

**RESPONSE TO SUBMISSION (RTS)
REDOX PTY LTD
2 SWETTENHAM ROAD, MINTO**

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1. INTRODUCTION

Benbow Environmental was commissioned by Redox to prepare the response to submission (RTS) for the proposed changes to the original development of the project described as construction and operation of a chemical storage and distribution centre and associated infrastructure at 2 Swettenham Road, Minto.

This RTS report responds to comments from the Department of Planning and Environment, NSW EPA and Campbelltown Council.

This RTS also briefly addresses correspondence with SafeWork and Sydney Water.

The Department of Planning & Environment have reviewed the Response to Submission Report (RTS) for the Redox Chemical Storage and Distribution Facility prepared by Benbow Environmental (dated 14 November 2018), and requests the additional information as detailed in the email from Melissa Prochaska dated 29 November 2018. This is referred to as “further comments” throughout the relevant sections of this report.



2. NSW EPA COMMENTS

Attachment 1 details information requested in the correspondence from the Manager, Regional Operations Illawarra, Environment Protection Authority, their reference DOC18/690344-07.

2.1 NOISE

The proponent has outlined that the site continues to be regulated with noise conditions in the EPL. The EPA Industrial Noise Policy has been used to derive noise conditions for the site. The EPA may make changes to the licence to reflect more contemporary meteorological conditions.

Response:

The existing noise limits for the site are as follows:

Table 2-1: Existing Noise Limits

Location	Day	Evening	Night	Night
	L _{Aeq} (15 minutes)	L _{Aeq} (15 minutes)	L _{Aeq} (15 minutes)	L _{A1} (1 minute)
St Andrews Residences	36	36	36	50
Minto Residences	36	36	36	50
Child Care Centre (30 Swettenham Road)	44	N/A	N/A	N/A

Note: Where L_{Aeq} means the equivalent continuous noise level – the level of noise equivalent to the energy-average of noise levels occurring over a measurement period.

-Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays,

-Evening is defined as the period from 6pm to 10pm

-Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays

The noise emission limits apply under meteorological conditions of:

- wind speed up to 3 ms⁻¹ (10 metres above ground level); or*
- temperature inversion conditions up to 3°C per 100 metres and wind speeds up to 2 ms⁻¹ (measured at 10 metres above ground level)*

The existing limits are very stringent:

- The day time levels are below the minimum intrusiveness limit under the Noise Policy for Industry 2017;
- The evening and night limits are 1 dB(A) above the minimum intrusiveness limit in an area that would be expected to have reasonably high evening and night rating background levels given the proximity to major roads; and



- Both wind and temperature inversions are considered under the licencing conditions.

Any changes to the noise limits in regard to contemporary meteorological conditions and contemporary NSW EPA legislation/guidelines will likely result in less stringent licensing requirements. The proponent accepts that there may be further discussion with the EPA regarding update of the noise licensing conditions based on contemporaneous legislation.

As discussed above any changes to the noise limits in regard to contemporary meteorological conditions and contemporary NSW EPA legislation/guidelines will likely result in less stringent licensing requirements. Therefore these changes would not result in additional noise controls or any changes to the modification application to the Department of Planning and Environment.

2.2 AIR

Analysis of issues/sensitivities

The Assessment is based on general assumptions rather than any design information for the proposed mitigation measures associated with the decanting and mixing areas (wet scrubbers) and proposed discharge points. Additionally, the assessment does not adequately assess all potential pollutants or include adequate justification for not assessing potential emissions from other chemicals proposed to be used within the decanting/mixing area. Furthermore, it is not clear if there are existing approved sources which have not been included within the Assessment.

Whilst the proposal includes mitigation measures, EPA advises that an assessment based on general assumptions without adequate justification and supporting information presents uncertainty with the assessment outcomes.

This is discussed in detail below.

2.2.1 Issue 1 – No detailed information for the proposed mitigation measures has been provided

The EPA notes that the EA advises that there are three separate decanting and diluting areas proposed within Building F. They are associated with alkali filling [sic], acid filling and food grade products handling. These areas are considered the focal point for air emissions management and control associated with the proposed modification.

The EA advises that the Stage 4 development as modified would use three scrubbers and that exact details of the scrubbers would be provided before construction. The EPA understands that the proposed scrubbers are associated with each of the three filling/decanting areas (Alkali, Acid and Food grade).

Additionally, the EA advises that dry chemicals will be debagged and used within the alkali and food grade areas. The hopper that receives the contents of the bags is proposed to have a dust hood that would be connected to either a small reverse pulse dust collector or to the respective scrubbers for the type of chemical being debagged.

The EA advises that the chemicals tabled below present the majority of the chemicals to be used in each mixing area, however flexibility is needed to allow other chemicals with similar characteristics to be processed.



Table 2-2: Majority of Chemicals Stored and Used

<i>Acids</i>	<i>Alkali</i>	<i>Food Grade</i>
<i>Phosphoric acid</i>	<i>Sodium hydroxide</i>	<i>Acetic acid</i>
<i>Sulfuric acid</i>	<i>Potassium hydroxide</i>	<i>Citric acid</i>
<i>Ferric chloride</i>	<i>Hypochlorite solution</i>	<i>Urea ammonium nitrate</i>
<i>Formic acid</i>		<i>Phosphoric acid</i>
<i>Fluoro silicic acid</i>		

The EPA considers that additional information must be provided on the proposed mitigation measures, including information that the wet scrubbers will be adequate in mitigating potential air emissions from the range of chemicals proposed to be utilised within these areas.

The proponent must provide additional information and justification for the proposed emission controls. Specifically:

- Confirm all the chemicals proposed to be used within the mixing/decanting areas*
- Confirm that all storage and mixing tanks will be vented to proposed emission controls*
- Additional information from the supplier/manufacturer of the wet scrubbers to confirm the emission controls would adequately mitigate potential emissions from all the chemicals proposed to be used within the mixing/decanting areas*
- Additional information from the supplier/manufacturer of the wet scrubbers detailing expected emission performance. Emission performance should be provided in the form of discharge concentrations that the wet scrubbers will achieve.*

The response to this issue is answered by reference to the information provided in the Environmental Assessment and the Air Quality Impact Assessment. The responses are answered in detail to assist all parties.

The details of the model of the scrubbers was provided. Further more detailed information on the performance of these scrubbers has been obtained to further assist EPA.

- Confirm all the chemicals proposed to be used within the mixing/decanting areas*

Response: The following table details the further chemicals that the proponent considers may be stored, decanted/diluted and packaged.

Table 2-3: All Chemicals

Product	Area	Process		Raw material		Repacked/Diluted material	
		Repack	Dilution	DG Class	Subrisk DG class	DG Class	Subrisk DG class
Phosphoric acid	Acid	Y	Y	8	N/A	8	N/A
Sulphuric acid	Acid	Y	Y	8	N/A	8	N/A
Ferric Chloride	Acid	Y	N	8	N/A	8	N/A
Fluorosilicic acid	Acid	Y	N	8	N/A	8	N/A
Formic acid	Acid	Y	Y	8	3	8	N/A
Nitric acid	Acid	Y	N	8	5.1	8	5.1
Maleic acid	Acid	N	Y	8	N/A	8	N/A
Ferrous Sulphate	Acid	N	Y	N/A	N/A	N/A	N/A
Oxalic acid	Acid	N	Y	N/A	N/A	N/A	N/A
Sulphamic acid	Acid	N	Y	8	N/A	N/A	N/A
Ferrous Chloride	Acid	Y	N	8	N/A	8	N/A
Glycolic acid	Acid	Y	Y	8	N/A	8	N/A
Aluminium Chloride	Acid	N	Y	N/A	N/A	N/A	N/A
Ammonium Bisulphite	Acid	N	Y	N/A	N/A	N/A	N/A
Sodium Hydroxide	Alkali	Y	Y	8	N/A	8	N/A
Sodium Hypochlorite	Alkali	Y	N	8	N/A	8	N/A
Potassium Hydroxide	Alkali	Y	Y	8	N/A	8	N/A
Urea Ammonium Nitrate (UAN)	Alkali	N	Y	N/A	N/A	N/A	N/A
Sodium Chlorite	Alkali	N	Y	8	N/A	8	N/A
Sodium Gluconate	Alkali	N	Y	N/A	N/A	N/A	N/A
Sodium Metabisulphite	Alkali	N	Y	N/A	N/A	N/A	N/A
Sodium Nitrite	Alkali	N	Y	5.1	6.1	5.1	6.1
Calcium Nitrite	Alkali	N	Y	5.1	N/A	5.1	N/A
Disodium Sulphamate	Alkali	N	Y	N/A	N/A	N/A	N/A
Urea	Alkali	N	Y	N/A	N/A	N/A	N/A



Product	Area	Process		Raw material		Repacked/Diluted material	
		Repack	Dilution	DG Class	Subrisk DG class	DG Class	Subrisk DG class
Copper Sulphate	Alkali	N	Y	N/A	N/A	N/A	N/A
Sodium Carbonate	Alkali	N	Y	N/A	N/A	N/A	N/A
Triethanolamine	Alkali	Y	Y	N/A	N/A	N/A	N/A
Monoethanolamine	Alkali	Y	Y	8	N/A	8	N/A
Caprolactum (Hexano-6-lactam)	Alkali	N	Y	N/A	N/A	N/A	N/A
Aluminium Chlorohydrate	Alkali	Y	N	N/A	N/A	N/A	N/A
Calcium Thiosulphate	Alkali	N	Y	N/A	N/A	N/A	N/A
Ammonium Sulphate	Alkali	N	Y	N/A	N/A	N/A	N/A
Potassium Permanganate	Alkali	N	Y	5.1	N/A	5.1	N/A
Sodium Metasilicate	Alkali	N	Y	8	N/A	8	N/A
Sodium Thiocyanate	Alkali	N	Y	N/A	N/A	N/A	N/A
Sodium Nitrate	Alkali	N	Y	5.1	N/A	5.1	N/A
Sodium Thiosulphate	Alkali	N	Y	N/A	N/A	N/A	N/A
Acetic acid	Food Grade	Y	Y	8	3	8	N/A
Citric acid	Food Grade	N	Y	N/A	N/A	N/A	N/A
Calcium Chloride	Food Grade	N	Y	N/A	N/A	N/A	N/A
Sodium Chloride	Food Grade	N	Y	N/A	N/A	N/A	N/A
Sodium Benzoate	Food Grade	N	Y	N/A	N/A	N/A	N/A
Sodium Citrate	Food Grade	N	Y	N/A	N/A	N/A	N/A
Malic acid	Food Grade	N	Y	N/A	N/A	N/A	N/A
Monosodium Phosphate	Food Grade	N	Y	N/A	N/A	N/A	N/A



Product	Area	Process		Raw material		Repacked/Diluted material	
		Repack	Dilution	DG Class	Subrisk DG class	DG Class	Subrisk DG class
Diammonium Phosphate	Food Grade	N	Y	N/A	N/A	N/A	N/A
Sodium Hexametaphosphate	Food Grade	N	Y	N/A	N/A	N/A	N/A



Confirm that all storage and mixing tanks will be vented to proposed emission controls

Response:

We confirm that all mixing tanks would be vented to the scrubbers. Storage tanks containing chemicals with high partial vapour pressure (acetic acid, ferrous chloride, ferric chloride etc.) will also be connected to the scrubbers. Redox does not intend to connect storage tanks of products that have negligible partial vapour pressures (sodium hypochlorite, sulphuric acid) to the scrubbers as this is unnecessary and represents a technical risk as cross connection then exists between vessels and would unnecessarily add to the design volumetric flow rates, increasing discharge volumes and increasing fan power demand.

Additional information from the supplier/manufacture of the wet scrubbers to confirm the emission controls would adequately mitigate potential emissions from all the chemicals proposed to be used within the mixing/decanting areas

The mixing tanks are those that are used to blend, dilute and mix the chemicals in accordance with the detail provided in the Environmental Assessment.

There would be three scrubbers used for the air emission controls from the mixing tanks. The scrubbers will be supplied by LabSystems (Laboratory Systems Group Pty Ltd).

The 3 scrubbers would be of the VHS-HFS100 series with the double spray system. The scrubber liquor would be tailored by LabSystems to be suitable for the proposed acids, bases and food grade acids.

An independent test of the removal efficiency is shown in Attachment 2 with removal efficiencies ranging from 88-98% reductions. The air quality impact assessment (AQIA) shows compliance, well below the limits, with a removal efficiency of 85%.

Therefore the controls would adequately mitigate potential emissions from all chemicals proposed.

Additional information from the supplier/manufacture of the wet scrubbers detailing expected emission performance. Emission performance should be provided in the form of discharge concentrations that the wet scrubbers will achieve.

The manufacturer has given removal efficiency test results undertaken by an independent firm. These are presented in Attachment 2.

The tests were conducted using three acids with similar removal efficiencies resulting. The acids used in these tests are more significant air contaminants than the acids to be stored and handled at the mixing tanks for this facility.

The removal efficiency is shown in ranging from 88-98% reduction.

The discharge concentration from the proposed facility will vary depending on the initial concentration, the level of dilution and the chemical used. The worst case discharge concentrations using a scrubber removal efficiency of 85% is shown in Table 7-1 of the AQIA (Ref: 148292 AQIA Rev3).

2.2.2 Issue 2 – Air Quality Assessment based on assumptions rather than design information

The assessment is based on general assumptions that have not been robustly justified with adequate supporting information. Assumptions are made for discharge parameters and wet scrubber control performance.

Additionally, the Assessment does not include an emission inventory that outlines all the discharge parameters for the point source discharges, including but not limited to stack height, stack diameter, flowrate and pollutant emission rates.

The EPA advises there is uncertainty with the assumptions made, including emission estimation, and hence the assessment outcomes. Uncertainty with the assessment could be resolved through provision of a revised assessment based on actual design information.

The assessment be revised using actual proposed design information and expected emission performance. This includes:

- Expected discharge concentrations the mitigation measures will achieve based on manufacture/supplier information.
- Actual (not assumed) discharge parameters that are adequately described within the revised assessment.

The air quality impact assessment (AQIA) is based on design information. Additional information is provided in a revised air quality impact assessment Ref: 148292_AQIA_Rev3.

The design details are provided in Section 7.2 of the AQIA.

The expected discharge concentrations were based on tank refilling operations utilising US EPA TANKS Emission Estimation Software Version 4.09D. Manufacture/supplier information was used to determine the chemicals handled and tank dimensions. It is not within the manufacturer/supplier capacity to directly provide discharge concentrations during filling operations, hence the use of US EPA TANKS to determine discharge concentrations.

The discharge parameters are provided in Table 7-1 of the revised AQIA. To determine “actual” discharge parameters it is recommended stack testing be performed during worst case operations after the commencement of operations.

2.2.3 Issue 3 – Assessment does not consider potential emissions from all potential pollutants

The Assessment predicts ground level concentrations for acetic acid and formic acid. Predicted ground level concentrations for acetic acid are compared with the impact assessment criteria contained in the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (the Approved Methods). Predicted ground level concentrations for formic acid are compared against referenced odour detection thresholds.



The Assessment does not assess other potential pollutants, such as Sulfuric acid, which is proposed for the decanting and mixing areas. The Approved Methods includes impact assessment criteria for Sulfuric acid, which is an individual toxic air pollutant. The impact assessment criteria for Sulfuric acid applies at and beyond the site boundary. The assessment advises that Acetic acid would have the highest potential for offsite impacts based on its volatility. Additionally, the assessment advises that Sulfuric acid from storage would be negligible due to the low partial vapour pressure.

To ensure robust assessment of all potential pollutants, the assessment must be revised to:

- Assess potential impacts of Sulfuric acid based on expected discharge concentrations of the wet scrubbers*
- Include further justification for those chemicals that have not been assessed. This should include a review of health and safety exposure standards associated with those chemicals where quantitative assessment has not been undertaken.*

Table 2-4: All Chemicals - Vapour Pressure - Criteria

Chemical	Vapour Pressure	Approved Methods				SWA ²		ACGIH ³	
		Criteria	Averaging Period	Percentile	Location of applied criteria	TWA	STEL	TWA	STEL
Phosphoric acid	0.03 mmHg at 25°C (PubChem, n.d.)	N/A	N/A	N/A	N/A	1 mg/m ³	3 mg/m ³	1 mg/m ³	3 mg/m ³
Sulfuric acid	Pure sulfuric acid has a vapor pressure of <0.001 mmHg at 25°C (Determination of Noncancer Chronic Reference Exposure Levels Batch 2B, 2001)	0.018 mg/m ³	1 hour	Level 1: 100 th Level 2: 99.9 th	At and beyond the boundary of the facility	1 mg/m ³	3 mg/m ³	0.2 mg/m ³	-
Ferric chloride	Negligible at 20°C (PubChem, n.d.)	N/A	N/A	N/A	N/A	-	-	-	-
Formic acid	40 mmHg at 24°C (CRC Handbook of Chemistry and Physics, 44th ed, n.d.)	N/A	N/A	N/A	N/A	303 mg/m ³ /100 ppm	-	5 ppm	10 ppm
Fluoro silicic acid	22.5 mmHg at 20°C (SOLVAY, 2013)	N/A	N/A	N/A	N/A	-	-	-	-
Acetic acid	15.8 mmHg at 25°C ¹	0.27 mg/m ³	1 hour	Level 1: 100 th Level 2: 99.9 th	At the nearest existing or likely future off-site sensitive receptor.	25 mg/m ³ /10 ppm	37 mg/m ³ /15 ppm	10 ppm	15 ppm
Citric acid	1.7 x 10 ⁻⁸ mm Hg at 25°C (PubChem, n.d.)	N/A	N/A	N/A	N/A	-	-	-	-
Urea ammonium nitrate	3.1 mmHg at 15.6°C (Redox, 2016)	N/A	N/A	N/A	N/A	-	-	-	-
Sodium hydroxide	1.82 x 10 ⁻²¹ mm Hg at 25°C (PubChem, n.d.)	N/A	N/A	N/A	N/A	2 mg/m ³ (Peak Limitation ⁴)	-	-	2 mg/m ³ (Ceiling ⁵)
Potassium hydroxide	1 mmHg at 714°C (PubChem, n.d.)	N/A	N/A	N/A	N/A	2 mg/m ³ (Peak Limitation ⁴)	-	-	2 mg/m ³ (Ceiling ⁵)
Sodium Hypochlorite solution	18.7 mmHg at 20°C (PubChem, n.d.)	N/A	N/A	N/A	N/A	-	-	-	-



Chemical	Vapour Pressure	Approved Methods				SWA ²		ACGIH ³	
		Criteria	Averaging Period	Percentile	Location of applied criteria	TWA	STEL	TWA	STEL
Nitric acid	63.1 mmHg at 25°C (PubChem, n.d.)	0.09 mg/m ³	1 hour	Level 1: 100 th Level 2: 99.9 th	At and beyond the boundary of the facility	5.2 mg/m ³	10 mg/m ³	2 ppm	4 ppm
Maleic acid	1.34 x 10 ⁻⁵ at 25°C (PubChem, n.d.)	N/A	N/A	N/A	N/A	-	-	-	-
Ferrous sulphate	14.6 mmHg at 25°C ¹ (Sigma-Aldrich, n.d.)	N/A	N/A	N/A	N/A	-	-		
Oxalic acid	0.001 mmHg at 20°C (PubChem, n.d.)	N/A	N/A	N/A	N/A	1 mg/m ³	2 mg/m ³	1 mg/m ³	2 mg/m ³
Sulphamic acid	0.006 mmHg at 20°C ¹ (Chemi Guru, n.d.)	N/A	N/A	N/A	N/A	-	-	-	-
Ferrous chloride	10 mm Hg at 700°C (PubChem, n.d.)	N/A	N/A	N/A	N/A	-	-	-	-
Glycolic acid	2 x 10 ⁻² mmHg at 25°C (PubChem, n.d.)	N/A	N/A	N/A	N/A	-	-	-	-
Aluminium chloride	1 mmHg at 99°C (Chemister, n.d.)	N/A	N/A	N/A	N/A	-	-	-	-
Ammonium bisulphite	17.3 mmHg at 20°C (Science Lab, n.d.)	N/A	N/A	N/A	N/A	-	-	-	-
Sodium chlorite	23.7 mmHg at 25°C (stonemfg, 2014)	N/A	N/A	N/A	N/A	-	-	-	-
Sodium gluconate	7.23 x 10 ⁻¹⁸ mmHg at 25°C (PMP Inc, n.d.)	N/A	N/A	N/A	N/A	-	-	-	-
Sodium metabisulphite	7.41 x 10 ⁻¹⁸ mmHg (estimate - liquid/subcooled) (The Good Scents Company, n.d.)	N/A	N/A	N/A	N/A	5 mg/m ³	-	5 mg/m ³	-
Sodium nitrite	7.44 x 10 ⁻¹⁷ mmHg at 25°C (In Chem, 2005)	N/A	N/A	N/A	N/A	-	-	-	-



Chemical	Vapour Pressure	Approved Methods				SWA ²		ACGIH ³	
		Criteria	Averaging Period	Percentile	Location of applied criteria	TWA	STEL	TWA	STEL
Disodium sulphamate	1 x 10 ⁻⁵ mmHg at 25°C (for disodium salt) (Lawrence Livermore National Laboratory, 2013)	N/A	N/A	N/A	N/A	-	-	-	-
Calcium nitrate	3-17 mmHg at 20°C (solutions) (EWING, 1927)	N/A	N/A	N/A	N/A	-	-	-	-
Copper sulphate	Negligible at 20°C (LogiChem, n.d.)	N/A	N/A	N/A	N/A	-	-	-	-
Sodium carbonate	Negligible at 20°C (InChem, n.d.)	N/A	N/A	N/A	N/A	-	-	-	-
Triethanolamine	3.59 x 10 ⁻⁶ mmHg at 25°C (PubChem, n.d.)	N/A	N/A	N/A	N/A	5 mg/m ³	-	5 mg/m ³	-
Monoethanolamine (Ethanolamine)	0.404 mm Hg at 25°C (PubChem, n.d.)	0.14 mg/m ³	1 hour	Level 1: 100 th Level 2: 99.9 th	At and beyond the boundary of the facility	7.5 mg/m ³	15 mg/m ³	3 ppm	6 ppm
Caprolactam (Hexano-6-lactam)	1.9 x 10 ⁻³ mmHg at 25°C (PubChem, n.d.)	N/A	N/A	N/A	N/A	1 mg/m ³	3 mg/m ³	5 mg/m ³	-
Aluminium chlorohydrate	17.8 mmHg at 20°C (anhydrous) (Redox, 2016)	N/A	N/A	N/A	N/A	-	-	-	-
Calcium thiosulphate	37 mmHg at 38°C (solution) (Measurement Technologies Inc, 2015)	N/A	N/A	N/A	N/A	-	-	-	-
Ammonium sulphate	14 mmHg at 20°C (PubChem, n.d.)	N/A	N/A	N/A	N/A	-	-	-	-
Potassium permanganate	Negligible at 20°C (PubChem, n.d.)	N/A	N/A	N/A	N/A	-	-	-	-
Sodium metasilicate	Negligible at 20°C (InChem, n.d.)	N/A	N/A	N/A	N/A	-	-	-	-
Sodium thiocyanate	4.73 mmHg at 25°C (Look Chem, n.d.)	N/A	N/A	N/A	N/A	-	-	-	-



Chemical	Vapour Pressure	Approved Methods				SWA ²		ACGIH ³	
		Criteria	Averaging Period	Percentile	Location of applied criteria	TWA	STEL	TWA	STEL
Sodium nitrate	0.63 mmHg at 600°C (Chemical Book, n.d.)	N/A	N/A	N/A	N/A	-	-	-	-
Sodium thiosulphate	Negligible at 20°C (PubChem, n.d.)	N/A	N/A	N/A	N/A	-	-	-	-
Calcium chloride	0.01 mmHg at 20°C (Chemical Book, n.d.)	N/A	N/A	N/A	N/A	-	-	-	-
Sodium chloride	1 mmHg at 865°C (PubChem, n.d.)	N/A	N/A	N/A	N/A	-	-	-	-
Sodium benzoate	2.9×10^{-12} mmHg at 25° (PubChem, n.d.)	N/A	N/A	N/A	N/A	-	-	-	-
Sodium citrate	Negligible at 20°C (Santa Cruz Biotechnology, n.d.)	N/A	N/A	N/A	N/A	-	-	-	-
Malic acid	3.28×10^{-8} mmHg at 25°C (extrapolated) (PubChem, n.d.)	N/A	N/A	N/A	N/A	-	-	-	-
Monosodium phosphate	Negligible at 20°C (Ixm, n.d.)	N/A	N/A	N/A	N/A	-	-	-	-
Diammonium phosphate	1.36 mmHg at 24°C (Roehl, 1936)	N/A	N/A	N/A	N/A	-	-	-	-
Sodium hexametaphosphate	Negligible at 20°C (Orica, n.d.)	N/A	N/A	N/A	N/A	-	-	-	-

NOTES TO ABOVE TABLE:

- Based on $P_{mmHg} = 10^{\frac{7.80307 - \frac{1651.2}{225 + T}}{}}$ T=0-36 degrees Celsius Lange's Handbook of Chemistry, 10th ed (Lange, 1973).
- Workplace Exposure Standards for Airborne Contaminants, Safe Work Australia (SWA 2018).
- Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices, American Conference of Governmental Industrial Hygienists (ACGIH 2017).
The peak limitation means a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.(SWA 2018).
- Ceiling limit is a criteria used for substances that are predominantly fast acting. It is appropriate for single brief samples and should not be exceeded. (ACGIH 2018).

The vapour pressures listed in the table for calcium nitrate, aluminium chlorohydrate, calcium thiosulphate is the total vapour pressure including water, where the partial pressure of water is responsible for the majority of the vapour pressure and the partial pressure of the compounds of question is much less.

Other than sulfuric acid, nitric acid and monoethanolamine (ethanolamine) none of the other proposed substances have NSW Approved Methods criteria.

Other than sulfuric acid the occupational health and safety limits for all chemicals in the table above are 1 mg/m³ or greater.

The substances with the highest vapour pressure are as follows:

Table 2-5: Chemicals with Highest Vapour Pressure

Chemical	Vapour Pressure
Formic acid	40 mmHg at 24°C
Fluoro silicic acid	22.5 mmHg at 20°C
Acetic acid	15.8 mmHg at 25°C
Sodium Hypochlorite solution	18.7 mmHg at 20°C
Nitric acid	63.1 mmHg at 25°C
Calcium thiosulphate	37 mmHg at 38°C

The vapour pressures of the substances above are all below formic acid except nitric acid.

Sulfuric acid, nitric acid and monoethanolamine (ethanolamine) have criteria that apply at the boundary to the site (closer than the nearest sensitive receptors).

An additional model for formic acid was run with boundary receptors around lot 1711 DP 1089572 spaced 40 m apart with the formic acid input parameters.

The highest boundary result was located at x coordinate: 299990.1 and y coordinate 6232530 with a ground level concentration of 0.00451 mg/m³.

The boundary predicted impacts from formic acid are well below the Approved Methods and occupational limits listed in the table above. As the vapour pressure for the majority of chemicals is less than formic acid the emission rates will be less than formic acid, therefore they would not exceed the relevant criteria and do not warrant further assessment.

Nitric acid is not intended to be diluted, only repackaged. Furthermore as it has a higher vapour pressure than formic acid and the emission rates would expect to increase proportionally based on the vapour pressure and would result with a boundary ground level concentration of approximately 0.00712 mg/m³ which is also below the relevant criteria.

It is not considered necessary to determine the discharge concentration of sulfuric acid through the wet scrubber. It is not within the manufacturer/supplier capacity to directly provide discharge concentrations during filling operations. The following discussion is considered sufficient:

This level complies with the sulfuric acid criteria, naturally the sulfuric acid emissions would be orders of magnitude less than this due to the low vapour pressure of the substance and would be well below the sulfuric acid criteria. No further assessment is considered warranted.

2.2.4 Issue 4 – Demonstration of compliance with the Protection of the Environment Operations (Clean Air) Regulation 2010

The assessment references Schedule 6 of the Protection of the Environment Operations (Clean Air) Regulation 2010 (the Regulation), which applies to non-scheduled premises. The Redox premises is scheduled and holds EPL 12041.

The EPA advises that Schedule 4 would apply to the proposal. The emission discharge points from the scrubbers will need to comply with relevant prescribed emissions concentration in Schedule 4 of The Regulation as a minimum. Schedule 4 includes prescribed concentrations of Sulfuric acid mist.

The proponent must demonstrate the discharge points will comply with relevant prescribed concentrations contained in the Clean Air Regulation through the provision of additional information from the manufacturer/supplier detailing expected emission performance (that is, discharge concentration) of the proposed wet scrubbers.

The prescribed emission concentration in schedule 4 of the Regulation for groups 2-6 is 100 mg/m³. The expected acetic acid concentrations are: 0.00145 g/s, 0.3142 m³/s, and 4.61 mg/m³ which is well below the 100 mg/m³ limit.

As previously discussed in Issue 3, sulfuric acid vapour pressure is orders of magnitude less than acetic acid and as such the emission rates are expected to be much lower. Therefore the sulfuric acid concentration is expected to be well below the prescribed 100 mg/m³.

No further assessment is warranted.

2.2.5 Issue 5 – Accounting for building wake effects and good stack design

The Air Quality Impact assessment does not adequately describe if building wake effects have been accounted for in the prediction of ground level concentrations. The assessment assumes that stack height is three metres above roof level and the discharge velocity is 10 metres per second.

The EPA advises that where stack heights are not located significantly above roof level there is potential for building wake effects that can affect predicted ground level concentrations and hence assessment outcomes.

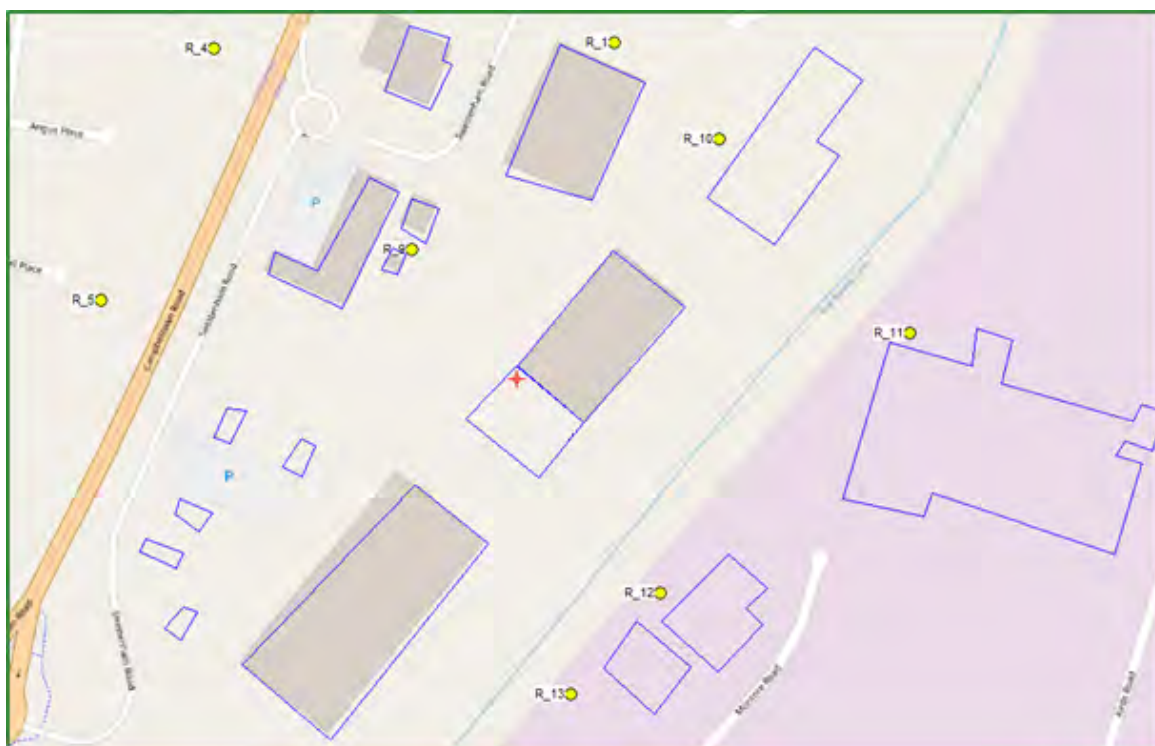
The assessment must be revised to be based on actual stack height design and discharge information including accounting for building wake effects.

Response:

Building-wake effects occur when emissions from a source are hindered as they move from winds “washing” the emissions down to the nearest building structure. This phenomenon can enhance

Building-wake effects were considered in the air dispersion modelling by representing all buildings and structures on and around the site as structures in the model using the BPIP/PRIME algorithm.

Figure 2-1: Buildings Modelled



Ref: 181194_RTS_REV11
April 2019

3. DEPARTMENT OF PLANNING AND ENVIRONMENT COMMENTS

This section addresses the comments raised in Attachment A of the Department of Planning and Environment letter dated 9 October 2018 regarding the Redox Chemical Storage Warehouse, Minto (DA 367-11-2002-I MOD 3). This letter is provided in Attachment 4 of this report.

3.1 SCOPE OF THE MODIFICATION REQUEST

Comment: *The Response to Submission (RTS) must formally confirm the modification request, taking into consideration the withdrawal of the alterations of the approved haul route on 25 September 2018.*

Response: The scope of the modification request is as follows:

- Increase the size of the largest packages/containers used to hold Class 3 flammable liquids and Class 6 toxic substances to include intermediate bulk containers i.e. IBCs. These were precluded from being able to be used in the original consent.
- Increase the total quantity of chemicals that can be stored on site to the original quantity requested in the original development application, 4,650 tonnes of dangerous goods and 15,795 tonnes of non-dangerous goods (20,445 tonnes total).
- Increase storage quantity of Class 8(3) and Class 8(C1) corrosive substances – a total quantity stored at the Stage IV area would be increased from 250 T to 540 T. The total quantity of dangerous goods on site would remain at 4,650 tonnes.
- Alter the site activities to allow for the supply of food grade chemicals.
- Allow site activities to include dilution.
- Allow operations of the wastewater treatment plant.

3.2 WITHDRAWAL OF THE PROPOSED ALTERATION OF THE APPROVED HAUL ROUTE

Comment: *An explanation must be provided regarding the withdrawal of the alteration of the haul route, which should include confirmation that the approved haul route will continue to be used by the Proponent.*

The RTS must also address Roads and Maritime's concerns raised in the initial submission dated 21 September 2018.

Response: The approved haul route will continue to be used by the proponent.

The RMS letter dated 2 October to the DPE states the following:

Reference is made to the Department of Planning and Environment (DPE) letter dated 17 September 2018, and subsequent email of amended application dated 25 September 2018, regarding the abovementioned application which was referred to Roads and Maritime Services (Roads and Maritime) for comment in accordance with Schedule 3 of the State Environmental Planning Policy (Infrastructure) 2007.

Roads and Maritime has reviewed the proposal as modified by REDOX, letter dated 25 September 2018, and understands that the current modification of the proposal by



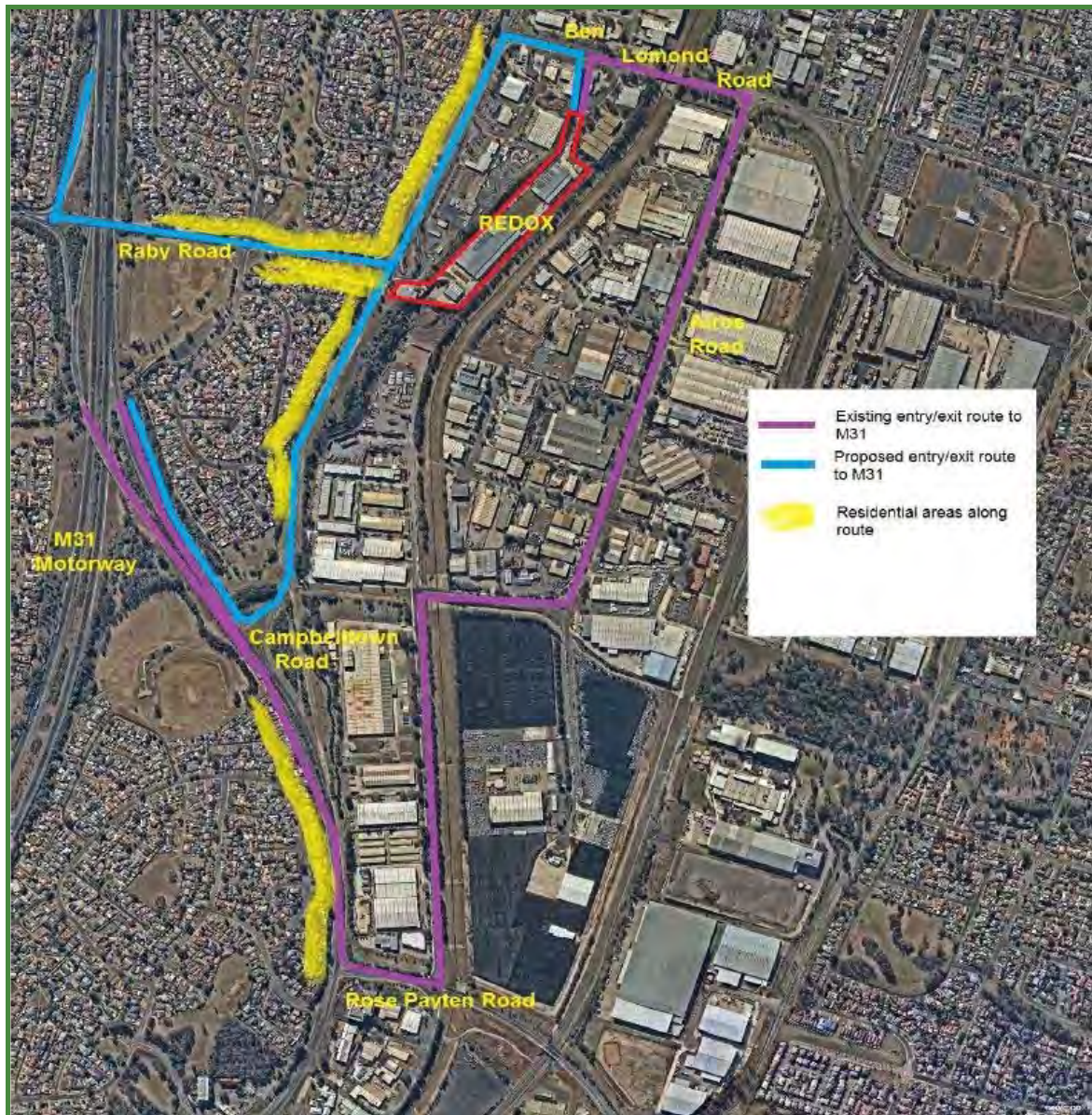
REDOX development has now excluded any variation proposal for the original truck routes servicing the subject land. This issue was the primary matter of concern raised in the Roads and Maritime Services original response dated 21 September 2018.

On this basis it is confirmed that Roads and Maritime raises no objections to the modified proposal and provides the following comments for consideration.

The RTS concerns raised in the initial submission dated 21 September are as follows:

- 1. The modification of the heavy vehicle route is not considered justified via the “Traffic and Parking Impact Assessment Report” prepared by Transport & Urban Planning Pty Ltd, dated August 2016, which deals mainly with vehicle numbers and movement corridors. The proposed change of route appears to traverse greater residential areas than the original route, see attached aerial map, and this required greater consideration of local amenity impacts when assessing the route variation;*
- 2. Proposal requires greater environmental and safety assessment relating to the transport of hazardous materials through primarily residential areas and details of hazardous risk assessment analysis undertaken;*
- 3. Any assessment of the modification to the approved transport routes servicing the facility should have regard to the intent/purpose, applicability and necessity to modify, the following transport related conditions of the 2003 approval for DA No. 367-11-2002-I issued by the NSW Minister for Infrastructure and Planning:
Conditions 1.1, 1.2, 4.6, 4.9, 4.10, 4.11, 4.21, 4.22, 5.2, 5.6, 5.10, 7.4 and 7.5.*
- 4. Concern is raised that the Modification Application relies on documentation prepared in 2016, Traffic and Acoustic Reports, and that it would be appropriate that this documentation was updated to reflect current day activities, particularly with regard to traffic generation and management.*

Figure 3-1: Aerial Map Attachment of RMS Letter



As the RMS letter dated 2 October confirmed that Roads and Maritime raises no objections to the modified proposal, no further comments are required.

3.3 TRUCK MOVEMENTS DURING THE CONSTRUCTION PHASE

Comment: The Environmental Assessment (EA) or attached Traffic Management Plan does not provide any discussion on the likely impact of vehicles during the construction phase of the Stage IV warehouse. While it is understood construction activities and potential impacts were discussed in the original EIS and associated management plans, this information was prepared over 15 years ago. In the RTS, please provide an understanding of the likely vehicle movements associated with the construction of the Stage IV warehouse, potential impacts and proposed mitigation measures.



Further Comments:

- *The information provided in the response is unclear and difficult to follow. It is considered the identified work vehicles (e.g. bulk earth works, foundation laying, etc.) will not be required per day for the entire four months of the planned construction phase, as indicated in Table 3-1. It is recommended the table provides a breakdown of the likely timeframe for each stage of the construction phase and what type and numbers of vehicles are required during each stage of the construction works*
- *Please advise whether the required tradesmen and identified vehicles will need to enter/exit the site during Peak AM and PM periods?*
- *For consistency, please define what is a trip and what is a movement, as both terms have been used in the EA and RTS*
- *In the RTS, it is stated that “the potential impact of the construction vehicles are considered to be negligible and that mitigation measures are not considered warranted”. However, it is noted in the EA a Traffic Management Plan will be included in the Construction Environmental Management Plan (CEMP). It is assumed this document will outline procedures and mitigation measures to manage construction traffic and ensure construction works can be carried out without having significant impacts on the current onsite operations?*

Response: The construction vehicle movements are summarised as follows:

- Bulk earthworks 6 trucks 5 cycles for 2 days
- Foundation 4 trucks 1 cycle for 3 days
- Ground floor slab 3 truck 4 cycles per day for 3 days
- Tilt up wall 3 trucks 2 cycles for 4 days
- Structural steel 3 truck for 1 day
- Roof sheeting 2 truck for 1 day
- Trades vehicles 5 Ute for 1per day for 4 months

This corresponds to the following vehicle movements per day:

Table 3-1: Construction Vehicle Movements

Activity	Vehicle Movements per day	Vehicle Type
Bulk earthworks	30	Truck
Foundation	3	Truck
Ground floor slab	8	Truck
Tilt up wall	3	Truck
Structural steel	6	Truck
Roof sheeting	4	Truck
Trades vehicles	10	Utility Vehicle

A vehicle movement and trip corresponds to either a vehicle entering the site **or** leaving the site. That is, one truck will generate 2 vehicle movements/trips.

The CEMP will include a traffic management plan which will outline procedures and mitigation measures to manage construction traffic and ensure construction works can be carried out without having significant impacts on the current onsite operations.



The following table details the timing of the construction activities and associated vehicle movements:

Table 3-2: Construction Activities – Staging – Vehicle Movements

Activity	Typical Activities	Duration	Vehicle Movements per Day	Vehicle Movements during Peak Periods
Site establishment	- Installation of erosion & sediment controls. - Establishment of construction site facilities and temporary security fencing.	1 week	6 truck movements per day 10 utility vehicle movements per day	3 truck movements during Peak AM periods 3 truck movements during Peak PM periods 5 utility vehicle movements during Peak AM periods 5 utility vehicle movements during Peak PM periods
Services	- Relocation/extension of services including electricity, water and telecommunications. - Waste control and management system.	1 week	6 truck movements per day 10 utility vehicle movements per day	3 truck movements during Peak AM periods 3 truck movements during Peak PM periods 5 utility vehicle movements during Peak AM periods 5 utility vehicle movements during Peak PM periods
Excavation	Excavation works	1 week	30 truck movements per day 10 utility vehicle movements per day	6 truck movements during Peak AM periods 6 truck movements during Peak PM periods 5 utility vehicle movements during Peak AM periods 5 utility vehicle movements during Peak PM periods



Activity	Typical Activities	Duration	Vehicle Movements per Day	Vehicle Movements during Peak Periods
Hardstand and drainage	- Preparation of construction diversion drains. - Construct foundations and ground floor slab	1 month	8 truck movements per day 10 utility vehicle movements per day	3 truck movements during Peak AM periods 3 truck movements during Peak PM periods 5 utility vehicle movements during Peak AM periods 5 utility vehicle movements during Peak PM periods
Construction	- Construction of stage 4 building including: - tilt up walls; - structural steel works; - roof sheeting; and - internal fit out.	2 months	6 truck movements per day 10 utility vehicle movements per day	3 truck movements during Peak AM periods 3 truck movements during Peak PM periods 5 utility vehicle movements during Peak AM periods 5 utility vehicle movements during Peak PM periods
Finishing works	- Removal of temporary works; - Decommissioning of any construction facilities; and - Site clean-up and disposal of surplus waste materials.	1 week	6 truck movements per day 10 utility vehicle movements per day	3 truck movements during Peak AM periods 3 truck movements during Peak PM periods 5 utility vehicle movements during Peak AM periods 5 utility vehicle movements during Peak PM periods
	Total	4 months		



The potential impact of the construction vehicles are considered to be negligible. Mitigation measures are not considered warranted.

3.4 CHANGE IN THE EXISTING TRUCK MOVEMENTS

Comment: Based on the discussion provided in section 4.4 of the EA, the Traffic and Parking Assessment in Attachment 6, it is understood the Proponent proposes to increase light vehicle movements by 24 trips per day and heavy vehicle movements by 20 trips per day. In the RTS, please provide an indicative breakdown of vehicles entering/leaving the site carrying dangerous goods vs non-dangerous goods. Please clarify how this increase in vehicle movements relates to current operations and the request to increase the quantity of non-dangerous goods stored onsite.

Further Comments:

- The Department understands that current operation generally involves the transportation and storage of raw materials and that the construction of Stage IV will allow for repackaged, decanted and diluted chemicals to be stored and transported from the site. However, further justification is required as to why the tripping capacity will increase from 35,000 L/day to 100,000 L/day considering the only proposed increase in chemical storage limits for the facility is a difference of 4,600 tonnes of non-dangerous goods
- Further justification is required as to why there is a need for an additional 12 heavy vehicles per day to transport dangerous goods, considering the dangerous goods storage limit will remain unchanged 4,650 tonnes. Please provide a breakdown of the vehicle types, the chemical class and storage container type for the proposed vehicle increase
- Please provide a breakdown of the current average daily light and heavy vehicles entering and exiting the site
- In accordance with condition 4.12 of the consent, please confirm no B-double vehicles are proposed to enter and/or exit the site as part of this modification request



Response:

The vehicle breakdown is as follows:

Table 3-3: Additional Vehicles

Vehicle		Heavy			Light		
Purpose	Type	DG	Non-DG	No Chemicals	DG	Non-DG	No Chemicals
Bulk Liquid Tanker (DG Class 8)	Articulated Road Tanker	3					
Bulk Liquid Tanker (Non-DG)	Articulated Road Tanker		2				
Container Cartage (DG Class 8)	Articulated Container SKEL	2					
Container Cartage (Other DG Classes)	Articulated Container SKEL	1					
Container Cartage (Non-DG)	Articulated Container SKEL		2				
Packaged Goods Delivery (DG Class 8)	Rigid-body tabletop (12MT capacity)	4					
Packaged Goods Delivery (Mixed DG Classes)	Rigid-body tabletop (12MT capacity)	2					
Packaged Goods Delivery (Non-DG)	Rigid-body tabletop (12MT capacity)		2				
Misc item delivery (Packaging etc)	Rigid-body tabletop (12MT capacity)			2			
Packaged Goods Courier (DG Class 8)	Ute/Pantech (1-3MT capacity)				1		
Packaged Goods Courier (Other DG Classes)	Ute/Pantech (1-3MT capacity)				1		
Packaged Goods Courier (Non-DG)	Ute/Pantech (1-3MT capacity)					4	
Employee vehicle	Car						18
Totals		12	6	2	2	4	18



The *35,000 L/day to 100,000 L/day* are daily production quantities and are independent of the storage quantities. The increase in production quantities are due to the stage IV facility having a faster throughput than the existing facility in Girraween, this also accounts for the increase in vehicle movements, with the storage capacity remaining the same.

A percentage of the raw materials that will be used in the Stage IV development are already being transported to, stored at, and transported away from the Minto site. The stage IV development will repackage and dilute some of these materials before leaving the site. This will incur additional vehicle movements, but movements will not scale proportionally with volumes.

Based on current operations at our Girraween site (whose operations will move to Minto) we know additional vehicle movements will be initially approximately half of the above numbers. It is hard to predict growth, but on current trends it will take 7-10 years before additional vehicle movements have reached the above levels. The above additional traffic movements are commensurate with the planned maximum capacity of 100,000 L/day of repackaging/dilution per day.

The number of current vehicle trips are shown in the table below:



Table 3-4: Current Vehicle Movements

Vehicle		Heavy			Light		
Purpose	Type	DG	Non-DG	No Chemicals	DG	Non-DG	No Chemicals
Bulk Liquid Tanker (DG Class 8)	B-Double						
Bulk Liquid Tanker (Non-DG)	B-Double						
Bulk Liquid Tanker (DG Class 8)	Semi Trailer						
Bulk Liquid Tanker (Non-DG)	Semi Trailer						
Container Cartage (DG Class 8)	B-Double	1					
Container Cartage (Other DG Classes)	B-Double	1					
Container Cartage (Non-DG)	B-Double		1				
Container Cartage (DG Class 8)	Semi Trailer	4					
Container Cartage (Other DG Classes)	Semi Trailer	14					
Container Cartage (Non-DG)	Semi Trailer		18				
Packaged Goods Delivery (DG Class 8)	Rigid-body tabletop	11					
Packaged Goods Delivery (Mixed DG Classes)	Rigid-body tabletop	37					
Packaged Goods Delivery (Non-DG)	Rigid-body tabletop		15				
Misc item delivery (Packaging etc)	Rigid-body tabletop			10			
Packaged Goods Courier (DG Class 8)	Ute/Van				1		
Packaged Goods Courier (Other DG Classes)	Ute/Van				1		
Packaged Goods Courier (Non-DG)	Ute/Van					2	
Employee vehicle	Car						144
Totals		68	34	10	2	2	144

Section 4.12 of the original consent reads as follows:

4.12 Prior to the commencement of any transport to the site involving B-double vehicles, the Applicant shall demonstrate to the satisfaction of the Director-General that the B-double reclassification of Holmes Road has been approved by the RTA in association with Council.

B-double container trucks have been accessing the site since the reclassification of Holmes Road for B-doubles was approved. It is envisaged movements of B-double trucks at the site will increase by approximately 2 movements per day as a result of activities associated with the Stage IV development.

3.5 CLARIFICATION REGARDING BULK SODA ASH

Comment: Bulk soda ash was removed from the list of proposed non-dangerous goods to be stored onsite as part of the Commission of Inquiry. Consequently, the overall non-dangerous goods quantity was reduced from 20,445 tonnes to 15,795 tonnes in the consent.

The modification request now seeks to increase the total quantity of non-dangerous goods to be stored on-site back to the original proposed 20,445 tonnes. While it appears from the information provided in the EA, this increase will allow for storage of already approved non-dangerous goods and food grade chemicals, there is no clear statement which clearly confirms this increase is not to reinstate the bulk soda ash previously removed. Please provide confirmation bulk soda ash is not proposed to be stored onsite.

Response: No bulk soda ash is proposed to be stored on site.

3.6 COMMUNITY AND AGENCY CONSULTATION

Comment: Section 3 of the EA discusses the consultation programme carried out by Benbow Environmental on behalf of the Proponent. Further clarification is required in the RTS to address the following:

- The date the leaflet provided in Attachment 13 of the EA was distributed to the residential houses and commercial premises identified in the Figure on Page 3-2 of the EA;
- The date the Childcare Centre was visited and whether their representatives raise any concerns;
- The leaflet in Attachment 13 of the EA advises that community meetings would be held at the Redox Facility on Friday 23 February and Tuesday 27 February. Please confirm in the RTS on which calendar year these community meetings were held. In addition, please provide for community meetings held:
 - ▶ The number of attendees;
 - ▶ Comments, questions or issues raised at each meeting; and
 - ▶ Responses provided to address any comments, questions or issues raised; and
- A summary of the comments, questions or issues raised by Campbelltown City Council and the relevant agencies received to date. Noting some of the correspondence received is provided in Attachment 15 of the EA.



Response: The leaflet is Attachment 15 of the Environmental Assessment and was distributed to residential and commercial premises on the 14th and 15th of February 2018 by letterbox drop. Further personal visits were made to commercial premises on Tuesday 27th of February 2018. A leaflet was also distributed to the Child Care Centre on the dates stated above.

A personal visit was made to the Child Care Centre on the 27th of February 2018. The manager/owner of the Child Care Centre was present and the leaflet was handed to him. He made comment that he had already received the leaflet through the mail. No issues were raised during the discussion.

The meetings were held in 2018. Besides Redox management and R T Benbow, 2 residents attended on the Tuesday 27 February 2018. There were no residential attendees on the Friday 23 February 2018. The residential attendees on the Tuesday raised the issue of transport routes. The response provided was to explain the following:

- Transport routes have adhered to the approved routes and there have been no accidents or incidents involving vehicle movements relating to Redox since the site began operations.
- There would be no proposed changes to existing truck movements for trucks carrying bulk in tanks.

3.7 SUMMARY OF COMMENTS, QUESTIONS OR ISSUES RAISED BY CAMPBELLTOWN CITY COUNCIL AND THE RELEVANT AGENCIES

3.7.1 Sydney Water

1. A trade wastewater consent will be required.
2. This will need to be completed.
3. It is likely the discharge from the proposed development will need to be under a separate consent and this will be confirmed at a later date.

3.7.2 SafeWork NSW

1. On completion of the works, Redox will need to update its notification of hazardous chemicals to SafeWork NSW under Clause 348(2)(a) of the Work Health and Safety Regulation 2017.
2. As well update the Manifest.
3. As well update the Emergency Plan.

The following two agencies replied after the Environmental Assessment was submitted. Their correspondence is provided in Attachment 5 and 6.

3.7.3 Roads and Maritime Services

As a result of the Redox development now not wanting to modify traffic routes, RMS raises no objections to the modified proposal.

A number of comments were made for consideration of the original proposed modification. These are not now relevant and would be considered in any future proposed modification.



3.7.4 Campbelltown City Council

The following comments were received from Council:

1. These comments relate to traffic numbers and load limits on bridges.
2. Redox would reassess traffic routes and vehicle numbers in a future development application.
3. An adequate stormwater system would be designed to cater for overland flow into the local catchment.
4. The site has not altered the bunding and spill controls designed into the development as it exists today. These have proved to be adequate.

These are addressed in Section 4.

3.8 QUESTIONS REGARDING PRELIMINARY HAZARD ASSESSMENT (PHA)

Comment: *The scope of the modification has now been clearly stated in the EA. It is understood that the modification is seeking to change the mode of storage into the following, but the overall dangerous goods storage quantity is unchanged as 4650 tonnes:*

- 290 tonne of Class 8 corrosive material in aboveground tanks.
- Up to 900 tonne Class 3 flammable liquid in intermediate bulk container (IBC – 1000 L).
- Up to 850 tonne of Class 6.1 material in IBC.

Following the review of PHA, the following questions are raised:

- *Refer to Table 2-14 of the EA, it is noted that up to 900 tonnes of Class 3 is stored. Please clarify why the PHA only capture the quantity of 600 tonne of Class 3 in the assessment. It should be also noted that in Table 5-5 of the PHA, storage of 1200 tonne of Class 3 is suggested. If the proposal is to store up to 900 tonnes of class 3 in warehouse B1/B2, please justify whether an update of PHA is required.*
- *In Table 5-16 of PHA, it is noted that the fire involving 30 tonne of Class 8(3) liquid in Stage IV building has a larger heat radiation distance than those shown in Table 5-12 for 600 tonne of Class 3 liquid at B1/B2 warehouses. Please clarify what are the warehouses' areas for each case.*
- *Based on the consequence distance on the worst-case fire event, please comment whether the heat radiation to fatality and injury will extend beyond the site boundary and reach to the closest residential or sensitive uses.*

Further Comments:

It is considered that the Applicant has not provided adequate justification on the reason of modelling 600 tonnes of Class 3 in the Preliminary Hazard Assessment (PHA). It also raises further concern on the actual Class 3 material storage arrangement on site as inconsistent information are provided between EA and PHA risk analysis.

Table 2-1 and Table 4-1 of EA (Rev 9) listed a total of 900 tonnes of Class 3 will be stored and handled as part of this modification, and throughout the EA/PHA it is suggested that class 3 material will be stored only in warehouse B1 and B2. However, it is noted that



section 5.8.3 of PHA captures fire involves 600 tonnes for Class 3 material in one single warehouse and consultant's responses suggests 600 tonnes in each warehouse were approved under the original DA, which based on the Department's knowledge was not the case. In addition, it is noted that Table 5-6 of PHA indicated a storage of 1200 tonnes of Class 3 material was captured in the risk analysis. Based on these conflicting information, the Department is uncertain the actual Class 3 storage quantity will be stored and handled on site, as the PHA modelling input (600 tonnes x 2 warehouse) reflected the combined quantity could exceed the total Class 3 quantity (900 tonnes) proposed in the modification.

In order to clarify the actual storage and handling of Class 3 material on site, as modified, please provide the following:

- 1. Confirmation of the total maximum Class 3 storage and handling quantity within the facility, as modified, will be 900 tonnes.*
- 2. The maximum quantity of Class 3 material to be stored in warehouse B1 and B2 separately.*
- 3. Number of Class 3 in IBC will be stored in warehouse B1 and B2.*
- 4. The quantity of Class 3 will be stored in bulk in warehouse B1 and B2.*
- 5. What is the existing or proposed mechanism to verify the class 3 storage quantity below the approval limit of 900 tonnes.*

According to section 5.7.3 of PHA, it is stated that the fire may spread and engulf IBC as IBCs may fail during pool fire event. Assuming the Class 3 material quantity as modified is 900 tonnes, the worst-case scenario would be 900 tonnes of Class 3 material in warehouse B1 and B2 involved in fire. Please update the consequence analysis for Scenario 3 to reflect the worst-case scenario if required.

Response: Warehouse B1 and B2 have approval to store up to 600 tonnes each. This was approved in the original DA and is not being altered therefore an update to the PHA is not required.

The PHA for the EA restricted the assessment to either B1 or B2 as the two warehouses are segregated by a 240/240/240 fire rated wall which extends through the roofline in accordance with AS1940-2017 requirements. The warehouses were designed so that fire in one would not impact on adjoining warehouses.

- The area used for the B1/B2 warehouse fire was 450 m² (Scenario 1 & 2).
- The combined area for the B1 and B2 warehouse fire was 900 m² (Scenario 3).
- The area used for the stage 4 facility was 300 m² (Scenario 5, 6 and 7).

The reason the stage 4 facility has higher heat of radiation contours to B1/B2 warehouse fires is because the fire-rated walls were considered in scenarios 1-3 and were not considered in scenarios 5-7.

For worst-case fire events, as can be seen in the contours, the 4.7 kW/m² heat of radiation level for possible injury extends slightly beyond the property boundary but not into areas likely to be occupied by individuals. Heat of radiation level for possible fatality (12.6 kW/m²) or more do not extend beyond the property boundary. Additional controls would further reduce these levels.

The total maximum quantity of Class 3 storage will be 900 tonnes.

The maximum quantity of Class 3 material to be stored in warehouse B1 is 600 tonnes, the maximum quantity of Class 3 material to be stored in warehouse B2 is 600 tonnes. However the combined storage quantity will not exceed 900 tonnes.

The maximum number of Class 3 IBCs to be stored in warehouse B1 is 600, the maximum number of Class 3 IBCs to be stored in warehouse B2 is 600. However the combined quantity will not exceed 900 IBCs.

Scenario 3 has been revised to be 900,000 kg, this does not alter the results of the model in regards to heat of radiation vs distance, as these parameters are dependent on the surface area of pool fire, rather the duration of the fire would increase.

3.9 CONSTRUCTION NOISE

Further Comment:

Please confirm that the noise limits as defined in the consent under condition 4.2.1 and within the Protection of the Environment Operations Act 1997 Environment Protection Licence will not be exceeded during the construction phase of Stage IV. Noting that conditions 4.18 and 4.19 will also apply during the construction phase of Stage IV.

The Stage IV construction noise limits are those specified in clause 4.17 and 4.18:

4.17 The Applicant shall ensure that all site preparation and construction activities associated with the development do not exceed the criteria at the nominated locations specified in Table 1. For the purpose of this condition, construction noise shall be determined at the locations under the conditions specified for operational noise, as provided in conditions 4.21 and 4.22 of this consent.

Table 1 – Construction Noise Criteria

Locations	Day
	LAeq(15 minute) (dB(A))
St Andrews Residences	46
Minto Residences	46

4.18 The Applicant shall ensure that site preparation and construction activities associated with the development do not exceed 62 dB(A)(LAeq(15 minute) at the New Generation Childcare Centre, 30 Swettenham Road, St Andrews, during normal operating hours and/or occupation of the Childcare Centre.

These noise levels will not be exceeded during the construction phase of Stage IV.

The construction hours will only be undertaken within the hours specified in clause 4.19:

4.19 The Applicant shall only undertake noisy site preparation works and noise construction activities (including transportation of fill and spoil[sic]) associated with the development, between the following hours:



- a) 7:00am to 6:00pm, Mondays to Fridays, inclusive;
- b) 8:00 am to 1:00 pm on Saturdays; and
- c) at no time on Sundays or public holidays.

For the purpose of this condition, “noisy” is any activity that may be audible at a residential receptor. This condition does not apply in the event of a direction from police or other relevant authority for safety reasons, or to avoid the loss of life, property or damage to the environment.

Clause 4.21 and the EPL present the operational noise limits and do not apply to the Stage IV construction works.

3.10 STORMWATER QUALITY MONITORING

The document development consent (DA 367-11-20002-i) conditions 5.8 and 7.5(c) refer to monitoring stormwater discharge in accordance with the Clean Water Regulation (Class R Classification).

Stormwater Quality Monitoring

5.8 Prior to the commencement of operations at the site, the Applicant shall submit for the approval of the Director-General, in consultation with Council, a stormwater Quality Monitoring Program. This Program shall form part of the Stormwater Operational Environmental Management Plan required by condition 7.5(c). The program shall include, but not necessarily be limited to:

- a) identification of contaminants to be tested, including those required under the Clean Water Regulation (Class R Classification);***
- b) monitoring frequencies; and*
- c) methodologies for stormwater quality monitoring.*

The stormwater Quality Monitoring Program shall be submitted for the approval of the Director-General prior to the commencement of operation of the development.

7.5(c) a Stormwater Management Plan to outline measures to mitigate impacts of stormwater run-off from and within the premises. This plan shall be submitted to the EPA and prepared in consultation with Council. This plan shall include, but not necessarily be limited to:

- (i) details of all relevant stormwater control infrastructure and how that infrastructure minimise stormwater peak flows and peak pollutant concentrations;*
- (ii) procedures for the installation and maintenance of gross pollutant traps to screen stormwater from the site;*
- (iii) a demonstration of consistency with the stormwater management plan for the catchment and any relevant stormwater guidelines prepared by Council;*
- (iv) details of the monitoring program, as required by condition 5.8, to monitor stormwater flows from the site to meet discharge requirements for Class R (Restricted) Waters under the Clean Water Regulations; and***
- (v) details of contingency measures that would be followed to ensure the protection of Bow Bowing Canal, should an accident or emergency occur at the site.*

It is understood that no operations take place within the areas on the site which collect stormwater that could cause contaminated stormwater run-off. The only potential source of



contaminated stormwater runoff would be from a spill incident. This would be addressed in the site's emergency plan and PIRMP and it is not practical to have a regular monitoring program for a spill incidents. Therefore undertaking a Stormwater Management Plan and Stormwater Quality Monitoring is not considered warranted.

The 2011-2018 Annual Environmental Management Reports (AEMRs) are presented in Attachment 9. 2011 to 2013 stormwater monitoring was undertaken in Pits 1-3. Water in the stormwater pits was assessed/tested for:

- colour;
- clarity;
- odour;
- pH;
- temperature;
- specific gravity;
- dissolved oxygen;
- suspended solids; and
- turbidity.

2011 sampling also tested for:

- total Kjeldahl nitrogen (TKN);
- NO_x-N;
- Total nitrogen; and
- Total phosphorous.

All samples passed internal stormwater analysis during 2011, 2012 and 2013 despite few samples being higher than the max values for suspended solids and turbidity. The pass was based on the fact that no traces of chemicals were found in any of the samples.

Stormwater sampling ceased in 2014 as the Clean Waters Act & Regulations was repealed.

The AEMRs for 2011-2018 reported in the Environmental Impacts & Performance table:

- No spillages of product during transportation causing contamination of stormwater, soil or groundwater.
- No spillages of product during storage & handling causing contamination of stormwater.

Considering all samples tested during 2011-2013 passed internal stormwater analysis, and no contamination of stormwater has occurred based on the available history of the site; undertaking a Stormwater Management Plan and Stormwater Quality Monitoring is not considered warranted.

It is requested conditions 5.8 and 7.5(c) be entirely removed from the consent conditions.

4. CAMPBELLTOWN CITY COUNCIL

This section addresses issues raised in Campbelltown City Council's submission in an email dated 24 October 2018.

4.1 TRAFFIC MOVEMENTS

Comment: 1. *Without some assessment of the existing traffic movements on the site, it is not possible to determine if the comments regarding minor impact on traffic facilities in the area are correct. The document indicates a possible tripling of the current level of production from 35,000 L/day to 100,000 L/day. Details are scant but would assume this translates to a tripling of vehicle movements. Until this is confirmed, it is not possible to determine the impact on existing traffic facilities.*

Response: The additional vehicle numbers are as follows:



Table 4-1: Additional Vehicle Movements

Vehicle		Heavy			Light		
Purpose	Type	DG	Non-DG	No Chemicals	DG	Non-DG	No Chemicals
Bulk Liquid Tanker (DG Class 8)	B-Double	1					
Bulk Liquid Tanker (Non-DG)	B-Double		1				
Bulk Liquid Tanker (DG Class 8)	Semi Trailer	2					
Bulk Liquid Tanker (Non-DG)	Semi Trailer		1				
Container Cartage (DG Class 8)	B-Double						
Container Cartage (Other DG Classes)	B-Double						
Container Cartage (Non-DG)	B-Double						
Container Cartage (DG Class 8)	Semi Trailer	2					
Container Cartage (Other DG Classes)	Semi Trailer	1					
Container Cartage (Non-DG)	Semi Trailer		2				
Packaged Goods Delivery (DG Class 8)	Rigid-body tabletop	4					
Packaged Goods Delivery (Mixed DG Classes)	Rigid-body tabletop	2					
Packaged Goods Delivery (Non-DG)	Rigid-body tabletop		2				
Misc item delivery (Packaging etc)	Rigid-body tabletop			2			
Packaged Goods Courier (DG Class 8)	Ute/Van				1		
Packaged Goods Courier (Other DG Classes)	Ute/Van				1		
Packaged Goods Courier (Non-DG)	Ute/Van					4	
Employee vehicle	Car						18
Totals		12	6	2	2	4	18



A percentage of the raw materials that will be used in the Stage IV development are already being transported to, stored at, and transported away from the Minto site. The stage IV development will repackage and dilute some of these materials before leaving the site. This will incur additional vehicle movements, but movements will not scale proportionally with volumes.

Based on current operations at the Girraween site (whose operations will move to Minto) additional vehicle movements will be initially approximately half of the above numbers. It is hard to predict growth, but on current trends it will take 7-10 years before additional vehicle movements have reached the above levels. The above additional traffic movements are commensurate with the planned maximum capacity of 100,000 L/day of repackaging/dilution per day.

4.2 TRUCK ROUTE

Comment: 2. *There is a Load limit of 40T on Ben Lomond Bridge over Bow Bowing Creek which is identified as part of the truck route for the site (see attached email). Could not find details of trucks which are accessing this site, but this may be a significant issue and have an impact on routes to and from the site. May also be at odds with the decisions to not revise the access routes.*

Response: The decision to not revise the access routes for the truck paths was based on time constraints in conjunction with RMS not supporting the revised routes without public notification. The decision to not revise the access routes was based on advice from the Department of Planning. The routes will be revised in a Section 4.55 modification application, which will be completed and submitted to council after the finalisation of the RTS.



Table 4-2: Current Vehicle Movements

Vehicle		Heavy			Light		
Purpose	Type	DG	Non-DG	No Chemicals	DG	Non-DG	No Chemicals
Bulk Liquid Tanker (DG Class 8)	B-Double						
Bulk Liquid Tanker (Non-DG)	B-Double						
Bulk Liquid Tanker (DG Class 8)	Semi Trailer						
Bulk Liquid Tanker (Non-DG)	Semi Trailer						
Container Cartage (DG Class 8)	B-Double	1					
Container Cartage (Other DG Classes)	B-Double	1					
Container Cartage (Non-DG)	B-Double		1				
Container Cartage (DG Class 8)	Semi Trailer	4					
Container Cartage (Other DG Classes)	Semi Trailer	14					
Container Cartage (Non-DG)	Semi Trailer		18				
Packaged Goods Delivery (DG Class 8)	Rigid-body tabletop	11					
Packaged Goods Delivery (Mixed DG Classes)	Rigid-body tabletop	37					
Packaged Goods Delivery (Non-DG)	Rigid-body tabletop		15				
Misc. item delivery (Packaging etc)	Rigid-body tabletop			10			
Packaged Goods Courier (DG Class 8)	Ute/Van				1		
Packaged Goods Courier (Other DG Classes)	Ute/Van				1		
Packaged Goods Courier (Non-DG)	Ute/Van					2	
Employee vehicle	Car						144
Totals		68	34	10	2	2	144



Redox requires all transport contractors (including QUBE) accessing the site to use truck approved routes only. Until such time as truck routes are revised as part of a Section 4.55 modification, Redox confirms it will continue to mandate its third-party transport contractors conform to currently approved traffic routes and current restrictions including the limit of 40 tonne vehicles on Ben Lomond Road.

4.3 OVERLAND FLOW

Comment: 3. The site is not affected by 1% AEP flooding in Bow Bowing Creek however it is affected by overland flow from the local catchment. A suitably sized internal stormwater system will need to be installed. Consideration of overland flow paths in a full range of storm events (commensurate with the environmental risk posed by the chemicals stored on site) will need to be undertaken. The proposal appears to close the gap between the buildings which currently conveys flows to the creek. Unsure if the nature of development requires assessment of a higher flood standard than our usual flood planning event.

Response: Redox already have approval for the construction of the stage IV facility as per the original development consent. The hydrology calculations were based on rainfall data supplied by Campbelltown City Council (10 yr. ARI rainfall intensity 183.2 mm/hr). The calculation sheet is contained in Stormwater Drainage Plan D02 Issue G. The internal stormwater system has been sized based on this data.

A stormwater concept plan (being the drawing provided to the EPA) for the operational site with reference numbers 1169-02 Sheet 1 and 1169-02 Sheet and referenced in Consent Condition 1.2(o) do not indicate any overland flow as stormwater is prevented from entering the tank farm area by a 200 mm high bund. Currently the undeveloped section of the site is protected from any overland flow by an earthen bund along the length of the undeveloped portion. Any overland flow would be considered by the EPA as counter to intent of the concept plan.

There is no overland flow as this would have the potential to wash chemical contaminants into Bow Bowing Canal.

4.4 BUNDING AND SPILL CONTROL

Comment: 4. With respect to water quality (as the site abuts Bow Bowing Creek) the proposal will need to demonstrate appropriate bunding and spill controls commensurate with the level of risk. The proposal may do such, but time has not allowed full review.

Response: As detailed in the Environmental Assessment, the stage IV facility will be appropriately bundled/graded.

4.5 STORMWATER MEASURES

Comment: We would like confirmation that the stormwater quality and quantity measures are consistent with current standards.

Response: The proposal will have nil discharge of chemicals to stormwater and consequently negligible impact on stormwater quality and is therefore consistent with current standards.



5. SYDNEY WATER

While Sydney Water has made no comment with regards to the RTS, an email from Sydney Water was received on Friday, 14th September from Ann Powell, Strategic Coordinator, Development & Infrastructure Portfolio Services, Sydney Water.

The email response was in two parts. Part 1 deals with the Development Application reviewed and responded to by Sydney Water. Part 2 deals with the current response from Sydney Water's Trade waste area (Customer Delivery) in relation to the proposed changes in the letter attached from Benbow Environmental.

The email from Sydney Water is provided in full in Attachment 7.

5.1 PART 1 - SYDNEY WATER'S RESPONSE TO THE DEVELOPMENT APPLICATION.

Comment: *Sydney Water have investigated the proposed development by Redox Chemicals P/L under Case Number 67836 & issued out Notice of Requirements dated 11 October 2004.*

These requirements were issued for the development proposal as outlined in the consent granted by the Minister for Planning in 2003 in DA 367-11-2002-i. In that consent it listed Stage 4 (Construction & use of Building H & Tank Farm & Drumming Facility (Building 'F')).

Subsequently all Sydney Water's requirements have been met for the construction & operation of a Chemical & Storage Distribution Centre & our Section 73 Subdivider/Developer Compliance Certificate was issued on 11 October 2004.

The only change now to be addressed is concerning the Trade Waste conditions (see Part 2 below).

Response: Sydney Water's comments regarding the Development Application are duly noted and do not warrant further comment.

5.2 PART 2 - CURRENT RESPONSE FROM SYDNEY WATER'S TRADE WASTE TEAM (CUSTOMER DELIVERY)

Comment: *Mark Schibeci from the Trade Waste area in Customer Delivery reviewed Benbow Environmental's letter to Sydney Water dated 07 August 2018 regarding the Stage 4 development at Redox Chemicals Minto.*

Mark has advised in his e-mail response dated 22 August 2018 to Benbow Environmental that there is currently a Trade Waste consent in place for a wash bay on site & this is about to be renewed for another 4 years.

While Benbow Environmental letter provides an overview of what is proposed however more information is required so an Application to Consent to Discharge Industrial Trade Waste wastewater was attached.

From a Trade Waste perspective it is important for Benbow Environmental to complete the attached Application to Consent to Discharge Industrial Trade Waste wastewater (see



attached) so that Sydney Water can categorise the process appropriately. This will need to be completed & submitted to Sydney Water in the first instance.

As the change to alter the original development consent conditions will lead to the new process being different to & located away from the current process (wash bay), it is likely that Sydney Water would be looking at issuing a separate Trade Waste consent for this.

This separate consent will enable Sydney Water to measure the volume & monitor the quality of this new discharge.

The new consent will not be issued until the commencement of operations however if an interim written approval is required & the application submitted contains all the information required, Sydney Water is happy to provide an e-mail to that effect.

Response: Kieran Horkan, Scientific Director, Organized Rhyme, has been engaged by Redox to assist in addressing the Trade Waste Agreement issues raised. A letter from Kieran Horkan to Redox advising on the best approach is provided in Attachment 8.



6. SAFEWORK

It is acknowledged that SafeWork NSW does not wish to make any further comments to the Response to Submission as per the email sent 18 October 2018 from Andrew Battye, Manager, Dangerous Goods & Explosives, SafeWork NSW to Melissa Prochazka, Senior Planning Officer, Industry Assessments, Department of Planning & Environment.



7. LIMITATIONS

Our services for this project are carried out in accordance with our current professional standards for site assessment investigations. No guarantees are either expressed or implied.

This report has been prepared solely for the use of Redox Pty Ltd, as per our agreement for providing environmental services. Only Redox Pty Ltd is entitled to rely upon the findings in the report within the scope of work described in this report. Otherwise, no responsibility is accepted for the use of any part of the report by another in any other context or for any other purpose.

Although all due care has been taken in the preparation of this study, no warranty is given, nor liability accepted (except that otherwise required by law) in relation to any of the information contained within this document. We accept no responsibility for the accuracy of any data or information provided to us by Redox Pty Ltd for the purposes of preparing this report.

Any opinions and judgements expressed herein, which are based on our understanding and interpretation of current regulatory standards, should not be construed as legal advice.



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ATTACHMENTS

Attachment 1: EPA Response



DOC18/690344-07

Mr Kane Winwood
Industry Assessment
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Mr Winwood

Section 75W Modification – DA 367-11-2002-I MOD3
Redox Pty Ltd, 2 Sweetenham Road, Minto – Environment Protection Licence 12041

I refer to the Section 75W modification request submitted by Redox Pty Ltd (Redox) to modify the development consent for operations at 2 Sweetenham Road, Minto.

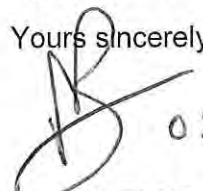
The modification proposes to:

- allow for the use of intermediate bulk containers (IBC) for storage of Class 3 flammable liquid and Class 6 toxic substances
- increase the total quantity of non-dangerous goods stored on site from 11,195 to 15,795 tonnes
- increase the storage quantity of Class 8(3) and Class 8(F1) corrosive substances stored within the Stage IV area from 250 to 540 tonnes. Noting the total quantity of dangerous goods stored on site remains unchanged at 4,650 tonnes
- allow for the decanting and dilution of food grade chemicals
- clarify site activities listed on the development consent.

The Environment Protection Authority (EPA) has reviewed the associated documents for the proposal and has identified a number of areas that require clarification. These are detailed at Attachment A. The EPA may have further comments on receipt and review of any requested information.

If you have questions regarding the above, please phone this office on (02) 4224 4100.

Yours sincerely



02/10/18

PETER BLOEM
Manager Regional Operations Illawarra
Environment Protection Authority

Attachment

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ATTACHMENT A

GENERAL

The proponent must ensure all activities are undertaken in compliance with the *Protection of the Environment Operations (POEO) Act 1997* and any associated Regulations.

The Redox premises at Minto is currently regulated by the EPA under Environment Protection Licence (EPL) 12041. This EPL must be complied with at all times.

NOISE

The proponent has outlined that the site continues to be regulated with noise conditions in the EPL. The EPA Industrial Noise Policy has been used to derive noise conditions for the site. The EPA may make changes to the licence to reflect more contemporary meteorological conditions.

AIR

Analysis of issues/sensitivities

The EPA reviewed:

- The Environmental Assessment (BE, 2018)¹ (the EA)
- the Air Quality Impact Assessment (BE, 2016)² (the Assessment).

The Assessment is based on general assumptions rather than any design information for the proposed mitigation measures associated with the decanting and mixing areas (wet scrubbers) and proposed discharge points. Additionally, the assessment does not adequately assess all potential pollutants or include adequate justification for not assessing potential emissions from other chemicals proposed to be used within the decanting/mixing area. Furthermore, it is not clear if there are existing approved sources which have not been included within the Assessment.

Whilst the proposal includes mitigation measures, EPA advises that an assessment based on general assumptions without adequate justification and supporting information presents uncertainty with the assessment outcomes.

Issue 1 – No detailed information for the proposed mitigation measures has been provided

The EPA notes that the EA advises that there are three separate decanting and diluting areas proposed within Building F. They are associated with alkali filling, acid filling and food grade products handling. These areas are considered the focal point for air emission management and control associated with the proposed modification.

The EA advises that the Stage 4 development as modified would use three scrubbers and that exact details of the scrubbers would be provided before construction. The EPA understands that the proposed scrubbers are associated with each of the three filling/decanting areas (Alkali, Acid and Food grade).

Additionally, the EA advises that dry chemicals will be debagged and used within the alkali and food grade areas. The hopper that receives the contents of the bags is proposed to have a dust hood that

¹ BE, 2018 – *Section 75W Environmental Assessment for Upgrading and Completion of Stage IV of the Development Consent for Redox Pty Ltd, 2 Swettenham Road, Minto*, prepared by Benbow Environmental dated 11 September 2018.

² BE, 2016 – *Air Quality Impact Assessment Report for 2 Swettenham Road, Minto NSW*, prepared by Benbow Environmental dated 30 August 2016.

would be connected to either a small reverse pulse dust collector or to the respective scrubbers for the type of chemical being debagged.

The EA advises that the chemicals tabled below present the majority of the chemicals to be used in each mixing area, however flexibility is needed to allow other chemicals with similar characteristics to be processed.

Acids	Alkali	Food Grade
Phosphoric acid Sulfuric acid Ferric chloride Formic acid Fluoro silicic acid	Sodium hydroxide Potassium hydroxide Hypochlorite solution	Acetic acid Citric acid Urea ammonium nitrate Phosphoric acid

The EPA considers that additional information must be provided on the proposed mitigation measures, including information that the wet scrubbers will be adequate in mitigating potential air emissions from the range of chemicals proposed to be utilised within these areas.

The proponent must provide additional information and justification for the proposed emission controls. Specifically:

- Confirm all the chemicals proposed to be used within the mixing/decanting areas
- Confirm that all storage and mixing tanks will be vented to proposed emission controls
- Additional information from the supplier/manufacturer of the wet scrubbers to confirm the emission controls would adequately mitigate potential emissions from all the chemicals proposed to be used within the mixing/decanting areas
- Additional information from the supplier/manufacturer of the wet scrubbers detailing expected emission performance. Emission performance should be provided in the form of discharge concentrations that the wet scrubbers will achieve.

Issue 2 – Air Quality Assessment based on assumptions rather than design information

The Assessment is based on general assumptions that have not been robustly justified with adequate supporting information. Assumptions are made for discharge parameters and wet scrubber control performance.

Additionally, the Assessment does not include an emission inventory that outlines all the discharge parameters for the point source discharges, including but not limited to stack height, stack diameter, flowrate and pollutant emission rates.

The EPA advises there is uncertainty with the assumptions made, including emission estimation, and hence the assessment outcomes. Uncertainty with the assessment could be resolved through provision of a revised assessment based on actual design information.

The assessment be revised using actual proposed design information and expected emission performance. This includes:

- Expected discharge concentrations the mitigation measures will achieve based on manufacture/supplier information
- Actual (not assumed) discharge parameters that are adequately described within the revised assessment.

Issue 3 - Assessment does not consider potential emissions from all potential pollutants

The Assessment predicts ground level concentrations for acetic acid and formic acid. Predicted ground level concentrations for acetic acid are compared with the impact assessment criteria contained in the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (the Approved Methods). Predicted ground level concentrations for formic acid are compared against referenced odour detection thresholds.

The Assessment does not assess other potential pollutants, such as Sulfuric acid, which is proposed for the decanting and mixing areas. The Approved Methods includes impact assessment criteria for Sulfuric acid, which is an individual toxic air pollutant. The impact assessment criteria for Sulfuric acid applies at and beyond the site boundary. The assessment advises that Acetic acid would have the highest potential for offsite impacts based on its volatility. Additionally, the assessment advises that Sulfuric acid from storage would be negligible due to the low partial vapour pressure.

To ensure robust assessment of all potential pollutants, the assessment must be revised to:

- Assess potential impacts of Sulfuric acid based on expected discharge concentrations of the wet scrubbers
- Include further justification for those chemicals that have not been assessed. This should include a review of health and safety exposure standards associated with those chemicals where quantitative assessment has not been undertaken.

Issue 4 – Demonstration of compliance with the Protection of the Environment Operations (Clean Air) Regulation 2010

The assessment references Schedule 6 of the *Protection of the Environment Operations (Clean Air) Regulation 2010* (the Regulation), which applies to non-scheduled premises. The Redox premises is scheduled and holds EPL 12041.

The EPA advises that Schedule 4 would apply to the proposal. The emission discharge points from the scrubbers will need to comply with relevant prescribed emissions concentration in Schedule 4 of the Regulation as a minimum. Schedule 4 includes prescribed concentrations for Sulfuric acid mist.

The proponent must demonstrate the discharge points will comply with relevant prescribed concentrations contained in the Clean Air Regulation through the provision of additional information from the manufacturer/supplier detailing expected emission performance (that is, discharge concentration) of the proposed wet scrubbers.

Issue 5 - Accounting for building wake effects and good stack design

The Air Quality Impact Assessment does not adequately describe if building wake effects have been accounted for in the prediction of ground level concentrations. The assessment assumes that stack height is three metres above roof level and the discharge velocity is 10 metres per second.

The EPA advises that where stack heights are not located significantly above roof level there is potential for building wake effects that can affect predicted ground level concentrations and hence assessment outcomes.

The assessment must be revised to be based on actual stack height design and discharge information including accounting for building wake effects.

Attachment 2: Scrubber Removal Efficiency Test Results

Result Sheet

Telephone: 03-9565 9888 International: +61-3-9565 9888
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Web Site: www.hrl.com.au

HRL Technology Pty Ltd
ACN 062 076 199
ABN 95 062 076 199

677 Springvale Road
Mulgrave Victoria 3170
AUSTRALIA

Date: **11 August 2015** File No. **67150215** Report No. **CMM/15/0651R**
11/08/2015

To: Name **Warren Booth**
Company **Laboratory Systems Group**
Address **Unit 6, 144-150 Canterbury Road**
Kilsyth Victoria Aust 3137

Fax No. **03 9761 7350**

Tel No. **03 8720 9000**

From: Name **Daniel McCarthy**

Tel No. **9565 9836**

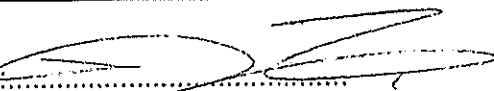
Number of pages including this page: **3**

ANALYSIS OF FUME HOOD SCRUBBER SYSTEMS

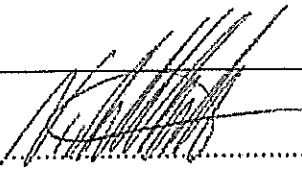
INTRODUCTION:

Laboratory Systems commissioned HRL Technology to perform efficiency testing of two fume hood wet scrubber systems developed by their group. The testing aimed to quantify the percentage removal of hydrochloric, perchloric and hydrofluoric acids from the air stream passing through the scrubbers when these acids were left fuming within the confines of the fume hood.

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Unit 6, 144-150 Canterbury Road
KILSYTH VIC 3137
A.B.N. 35 796 401 519
Tel: (613) 8720 9000
Fax: (613) 9761 7350

Signed: 

Daniel McCarthy
Product Development and
Project Chemist

Approved: 

Nick Miller
Team Leader-Analytical
Services

Distribution: Copy 1: Client. Copy 2: HRL Project File.

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The results presented in this report relate exclusively to the samples selected by the client for the purpose of testing. No responsibility is taken for the representativeness of these samples.

HRL's Quality Management System is certified by NCSI to ISO9001

QA 485

METHODOLOGY:

Fume hood scrubber efficiency was assessed by boiling known volumes of hydrochloric, perchloric and hydrofluoric acids to create vapour within the fume hood. Emissions were sampled in-situ in the fume hood on either side of the scrubber using an Apex Manual 5 Source Sampler configured to USEPA Method 26. The sample was drawn from the fume hood at the maximum flow capacity of the source sampler to obtain the maximum possible sample volume for testing. HRL Technology possesses NATA accreditation for sampling according to USEPA Method 26.

The fume hood was configured according to manufacturer specifications, with an average face velocity of 0.55m/s and a sash height of 300mm.

The sample gas volumes were measured using dry gas meters fitted with devices for measuring inlet and outlet gas temperatures. Samples collected were then tested for species indicative of acid presence in the vapour.

Hydrofluoric acid content was measured as fluoride in the impinger solutions, in accordance with APHA "Standard methods for the examination of water and waste water" section 4500 F.

Hydrochloric acid content was measured spectrophotometrically as chloride in the impinger solutions.

Perchloric acid content was measured as chlorine in the impinger solutions via ICP-OES.

This report and results sheets supersedes all previous for this project.

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RESULTS:

Analysis results are presented in Tables 1-3

Table 1- new LSG Mistline scrubber with Polypropylene Pad

Contaminant	Volume of acid boiled off in test (mL)	Sampling Position (relative to scrubber)	Concentration (mg/L)	Removal Efficiency (%)
Hydrochloric acid (as Cl-)	25	Pre	92.3	94.1
		Post	5.4	
Hydrofluoric acid (as F-)	20	Pre	127.0	97.6
		Post	3.0	
Perchloric acid (as Cl)	15	Pre	31.8	88.2
		Post	3.7	

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Table 2 - Standard scrubber results (two spray system)

Contaminant	Volume of acid boiled off in test (mL)	Sampling Position (relative to scrubber)	Concentration (mg/L)	Removal Efficiency (%)
Hydrochloric acid (as Cl-)	25	Pre	70.0	98.2
		Post	1.3	
Hydrofluoric acid (as F-)	20	Pre	73.0	96.2
		Post	2.8	

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Table 3 - Standard scrubber results (single spray system)

Contaminant	Volume of acid boiled off in test (mL)	Sampling Position (relative to scrubber)	Concentration (mg/L)	Removal Efficiency (%)
Hydrochloric acid (as Cl-)	25	Pre	70.0	98.3
		Post	1.2	

Attachment 3: Building Downwash Output File

Building Downwash output file.pro
T:\JOBS - ACTIVE\148292 - Redox - Ongoing work\Job\Technical\Air\148

BPIP (Dated: 04274)

DATE : 10/10/2018

TIME : 17: 6:38

T:\JOBS - ACTIVE\148292 - Redox - Ongoing work\Job\Technical\Air\148

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BPIP PROCESSING INFORMATION:

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The P flag has been set for preparing downwash related data
for a model run utilizing the PRIME algorithm.

Inputs entered in METERS will be converted to meters using
a conversion factor of 1.0000. Output will be in meters.

The UTM variable is set to UTM. The input is assumed to be in
UTM coordinates. BPIP will move the UTM origin to the first pair of
UTM coordinates read. The UTM coordinates of the new origin will
be subtracted from all the other UTM coordinates entered to form
this new local coordinate system.

Plant north is set to 0.00 degrees with respect to True North.

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PRELIMINARY* GEP STACK HEIGHT RESULTS TABLE
(Output Units: meters)

Stack Name	Stack Height	Stack-Building Base Elevation Differences	GEP** EQN1	Preliminary* GEP Stack Height Value
FLARE1	4.25	0.06	26.19	65.00
STCK1	13.00	4.69	21.56	65.00

* Results are based on Determinants 1 & 2 on pages 1 & 2 of the GEP
Technical Support Document. Determinant 3 may be investigated for
additional stack height credit. Final values result after
Determinant 3 has been taken into consideration.

** Results were derived from Equation 1 on page 6 of GEP Technical
Support Document. Values have been adjusted for any stack-building
base elevation differences.

Note: Criteria for determining stack heights for modeling emission
limitations for a source can be found in Table 3.1 of the
GEP Technical Support Document.

BPIP (Dated: 04274)

DATE : 10/10/2018

TIME : 17: 6:38

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Building Downwash output file.pro

BPIP output is in meters

SO	BUILDHGT	FLARE1	10.50	10.50	10.50	10.50	10.50	10.50
SO	BUILDHGT	FLARE1	10.50	10.50	10.50	10.50	10.50	10.50
SO	BUILDHGT	FLARE1	10.50	10.50	10.50	10.50	10.50	10.50
SO	BUILDHGT	FLARE1	10.50	10.50	10.50	10.50	10.50	10.50
SO	BUILDHGT	FLARE1	10.50	10.50	10.50	10.50	10.50	10.50
SO	BUILDHGT	FLARE1	10.50	10.50	10.50	10.50	10.50	10.50
SO	BUILDWID	FLARE1	88.74	78.63	66.13	54.72	64.93	77.12
SO	BUILDWID	FLARE1	86.96	94.16	98.50	99.85	137.23	134.38
SO	BUILDWID	FLARE1	130.50	138.02	141.35	140.38	100.64	96.15
SO	BUILDWID	FLARE1	88.74	78.63	66.13	52.32	64.93	77.12
SO	BUILDWID	FLARE1	86.96	94.16	98.50	99.85	137.23	134.38
SO	BUILDWID	FLARE1	130.50	138.02	141.35	140.38	100.64	96.15
SO	BUILDLEN	FLARE1	99.85	98.16	93.49	130.50	95.68	100.40
SO	BUILDLEN	FLARE1	102.07	100.64	96.15	88.74	96.05	76.55
SO	BUILDLEN	FLARE1	54.72	72.45	91.61	107.97	94.16	98.50
SO	BUILDLEN	FLARE1	99.85	98.16	93.49	88.08	95.68	100.40
SO	BUILDLEN	FLARE1	102.07	100.64	96.15	88.74	96.05	76.55
SO	BUILDLEN	FLARE1	54.72	72.45	91.61	107.97	94.16	98.50
SO	XBADJ	FLARE1	4.44	10.34	15.92	-21.41	16.80	12.05
SO	XBADJ	FLARE1	6.94	1.61	-3.76	-9.02	-31.43	-28.98
SO	XBADJ	FLARE1	-25.65	-41.48	-58.45	-73.64	-86.59	-96.91
SO	XBADJ	FLARE1	-104.29	-108.49	-109.41	-109.10	-112.49	-112.46
SO	XBADJ	FLARE1	-109.01	-102.25	-92.39	-79.72	-64.62	-47.57
SO	XBADJ	FLARE1	-29.06	-30.97	-33.16	-34.34	-7.57	-1.59
SO	YBADJ	FLARE1	-35.35	-25.31	-14.50	-1.71	9.01	19.89
SO	YBADJ	FLARE1	30.16	39.51	47.66	54.36	39.88	42.22
SO	YBADJ	FLARE1	43.84	43.47	41.78	38.82	51.93	44.31
SO	YBADJ	FLARE1	35.35	25.31	14.50	2.90	-9.01	-19.89
SO	YBADJ	FLARE1	-30.16	-39.51	-47.66	-54.36	-39.88	-42.22
SO	YBADJ	FLARE1	-43.84	-43.47	-41.78	-38.82	-51.93	-44.31
SO	BUILDHGT	STCK1	10.50	10.50	10.50	10.50	10.50	10.50
SO	BUILDHGT	STCK1	10.50	10.50	10.50	10.50	10.50	10.50
SO	BUILDHGT	STCK1	10.50	10.50	10.50	10.50	10.50	10.50
SO	BUILDHGT	STCK1	10.50	10.50	10.50	10.50	10.50	10.50
SO	BUILDHGT	STCK1	10.50	10.50	10.50	10.50	10.50	10.50
SO	BUILDHGT	STCK1	10.50	10.50	10.50	10.50	10.50	10.50
SO	BUILDWID	STCK1	88.74	78.63	66.13	52.32	64.93	77.12
SO	BUILDWID	STCK1	86.96	94.16	98.50	99.85	98.16	93.49
SO	BUILDWID	STCK1	130.50	95.68	100.40	102.07	100.64	96.15
SO	BUILDWID	STCK1	88.74	78.63	66.13	52.32	64.93	77.12
SO	BUILDWID	STCK1	86.96	94.16	98.50	99.85	98.16	93.49
SO	BUILDWID	STCK1	130.50	95.68	100.40	102.07	100.64	96.15
SO	BUILDLEN	STCK1	99.85	98.16	93.49	88.08	95.68	100.40
SO	BUILDLEN	STCK1	102.07	100.64	96.15	88.74	78.63	66.13
SO	BUILDLEN	STCK1	54.72	64.93	77.12	86.96	94.16	98.50
SO	BUILDLEN	STCK1	99.85	98.16	93.49	88.08	95.68	100.40
SO	BUILDLEN	STCK1	102.07	100.64	96.15	88.74	78.63	66.13
SO	BUILDLEN	STCK1	54.72	64.93	77.12	86.96	94.16	98.50
SO	XBADJ	STCK1	-17.89	-10.25	-2.30	5.73	4.90	3.90
SO	XBADJ	STCK1	2.79	1.59	0.34	-0.92	-2.15	-3.32
SO	XBADJ	STCK1	-7.47	-20.92	-36.13	-50.25	-62.83	-73.51
SO	XBADJ	STCK1	-81.95	-87.91	-91.19	-93.81	-100.58	-104.31
SO	XBADJ	STCK1	-104.86	-102.23	-96.49	-87.82	-76.48	-62.82
SO	XBADJ	STCK1	-47.25	-44.01	-40.99	-36.72	-31.33	-24.99
SO	YBADJ	STCK1	-43.45	-37.17	-29.75	-21.09	-11.55	-2.43
SO	YBADJ	STCK1	6.76	15.75	24.26	32.03	38.83	44.45
SO	YBADJ	STCK1	28.55	52.74	54.11	53.83	51.91	48.41

		Building Downwash output file.pro						
S0 YBADJ	STCK1	43.45	37.17	29.75	21.09	11.55	2.43	
S0 YBADJ	STCK1	-6.76	-15.75	-24.26	-32.03	-38.83	-44.45	
S0 YBADJ	STCK1	-28.55	-52.74	-54.11	-53.83	-51.91	-48.41	



Contact Name: Melissa Prochazka
Number: (02) 8289 6695
Email: melissa.prochazka@planning.nsw.gov.au

Mr Richard Coneliano
Director
Redox Pty Ltd
2 Swettenham Road
Minto NSW 2566

Dear Mr Coneliano,

**Redox Chemical Storage Warehouse, Minto (DA 367-11-2002-i MOD 3)
Request for Response to Submissions**

The notification period of the modification request for the Redox Chemical Storage Warehouse, Minto ended on Tuesday 2 October 2018. All submissions received by the Department during the notification period are available on the Department's website at:

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=9009.

Please provide a response to the issues raised by the submissions and the Department (see **Attachment A**) by **Friday 9 November 2018**.

If there are any changes to the scope of the modification that substantially change the environmental impacts of the modification as outlined in the EA, exhibition of the proposed changes may be required.

If you have any questions, please contact Melissa Prochazka, Senior Planning Officer, on the details above.

Yours sincerely

Chris Ritchie
Director

Industry Assessments

as delegate for the Planning Secretary

9/10/18.

ATTACHMENT A – Department of Planning and Environment's Comments

In order to finalise the assessment, additional information is required including but not limited to the following:

1. Scope of the modification request

The Response to Submissions (RTS) must formally confirm the scope of the modification request, taking into consideration the withdrawal of the alteration of the approved haul route on 25 September 2018.

2. Withdrawal of the proposed alteration of the approved haul route

An explanation must be provided regarding the withdrawal of the alteration of the haul route, which should include confirmation that the approved haul route will continue to be used by the Proponent.

The RTS must also address Roads and Maritime's concerns raised in the initial submission dated 21 September 2018.

3. Truck movements during the construction phase

The Environmental Assessment (EA) or attached Traffic Management Plan does not provide any discussion on the likely impact of vehicles during the construction phase of the Stage IV warehouse. While it is understood construction activities and potential impacts were discussed in the original EIS and associated management plans, this information was prepared over 15 years ago. In the RTS, please provide an understanding of the likely vehicle movements associated with the construction of the Stage IV warehouse, potential impacts and proposed mitigation measures.

4. Change in the existing truck movements

Based on the discussion provided in section 4.4 of the EA, the Traffic and Parking Assessment in Attachment 6, it is understood the Proponent proposes to increase light vehicle movements by 24 trips per day and heavy vehicle movements by 20 trips per day. In the RTS, please provide an indicative breakdown of vehicles entering / leaving the site carrying dangerous goods vs non-dangerous goods. Please clarify how this increase in vehicle movements relates to current operations and the request to increase the quantity of non-dangerous goods stored onsite.

5. Clarification regarding bulk soda ash

Bulk soda ash was removed from the list of proposed non-dangerous goods to be stored onsite as part of the Commission of Inquiry. Consequently, the overall non-dangerous goods quantity was reduced from 20,445 tonnes to 15,795 tonnes in the consent.

The modification request now seeks to increase the total quantity of non-dangerous goods to be stored on-site back to the original proposed 20,445 tonnes. While it appears from the information provided in the EA, this increase will allow for storage of already approved non-dangerous goods and food grade chemicals, there is no clear statement which clearly confirms this increase is not to reinstate the bulk soda ash previously removed. Please provided confirmation bulk soda ash is not proposed to be stored onsite.

6. Community and Agency Consultation

Section 3 of the EA discusses the consultation programme carried out by Benbow Environmental on behalf of the Proponent. Further clarification is required in the RTS to address the following:

- the date the leaflet provided in Attachment 13 of the EA, was distributed to the residential houses and commercial premises identified in the Figure on Page 3-2 of the EA;
- the date the Childcare Centre was visited and whether their representatives raise any concerns;
- the leaflet in Attachment 13 of the EA, advises that community meetings would be held at the Redox Facility on Friday 23 February and Tuesday 27 February. Please confirm in the RTS on which calendar year these community meetings were held. In addition, please provide for community meetings held:
 - the number of attendees;
 - comments, questions or issues raised at each meeting; and
 - responses provided to address any comments, questions or issues raised; and
- a summary of the comments, questions or issues raised by Campbelltown City Council and the relevant agencies received to date. Noting some of the correspondence received is provided in Attachment 15 of the EA.

7. Questions regarding Preliminary Hazard Assessment (PHA)

The scope of the modification has now been clearly stated in the EA. It is understood that the modification is seeking to change the mode of storage into the following, but the overall dangerous goods storage quantity is unchanged as 4650 tonnes:

- 290 tonne of Class 8 corrosive material in aboveground tanks
- Up to 900 tonne Class 3 flammable liquid in intermediate bulk container (IBC -1000L).
- Up to 850 tonne of Class 6.1 material in IBC.

Following the review of PHA, the following questions are raised:

- Refer to Table 2-14 of EA, it is noted that up to 900 tonnes of Class 3 is stored. Please clarify why the PHA only capture the quantity of 600 tonne of Class 3 in the assessment. It should be also noted that in Table 5-5 of PHA, storage of 1200 tonne of Class 3 is suggested. If the proposal is store up to 900 tonnes of class 3 in warehouse B1/B2, please justify whether an update of PHA is required.
- In Table 5-16 of PHA, it is noted that the fire involving 30 tonne of Class 8(3) liquid in Stage IV building has a larger heat radiation distance than those shown in Table 5-12 for 600 tonne of Class 3 liquid at B1/B2 warehouses. Please clarify what is the warehouses areas for each case.
- Based on the consequence distance on the worst-case fire event, please comment whether the heat radiation to fatality and injury will extend beyond the site boundary and reach to the closet residential or sensitive uses.

In the Response to Submissions due on 9 November 2018, please ensure the comments below are addressed.

Kind regards,

Melissa Prochazka

Senior Planning Officer (Part-time: Monday to Thursday)
Industry Assessments
Department of Planning & Environment
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From: David Smith <David.Smith@campbelltown.nsw.gov.au>

Sent: Wednesday, 24 October 2018 9:17 AM

To: Melissa Prochazka <Melissa.Prochazka@planning.nsw.gov.au>

Subject: FW: HPE CM: Update regarding the section 75W Modification to the Redox Chemicals Storage Warehouse, Minto (DA 367-11-2002-I MOD 3)

Hi Melissa,

Thank you for the phone conversation and sorry we are a bit slow with our response.

Our engineers have advised:

1. Without some assessment of the existing traffic movements on the site, it is not possible to determine if the comments regarding minor impact on traffic facilities in the area are correct. The document indicates a possible tripling of the current level of production from 35,000L/day to 100,000L/day. Details are scant but would assume this translates to a tripling of vehicle movements. Until this is confirmed, it is not possible to determine the impact on existing traffic facilities.
2. There is a Load limit of 40T on Ben Lomond Bridge over Bow Bowling Creek which is identified as part of the truck route for the site (see attached email). Could not find details of trucks which are accessing this site, but this may be a significant issue and have an impact on routes to and from the site. May also be at odds with the decisions to not revise the access routes.
3. The site is not affected by 1% AEP flooding in Bow Bowling Creek however it is affected by overland flow from the local catchment. A suitably sized internal stormwater system will need to be installed. Consideration of overland flow paths in a full range of storm events (commensurate with the environmental risk posed by the chemicals stored on site) will need to be undertaken. The proposal appears to close the gap between the buildings which currently conveys flows to the creek. Unsure if the nature of development requires assessment of a higher flood standard than our usual flood planning event.
4. With respect to water quality (as the site abuts Bow Bowling Creek) the proposal will need to demonstrate appropriate bunding and spill controls commensurate with the level of risk. The proposal may do such, but time has not allowed full review.

We would like confirmation that the stormwater quality and quantity measures are consistent with current standards.

Thank you for the opportunity to provide comments. Please let me know if any of this requires clarification.

Regards

David

David Smith
Executive Manager Urban Centres
Campbelltown City Council

P: 02 4645 4598
www.campbelltown.nsw.gov.au



From: Melissa Prochazka [<mailto:Melissa.Prochazka@planning.nsw.gov.au>]
Sent: Wednesday, 3 October 2018 11:50 AM
To: Council
Cc: Kane Winwood
Subject: FW: HPE CM: Update regarding the section 75W Modification to the Redox Chemicals Storage Warehouse, Minto (DA 367-11-2002-I MOD 3)

Good morning,

I am just following up to see whether Council would like to make a submission for the Redox Chemicals Storage Warehouse, Minto (DA 367-11-2002-i MOD 3). Noting submissions were due by 2 October 2018.

If you still wish to comment on the modification request, please provide your submission to the Department as soon as possible and no later than **Friday 5 October 2018**.

Kind regards,

Melissa Prochazka

Senior Planning Officer (Part-time: Monday to Thursday)
Industry Assessments
Department of Planning & Environment
Level 29 | 320 Pitt Street | GPO Box 39 SYDNEY NSW 2001
T 02 8289 6695 E melissa.prochazka@planning.nsw.gov.au

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From: Melissa Prochazka
Sent: Tuesday, 25 September 2018 4:19 PM
To: council@campbelltown.nsw.gov.au
Cc: Kane Winwood <Kane.Winwood@planning.nsw.gov.au>
Subject: HPE CM: Update regarding the section 75W Modification to the Redox Chemicals Storage Warehouse, Minto (DA 367-11-2002-I MOD 3)

Good afternoon,

I refer to the Department of Planning and Environment's letter dated 17 September 2018 regarding the 75W modification request for the Redox Chemicals Storage Warehouse, Minto (DA 367-11-2002-i MOD 3).

Please find attached advice from the Applicant that they would like to withdraw the component of the modification request relating to alteration of the approved traffic route to utilise Raby Road links to the Motorway. It is noted that traffic to and from the site will continue to be via the existing route as approved under the development consent.

Please take this into consideration when providing any comments on the proposed modification request by close of business **Tuesday 2 October 2018**.

If you have any further questions, please contact Melissa Prochazka on (02) 8289 6695.

Kind regards,

Melissa Prochazka

Senior Planning Officer (Part-time: Monday to Thursday)
Industry Assessments
Department of Planning & Environment
Level 29 | 320 Pitt Street | GPO Box 39 SYDNEY NSW 2001
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From: Luisa Maguire

Sent: Tuesday, 18 September 2018 7:45 AM

To: OLG - Campbelltown City Council <council@campbelltown.nsw.gov.au>

Cc: Melissa Prochazka <Melissa.Prochazka@planning.nsw.gov.au>

Subject: HPE CM: Notification of Section 75W Modification to the Redox Chemicals Storage Warehouse, Minto (DA 367-11-2002-I MOD 3)

Good Morning,

Please find attached the Notification of Section 75W Modification to the Redox Chemicals Storage Warehouse, Minto (DA 367-11-2002-I MOD 3)

The modification request and accompanying documents may be viewed on the department's website at http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=9009.

The Department of Planning and Environment invites you to comment on the modification request by close of business **Tuesday 2 October 2018**.

If you have any questions, please contact Melissa Prochazka on (02) 8289 6695 or via email at melissa.prochazka@planning.nsw.gov.au.

Regards

Luisa Maguire

Luisa Maguire

DA Coordinator | Key Sites and Industry Assessments
Department of Planning & Environment
320 Pitt Street | GPO Box 39 | Sydney NSW 2001
T 02 8289 6757 E luisa.maguire@planning.nsw.gov.au

2 October 2018

Our Reference: SYD18/01249/03 (A24247839)
DP&E Ref: DA 367-11-2002-I MOD3

Kane Winwood
Acting Team Leader
Industry Assessments
Department of Planning & Environment
GPO Box 39
SYDNEY, NSW, 2001.

Attention: Melissa Prochazka

Dear Kane Winwood

SECTION 75W MODIFICATION TO THE REDOX CHEMICALS WAREHOUSE, MINTO

Reference is made to the Department of Planning and Environment (DP&E) letter dated 17 September 2018, and subsequent email of amended application dated 25 September 2018, regarding the abovementioned application which was referred to Roads and Maritime Services (Roads and Maritime) for comment in accordance with Schedule 3 of the *State Environmental Planning Policy (Infrastructure) 2007*.

Roads and Maritime has reviewed the proposal as modified by REDOX, letter dated 25 September 2018, and understands that the current modification of the proposal by REDOX development has now excluded any variation proposal for the original truck routes servicing the subject land. This issue was the primary matter of concern raised in the Roads and Maritime Services original response dated 21 September 2018.

On this basis it is confirmed that Roads and Maritime raises no objections to the modified proposal and provides the following comments for consideration.

If you have any further inquiries in relation to this development application Chris King would be pleased to take your call on 8849 2087 or e: development.sydney@rms.nsw.gov.au

Yours sincerely



Pahee Rathan
Senior Land Use Assessment Coordinator
Northwest Sydney Precinct

Roads and Maritime Services

21 September 2018

Our Reference: SYD18/01249/02 (A24108379)
DP&E Ref: DA 367-11-2002-I MOD3

Kane Winwood
Acting Team Leader
Industry Assessments
Department of Planning & Environment
GPO Box 39
SYDNEY, NSW, 2001.

Attention: Melissa Prochazka

Dear Kane Winwood

SECTION 75W MODIFICATION - THE REDOX CHEMICALS WAREHOUSE, MINTO

Reference is made to the Department of Planning and Environment (DP&E) letter dated 17 September 2018, regarding the abovementioned application which was referred to Roads and Maritime Services (Roads and Maritime) for comment in accordance with Schedule 3 of the *State Environmental Planning Policy (Infrastructure) 2007*.

Roads and Maritime has reviewed the proposal and understands that the modification of the original consent for the REDOX development is for modification of building works, quantities of goods stored on site and an alteration to the approved heavy vehicle route to the M31 Motorway. Roads and Maritime objects to the proposed modification and provides the following comments for consideration:

1. The modification of the heavy vehicle route is not considered justified via the "*Traffic and Parking Impact Assessment Report*" prepared by Transport & Urban Planning Pty Ltd, dated August 2016, which deals mainly with vehicle numbers and movement corridors. The proposed change of route appears to traverse greater residential areas than the original route, see attached aerial map, and this requires greater consideration of local amenity impacts when assessing the suitability of any route variation;
2. Proposal requires greater environmental and safety assessment relating to the transport of hazardous materials through primarily residential areas and details of hazardous risk assessment analysis undertaken;
3. Any assessment of the modification to the approved transport routes servicing the facility should have regard to the intent/purpose, applicability and necessity to modify, the following transport related conditions of the 2003 approval for DA No.367-11-2002-i issued by the NSW Minister for Infrastructure and Planning:
Conditions 1.1, 1.2, 4.6, 4.9, 4.10, 4.11, 4.21, 4.22, 5.2, 5.6, 5.10, 7.4 and 7.5

Roads and Maritime Services

4. Concern is raised that the Modification Application relies on documentation prepared in 2016, Traffic and Acoustic Reports, and that it would be appropriate that this documentation was updated to reflect current day activities, particularly with regard to traffic generation and management.

Roads and Maritime Services notes that Benbow Environmental sought comments on this proposed Modification on the 7th August and Roads and Maritime responded to this query on the 12 September, copy is attached. It is noted that the Modification was lodged on the 11th September with the Department and thus Benbow Environmental was unable to respond to the matters raised by Roads and Maritime.

If you have any further inquiries in relation to this development application Chris King would be pleased to take your call on 8849 2087 or e: development.sydney@rms.nsw.gov.au

Yours sincerely



Pahee Rathan
Senior Land Use Assessment Coordinator
Network Sydney Precinct

Emma Hansma

From: Melissa Prochazka <Melissa.Prochazka@planning.nsw.gov.au>
Sent: Monday, 5 November 2018 3:19 PM
To: Richard Coneliano
Cc: Kane Winwood
Subject: RE: DA 367-11-2002-i MOD 3 - Redox Chemical Storage Facility, Minto - Sydney Water

Hi Richard,

Sorry for missing your call, I am currently attending a course.

The Department did not receive a submission from Sydney Water during the notification process. The reference to correspondence from Syd Water in the RTS letter is between Benbow as discussed in the EA. The attached email is sufficient to provide evidence of this correspondence.

In the RTS, I recommend you summarise the engagement undertaken with Sydney Water and provide the attached letter (re: trade waste) and email in the appendices.

I hope this helps.

Kind regards,

Melissa Prochazka

Senior Planning Officer (Part-time: Monday to Thursday)
Industry Assessments
Department of Planning & Environment
Level 29 | 320 Pitt Street | GPO Box 39 SYDNEY NSW 2001
T 02 8289 6695 E melissa.prochazka@planning.nsw.gov.au

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From: Richard Coneliano <Richard.Coneliano@redox.com>
Sent: Monday, 5 November 2018 2:53 PM
To: Melissa Prochazka <Melissa.Prochazka@planning.nsw.gov.au>
Cc: Steven Williams <Steven.Williams@redox.com>; Malcolm Perrins <Malcolm.Perrins@redox.com>; Emma Hansma <EHansma@benbowenviro.com.au>
Subject: DA 367-11-2002-i MOD 3 - Redox Chemical Storage Facility, Minto - Sydney Water

Hi Melissa,

I tried to call but got your VM.

We are almost there with our RTS. Understand we need to get it in to you by this Friday 9th Nov? We are on track.

One question at this stage: I can't find any submission by Sydney Water forwarded from you. We have an email sent by Sydney Water to Benbow Environmental (see attached). Is this what we should be responding to, or is there another letter from Sydney Water we have missed?

We engaged a trade waste expert who spoke to Sydney Water and provided us the attached. Is this in a form suitable for the RTS or do we have to rewrite somehow?

Thanks Melissa. Feel free to call on 0414848384 if you prefer.

Regards,

Richard Coneliano
Director / Information Technology Manager

Redox Pty Ltd | Sydney, Australia | Phone: +61-2-97333000 |
Fax: +61-2-97333111 | Web: <http://www.redox.com>



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From: POWELL, ANN [<mailto:ANN.POWELL@sydneywater.com.au>]

Sent: Friday, 14 September 2018 4:34 PM

To: Sarah New-Beall

Cc: SCHIBECI, MARK

Subject: Stage IV of Redox 2 Swettenham Road Minto Site Section 75W Application to Department of Planning & Environment

Good Afternoon,

I am responding to the attached letter dated 07 August 2018 (Reference: 148292_Let2_SW) from Benbow Environmental.

In that letter Sydney Water have been advised that there is to be a change to alter the original conditions of consent granted by the Minister for Planning in 2003 in DA 367-11-2002-i.

Sydney Water have been advised that stages 1-3 of the development have been completed. Stage 4 involves a facility to store Class 8 corrosive liquids in aboveground tanks.

The Section 75W application seeks to alter the range of chemicals that would be handled at the facility. Trade waste will be generated by Stage 4 of the development which was envisaged in the original development application. This daily discharge of trade waste is estimated not to exceed 5 kilolitres.

Sydney Water's response is in two parts. Part 1 deals with the Development Application reviewed & responded to by Sydney Water.

Part 2 deals with the current response from Sydney Water's Trade waste area (Customer Delivery) in relation to the proposed changes in the letter attached from Benbow Environmental.

Part 1 – Sydney Water's response to the Development Application.

Sydney Water have investigated the proposed development by Redox Chemicals P/L under Case Number 67836 & issued out Notice of Requirements dated 11 October 2004.

These requirements were issued for the development proposal as outlined in the consent granted by the Minister for Planning in 2003 in DA 367-11-2002-i. In that consent it listed Stage 4 (Construction & use of Building H & Tank Farm & Drumming Facility (Building 'F')).

Subsequently all Sydney Water's requirements have been met for the construction & operation of a Chemical & Storage Distribution Centre & our Section 73 Subdivider/Developer Compliance Certificate was issued on 11 October 2004.

The only change now to be addressed is concerning the Trade Waste conditions (see Part 2 below).

Part 2 Current response from Sydney Water's Trade Waste Team (Customer Delivery)

Mark Schibeci from the Trade Waste area in Customer Delivery reviewed Benbow Environmental's letter to Sydney Water dated 07 August 2018 regarding the Stage 4 development at Redox Chemicals Minto.

Mark has advised in his e-mail response dated 22 August 2018 to Benbow Environmental that there is currently a Trade Waste consent in place for a wash bay on site & this is about to be renewed for another 4 years.

While Benbow Environmental letter provides an overview of what is proposed however more information is required so an Application to Consent to Discharge Industrial Trade Waste wastewater was attached.

From a Trade Waste perspective it is important for Benbow Environmental to complete the attached Application to Consent to Discharge Industrial Trade Waste wastewater (see attached) so that Sydney Water can categorise the process appropriately. This will need to be completed & submitted to Sydney Water in the first instance.

As the change to alter the original development consent conditions will lead to the new process being different to & located away from the current process (wash bay), it is likely that Sydney Water would be looking at issuing a separate Trade Waste consent for this.

This separate consent will enable Sydney Water to measure the volume & monitor the quality of this new discharge.

The new consent will not be issued until the commencement of operations however if an interim written approval is required & the application submitted contains all the information required, Sydney Water is happy to provide an e-mail to that effect.

I trust that the above information will assist. If you have any further questions please do not hesitate to contact me. Happy to discuss.

Regards

Ann Powell
Strategic Project Coordinator
Development & Infrastructure Portfolio Services
Sydney Water, Level 7, 1 Smith Street, Parramatta NSW 2150



Ph 8849 5361
Mob 0439 484 772
ann.powell@sydneywater.com.au



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Attachment 9: Annual Environmental Management Reports

2011
Annual Environmental Management Report



Redox Pty Ltd



**2 Swettenham Road
Minto NSW 2566**

Prepared by: Redox Pty Ltd

Heather Kitto (Regulatory Affairs Coordinator)
Authorised by Malcolm Perrins (Director)

December 2011



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2011 Annual Environmental Management Report
2 Swettenham Road, Minto NSW

Executive Summary

This Annual Environmental Management Report (AEMR) has been prepared by Redox Pty Ltd (Redox) to review the performance of the development at 2 Swettenham Road, Minto NSW against the Operational Environmental Management Plan (OEMP) and Construction Environmental Management Plan (CEMP), the conditions of consent, Environmental Protection Licence 12041 and Environmental Legislation pertaining to the site, during the period January to December 2011.

The AEMR is intended to meet the requirements of the NSW Department of Planning, under development consent condition 8.3 – Annual Performance Reporting.

Site environmental management procedures and monitoring systems are in place for noise, transport, stormwater, waste, landscape, dust and odour control, community communication and incident reporting, as per the Operational Environmental Management Plans.

Ultimate responsibility for site environmental performance rests with the Managing Director. Day-to-day environmental management is the combined responsibility of the Regulatory Affairs Coordinator and the Store Manager.

No community, environmental or pollution complaints were received during 2011 related to the Minto facility operations.



1 Introduction

This Annual Environmental Management Report (AEMR) has been prepared by Redox Pty Ltd (Redox) to review the performance of the development at 2 Swettenham Road, Minto NSW against the Operational Environmental Management Plan (OEMP), the conditions of consent, Environmental Protection Licence 12041 and Environmental Legislation pertaining to the site, during the period January to December 2011.

The AEMR is intended to meet the requirements of the NSW Department of Planning, under development consent condition 8.3 – Annual Performance Reporting.

Condition 8.3 requires that Redox, throughout the life of the development, prepare and submit for the approval of the Director-General, and Annual Environmental Management Report (AEMR). The AEMR shall review the performance of the development against the Operational Environmental Management Plan, the conditions of consent and other licences and approvals relating to the development. The AEMR shall include, but not necessarily be limited to:

- (a) Details of compliance with the conditions of consent;
- (b) A copy of the Complaints Register for the preceding twelve-month period, and details of how these complaints were addressed and resolved;
- (c) A comparison of the environmental impacts and performance of the development against the environmental impacts and performance predicted in those documents listed under Condition 1.2 of consent;
- (d) Results of all environmental monitoring required under this consent and other approvals, including interpretations and discussion by a suitably qualified person; and
- (e) A list of all occasions in the preceding twelve-month period when environmental performance goals for the development have not been achieved, indicating the reason for failure to meet the goals and the action taken to prevent recurrence of that type of incident.

Redox shall submit a copy of the AEMR to the Director-General every year.

The Director-General may require Redox to address certain matters in relation to the environmental performance of the development in response to review of the Annual Environmental Management Report. Any action required to be undertaken shall be completed within such period as the Director-General may require.

1.1 Site & Operational Overview

Redox is an importer and distributor of close to 1,000 different organic and inorganic chemicals and raw materials. Used in more than 140 different industries, including Agriculture, Detergent, Food & Beverage, Mining & Metal, Surface Coating and Chemical Manufacture, these products are supplied to all areas of industry throughout Australia and New Zealand.

Redox operates five sites in Australia and three in New Zealand. The Head Office site in Minto (this site) is the base for the company's Marketing and Administration functions for its Australian and New Zealand operations. This site consists of two office/Administration buildings and five warehouses for the storage of both dangerous and non-dangerous goods.

The 5.984ha Redox owned site is located within the Minto Industrial Estate and is surrounded predominantly by light industrial and commercial operations to the west, north and south. Bow Bowing Canal forms the eastern boundary to the site. The nearest sensitive landuse is the New Generation Child Care Centre, situated on the site's northern boundary. The nearest residential properties are situated on the opposite side of Campbelltown Road.



Figure 1.1: Aerial view, Redox Minto Facility.



The Minto facility, operational since 5 December 2005, was officially opened on 26 April 2006. The construction of Stage 3 of the development, a 2935m² non-dangerous goods store, commenced August 2008 and was completed February 2009. The new store was occupied from 27 February 2009.

Operational and construction site environmental management procedures are in place for noise, transport, stormwater, waste, landscape, dust and odour control, community communication and incident reporting. Ultimate responsibility for site environmental performance rests with the Managing Director; day-to-day environmental management is the combined responsibility of the Regulatory Affairs Coordinator and the Store Manager.

1.2 Operational Environmental Management Plan

Prior to commencement of operations on the site, an Operational Environmental Management Plan (OEMP) was prepared by Redox, and approved by the Director-General of the Department of Infrastructure, Planning and Natural Resources (DIPNR). This OEMP details the environmental management framework, practices and procedures to be followed during the operation of the development. The OEMP includes:

- (a) Identification of all statutory and other obligations that Redox is required to fulfil in relation to operation of the development, including all consents, licences, approvals and consultations;
- (b) A description of the roles and responsibilities for all relevant employees involved in the operation of the development;
- (c) Overall environmental policies and principles to be applied to the operation of the development;
- (d) Standards and performance measures to be applied to the development, and a means by which environmental performance can be periodically reviewed and improved;
- (e) Management policies to ensure that environmental performance goals are met and to comply with the conditions of consent;
- (f) The listed Management Plans:
 - (i) Noise Management Plan;
 - (ii) Transport Management Plan;
 - (iii) Stormwater Management Plan;
 - (iv) Waste Management Plan;
 - (v) Landscape Management Plan; and
- (g) The environmental monitoring requirements outlined in the conditions of consent.



1.3 Development Consent Conditions

The Minister for Infrastructure and Planning, the Hon Craig Knowles MP, determined to approve the Chemical Storage and Distribution Facility, Lot 171 Swettenham Road, Minto, Campbelltown LGA (DA No: 367-11-2002-i) on 16 September 2003, subject to Development Consent Conditions.

The reason for the imposition of conditions is to:

- (a) Minimise any adverse environmental impacts associated with the development;
- (b) Ensure effective on-going environmental and safety management and monitoring;
- (c) Minimise potential safety impacts associated with the development; and
- (d) Implement the recommendations of the Commission of Inquiry into all environmental aspects of the development.

1.4 Environmental Protection Licence

Environmental Protection Licence 12041 authorises Redox to carry out Chemical Storage and Waste Activities at 2 Swettenham Road, Minto.

General obligations of the licensee under this licence, and as set out in the *Protection of the Environment Operations Act 1997* and the Regulations made under the Act, include to:

- (a) Ensure persons associated with Redox comply with this Licence,
- (b) Control the pollution of waters and the pollution of air, and
- (c) Report incidents causing or threatening material environmental harm.



2 Details of Compliance

This section is intended to address requirement (a) of DCC 8.3, to detail compliance with the conditions of consent.

2.1 Compliance with Development Consent Conditions

Table 2.1: Compliance with Development Consent Conditions

Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
1	GENERAL					
Obligation to Minimise Harm to the Environment						
1.1	Redox shall implement all practicable measures to prevent or minimise any harm to the environment that may result from the construction, commissioning, operation ... of the development.	✓			Compliant	Environmental aspects of construction and operation are identified and controlled as per the Construction & Operational Environmental Management Plans. Control measures are audited internally & externally.
Scope of Development						
1.2	Redox shall carry out the development generally in accordance with the scope documents.	✓			Compliant	These requirements are incorporated into the Operational & Construction Management Plans and drawings to ensure that the development remains the same as presented in the scope documents.
1.3	In the event of any inconsistency between the conditions of consent and/or any scope document(s), the conditions of consent and/or the most recent document shall prevail to the extent of the inconsistency.	✓			Noted	



2011 Annual Environmental Management Report
2 Swettenham Road, Minto NSW

Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
Provision of Documents						
1.4	Redox shall provide all documents and reports required to be submitted to the Director-General under this consent in an appropriate electronic format.	✓			Compliant	All documents required to be submitted to the Department under development consent are submitted in electronic (pdf) format.
1.5	Nothing in this consent prevents Redox from combining reporting requirements under this consent with reporting requirements for submission to another relevant party.	✓			Noted	
Statutory Requirements						
1.6	Redox shall ensure that all licences, permits and approvals are obtained and kept up-to-date throughout the life of the development.	✓			Compliant	The Regulatory Affairs Coordinator keeps all licences, permits and approvals up-to-date; and maintains an up-to-date spreadsheet record of permits & licences.
1.7	In the event that a dispute arises between Redox and a public authority other than the Department ... the matter shall be referred to the Director General.	✓			Noted	
2	COMPLIANCE					
2.1	Redox shall ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.	✓			Compliant	Employees are made aware of their responsibilities through site procedures and training, as required. Contractors & Sub-contractors are made aware of their responsibilities through site inductions.
2.2	Redox shall be responsible for environmental impacts resulting from the actions of all persons on site, including contractors, subcontractors and visitors.	✓			Noted	Management plans and procedures define responsibilities for environmental impacts. Redox oversees all work carried out by contractors onsite.



2011 Annual Environmental Management Report
2 Swettenham Road, Minto NSW

Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
2.3	Prior to each of the events listed below, Redox shall certify in writing to the satisfaction of the Director-General that it has complied with all conditions of this consent applicable prior to that event.				Noted	Not required during this reporting period.
	(a) commencement of any physical works on the land subject to this consent;		✓			
	(b) commencement of construction of stages 1, 2, 3 and 4 of the development; and (c) commencement of operation of stages 1, 2, 3, and 4 of the development.		✓	✓		
2.4	Notwithstanding condition 2.3 of this consent, the Director-General may require an update report on compliance with all, or any part of the conditions of this consent.	✓			Noted	Not required during this reporting period.
2.5	Redox shall meet the requirements of the Director-General in respect of the implementation of any measure necessary to ensure compliance with the conditions of consent, and general consistency with the scope documents.	✓			Noted	
3.1	In relation to the construction and occupation of the development, Redox shall provide the Director-General and Council with the following: (a) written notification of a Principal Certifying Authority; (b) copies of all construction certificates issued; (c) written notification of the intention to commence construction; (d) copies of all occupation certificates; (e) written notification of the intention to occupy.		✓ ✓ ✓	✓ ✓	Noted	Not required during this reporting period.



2011 Annual Environmental Management Report
2 Swettenham Road, Minto NSW

Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
3.2	Prior to the commencement of any construction associated with the development, Redox shall erect at least one sign at the construction site. The sign shall be maintained for the duration of construction works, and shall be removed as soon as practicable after the conclusion of construction works.		✓		Noted	
4	ENVIRONMENTAL PERFORMANCE					
Hazards and Risk Impacts						
4.1	For each of the dangerous goods classes ... Redox shall not permit the materials listed as "prohibited" to be received, stored or handled on the site.			✓	Compliant	Storage restrictions for each warehouse are entered into the Redox "Pick" system, which ensures "prohibited" materials are restricted from the site.
4.2	Redox shall only permit non-dangerous goods, and dangerous goods of class 8 to be stored or handled in bulk on the site.			✓	Compliant	As above.
4.3	Prior to any dangerous goods being brought to the site, Redox shall demonstrate to the satisfaction of the Director-General that it has a system in place to track the quantities and locations of dangerous goods on the site at all times.			✓	Compliant	Addressed as pre-operation requirement for Stages 1 & 2 of the development.
Bunding and Spill Management						
4.4	Redox shall ensure that all bunding installed at the development site is constructed strictly in accordance with: (a) all relevant Australian Standards; (b) a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; (c) the EPA's Environmental Protection Manual Technical Bulletin Bunding and Spill Management.		✓ ✓ ✓		Compliant	Building requirements were addressed as pre-construction requirements for Stages 1 & 2 of the development.



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
4.5	At least one month prior to the commencement of construction of the development ... Redox shall prepare and submit for the approval of the Director-General the studies set out below. (a) A Fire Safety Study (b) A Final Hazard Analysis (c) A Construction Safety Study		✓ ✓ ✓		Compliant	Not required for this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
Pre-Commissioning Studies						
4.6	No later than two months prior to the commencement of commissioning of the development, Redox shall prepare and submit for the approval of the Director-General the studies set out below: (a) A Transport of Hazardous Materials Study for the development. (b) An Emergency Plan for the development. (c) A Safety management System.			✓ ✓ ✓	Compliant	Not required during this reporting period. Addressed as pre-operation requirement for Stages 1 & 2 of the development and covering all four stages of the development.
4.7	Prior to the commencement of construction, Redox shall submit to the Director-General a Security Management Plan for the development.		✓		Compliant	Not applicable to this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
Traffic and Transport						
Community Enhancement Program						
4.8	Prior to the commencement of operation of the development ... Redox shall negotiate an agreed outcome with Council for an appropriate level of contribution towards mitigating any cumulative social/community impacts as a result of the development.			✓	Compliant	Not applicable to this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
Site Access, Internal Roads and Parking						
4.9	Redox shall ensure that all heavy vehicles access the site in a forward direction via the Holmes Road entrance, not via the Swettenham Road entrance.			✓	Compliant	The Holmes Road Secure Access System does not accommodate vehicles entering or exiting the site in a reverse direction. The Swettenham Road entrance accepts only company directors, visitors and emergency vehicles to the site. A sign is posted at the Swettenham Road entrance to instruct drivers that all deliveries and pick-ups must enter and exit via Holmes Road.
4.10	Redox shall develop and implement, in consultation with Council, a road hierarchy for heavy vehicles traveling to and from the site. The Applicant shall submit details of the road hierarchy for the approval of the Director-General prior to the commencement of operations on the site.			✓	Compliant	Not applicable to this reporting period. Addressed as pre-operation requirement for Stages 1 & 2 of the development.
4.11	Prior to the commencement of operations, Redox shall submit for the Director-General's approval a Transport Code of Conduct for the development.			✓	Compliant	Not applicable to this reporting period. Addressed as pre-operational requirement for Stages 1 & 2 of the development.
4.12	Prior to the commencement of any B-double transport to the site, Redox shall demonstrate to the satisfaction of the Director-General that the B-double reclassification of Holmes Road has been approved by the RTA in association with Council.			✓	Compliant	B-double transport has been approved for Holmes Rd.
4.13	The use of landscaping shall not affect driver sight distance for vehicles entering and exiting the site.		✓		Compliant	Addressed as pre-construction (landscaping design) requirement for Stages 1 & 2 of the development.
4.14	Redox shall design and construct all internal road works, including assoc. parking facilities and loading bays:				Compliant	Not applicable to this reporting period. Addressed as pre-construction requirement for
	(a) in accordance with relevant RTA and Council standards and codes, and Australian Standards;		✓			



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		General	Construction	Operation		
	(b) with clearly marked visitor, disabled, ambulance and service vehicle parking areas; and		✓			Stages 1 & 2 of the development.
	(c) with signage to demarcate all on-site vehicle movements.		✓			
Road Works						
4.15	Redox shall ensure that the deceleration lane at Swettenham Road is designed in accordance with Council's Specification for Construction of Sub-divisional Road and Drainage Works and that the land is constructed to the satisfaction of Council.		✓		Compliant	Not applicable to this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
4.16	Redox shall ensure that the compensatory pedestrian footpath is designed and constructed to the satisfaction of Council.		✓		Compliant	Not applicable to this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
Noise Impacts						
Construction Noise						
4.17	Redox shall ensure that all site preparation and construction activities associated with the development do not exceed the criteria at the nominated locations.		✓		Compliant	Not applicable to this reporting period. The Construction Noise Management Plan details measures to ensure that construction activities do not exceed the noise criteria at the nominated locations.
4.18	Redox shall ensure that site preparation and construction activities associated with the development do not exceed 62 dB(A) at the New Generation Childcare Centre.		✓		Compliant	Not applicable to this reporting period. The Construction Noise Management Plan details measures to ensure that construction activities do not exceed the noise criteria at the New Generation Child Care Centre.
4.19	Redox shall only undertake noisy site preparation works and noisy construction activities associated with the development between the nominated hours.		✓		Compliant	Not applicable to this reporting period. The Construction Noise Management Plan details the permitted hours for noisy construction activities.



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
4.20	The hours of site preparation works and construction activities ... may be varied with the prior written approval of the Director-General.		✓		Noted	Not applicable to this reporting period.
Operational Noise						
4.21	Redox shall design, construct, operate and maintain the development to ensure that the noise contributions from the development to the background acoustic environment do not exceed the maximum allowable noise contributions specified.	✓			Compliant	The Construction and Operational Noise Management Plans detail measures to ensure that construction and operational activities do not exceed the maximum allowable noise contributions.
Measurement of Noise Impacts						
4.22	Noise from the development shall be: (a) measured at the most affected point on or within the residential boundary to determine compliance with LAeq (15 min.) noise limits; or (b) measured at 1 metre from the dwelling façade to determine compliance with LA1(1 min.) noise limits.	✓			Compliant	Refer to Operational Noise Audit (Hibbs & Assoc., Feb. 2007) and Construction Noise Audit (Acoustic Dynamics, Sept. 2008) methodologies.
Soil and Water Impacts						
4.23	Redox shall comply with section 120 of the <i>Protection of the Environment Operations Act 1997</i> , which prohibits the pollution of waters.	✓			Compliant	The Construction & Operational Environmental Management Plans detail measures to prevent the pollution of waters.
Soil, Contamination and Geotechnics						
4.24	Redox shall ensure that all materials displaced during site preparation and construction works are stabilised, relocated and made secure so that they will not detrimentally affect any watercourse or riparian zone.		✓		Compliant	Not applicable to this reporting period. The Erosion & Sedimentation Management Plan (CEMP) details measures to ensure that all displaced materials are stabilized, secured and/or relocated.



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
4.25	Prior to the commencement of any site preparation or construction work, Redox shall submit for the approval of the Director-General, a geo-technical assessment of the site.		✓		Compliant	Not required during this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
4.26	Prior to the commencement of any site preparation or construction work, Redox shall submit for the approval of the Director-General, a contamination review of the site.		✓		Compliant	Not required during this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
4.27	Depending on the outcome of the investigations required by Condition 4.26, the Director-General may require Redox to prepare and implement a Soil Contamination Protocol.		✓		Noted	
Bow Bowing Canal and Riparian Zone						
4.28	Redox shall establish and maintain a riparian zone, consisting of local native plant species, in the area between the development and the watercourse within the property boundary.		✓		Compliant	Not applicable to this reporting period. The riparian zone was established during development Stages 1 & 2 as per the Vegetation Management Plan (CEMP).
4.29	Redox shall maintain the riparian zone, for a period of at least two years after final planting. Every six months during that period, the Applicant shall submit to the satisfaction of the Department, a status detailing the progress of the implementation of the Vegetation Construction Management plan.			✓	Compliant	The riparian zone was maintained as per the Vegetation Management Plan (CEMP) and Procedure 3103 – Landscape Management for the required two years post planting. The final vegetation status report was approved by the Department 26/03/2008.
4.30	The Applicant shall design and construct any stormwater outlet structure located within 40 metres of Bow Bowing Canal to ensure that the structure does not compromise the stability or function of the riparian zone.		✓		Compliant	Not applicable to this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
Waste Generation and Management						
4.31	Redox shall not receive waste at the site for storage, treatment, processing or reprocessing, and shall not dispose of waste generated by the development on the site.			✓	Compliant	Addressed by Waste Management Plan (OEMP) and Site Procedure 3402 – Waste Management & Disposal.
4.32	Redox shall ensure that only the hazardous and/or Industrial and/or Group A waste listed, are generated and/or stored at the site.			✓	Compliant	Addressed by Waste Management Plan (OEMP) and Site Procedure 3402 – Waste Management & Disposal.
4.33	The quantity of hazardous and/or Industrial and/or Group A waste generated at the site per year shall not exceed 100 tonnes.			✓	Compliant	Addressed by Waste Management Plan (OEMP) and Site Procedure 3402 – Waste Management & Disposal.
4.34	The quantity of hazardous and/or Industrial and/or Group A waste stored at the sit shall not exceed 50 tonnes at any one time.			✓	Compliant	Addressed by Waste Management Plan (OEMP) and Site Procedure 3402 – Waste Management & Disposal.
Air Quality Impacts						
Odour						
4.35	Redox shall design, construct, operate and maintain the development to prevent the emission of any offensive odour from the site that is attributable to the operation of the development.	✓			Compliant	Addressed by Health, Safety & Environment Procedure 3117 – Odour Control Management.
Acetic Acid Scrubber						
4.36	The Applicant shall design, construct, commission and operate the acetic acid scrubber to ensure that the emissions from the scrubber meet the requirements specified in the Environment Protection Licence.	✓			N/A	



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
4.37	Prior to the commencement of decanting activities involving acetic acid on the site, the Applicant shall submit to the Director-General and the EPA the manufacturer's performance guarantee and the detailed final design of the acetic acid scrubber.			✓	N/A	
Dust Emissions						
4.38	Redox shall design, construct, commission, operate and maintain the development in a manner that minimises dust emissions.	✓			Compliant	Addressed by Health, Safety & Environment Procedure 3110 – Dust Control Management.
Visual Amenity Impacts						
4.39	Redox shall prepare an external design panel indicating the proposed external design finishes, materials and configuration, in consultation with Council.		✓		Compliant	Not applicable to this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
4.4	Redox shall ensure that all external lighting associated with the development is mounted, screened and directed in such a manner so as not to create a nuisance to surrounding properties or roadways.		✓		Compliant	Not applicable to this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
4.41	This consent does not permit the display of any advertisement, or the erection of any advertising structure, on the site.	✓			Noted	
5	ENVIRONMENTAL MONITORING AND AUDITING					
5.1	Redox shall undertake all monitoring, including recording and reporting of monitoring results, as required under this consent, and as may be specified under an Environmental Protection Licence.	✓			Generally compliant	Refer to Section 5 of this report for environmental monitoring results.



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
Transport Auditing						
5.2	Within 90 days of commissioning each stage of the development, and then as may be required by the Director-General, Redox shall commission an independent Transport Audit of the development.			✓	Compliant	Not applicable to this reporting period.
5.3	Within 28 days of conducting the Audit, Redox shall provide the Director-General and Council with a copy of the Transport Audit Report.			✓	Compliant	Not applicable to this reporting period.
Noise Monitoring and Auditing						
Construction Noise						
5.4	Within one month of the commencement of construction activities associated with each stage of the development, Redox shall submit to the Director-General and the EPA a Construction Noise Audit.		✓		Compliant	Not applicable to this reporting period.
5.5	Redox may seek the Director-General's approval, in consultation with the EPA, to dispense with the requirement to undertake a Construction Noise Audit for stage 2, 3 and/or 4 of the development.		✓		Noted	
Operational Noise						
5.6	Within 90 days of the commencement of operation of each stage of the development, Redox shall conduct an Operational Noise Audit of its operations.			✓	Compliant	Not applicable to this reporting period.
5.7	Within 28 days of conducting the Audit, Redox shall provide the Director-General and EPA with a copy of the Noise Audit report.			✓	Compliant	Not applicable to this reporting period.



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
Stormwater Quality Monitoring						
5.8	Prior to the commencement of operations at the site, Redox shall submit for the approval of the Director-General, in consultation with Council, a Stormwater Quality Monitoring Program.			✓	Compliant	Not applicable to this reporting period. Addressed as pre-operational requirement for Stages 1 & 2 of the development.
Air Quality Monitoring and Auditing						
Acetic Acid Scrubber						
5.9	Redox shall periodically determine the pollutant concentrations discharged from the acetic acid scrubber.			✓	N/A	
5.10	Within 90 days of commencing acetic acid decanting activities at the site ... Redox shall conduct an Air Quality Audit of its operations to confirm the air emission performance of the acetic acid scrubber.			✓	N/A	
5.11	Within 28 days of conducting the Audit referred to under condition 5.10 of this consent, Redox shall provide the Director-General and EPA with a copy of the Air Quality Audit report.			✓	N/A	
Independent Hazard Auditing						
5.12	Twelve months after the commencement of operation of Stage 1 of the development ... Redox shall commission an independent, qualified person or team to undertake a Hazard Audit of the development. Further Hazard Audits shall be undertaken every three years or within 12 months of commissioning Stages 2, 3 and 4 of the development.			✓	Compliant	Not applicable to this reporting period. Last audit was conducted November 2010.



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
Independent Environmental Auditing						
5.13	Twelve months after the commencement of operation of each stage of the development, and every three years thereafter, Redox shall commission an independent, qualified person or team to undertake an Environmental Audit of the development.			✓	Compliant	Not applicable to this reporting period. Last audit was conducted November 2010.
5	ENVIRONMENTAL MONITORING AND AUDITING					
6.1	Subject to confidentiality, Redox shall make all documents required under this consent available for public inspection on request.	✓			Compliant	Addressed by Procedure 3104 – Community Right to Know Policy. Documentation is provided under Managing Director’s approval.
Complaints Procedure						
6.2	Prior to the commencement of construction of the development, Redox shall ensure that the following are available: (a) a 24-hour, toll-free telephone number on which complaints about the development may be registered; (b) a postal address to which written complaints may be sent; and (c) an email address to which complaints may be transmitted. The telephone number, postal address and email address shall be advertised on at least one occasion prior to the commencement of construction of each stage of the development, through a medium approved by the Director-General.		✓ ✓ ✓ ✓		Compliant	Not applicable to this reporting period.
6.3	Redox shall record details of all complaints received ... in an up-to-date Complaints Register. The Complaints Register shall be made available upon request.	✓			Compliant	No complaints received during this reporting period. Complaints are recorded and actioned as per Procedure 3022 – Problems and Complaints.



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
Community Communication Strategy						
6.4	Prior to the commencement of operations at the site, Redox shall prepare and implement a Community Communication Strategy for the development. The Strategy shall be approved by the Director-General prior to the commencement of any operations on the site.			✓	Compliant	Not applicable to this reporting period. Addressed as pre-operation requirement for Stages 1 & 2 of the development.
7	ENVIRONMENTAL MANAGEMENT					
Environmental Representative						
7.1	Prior to the commencement of construction of the development, Redox shall notify the Director-General of the name and contact details of a suitably qualified and experienced Environmental Representative, and any changes to that appointment that may occur from time to time.	✓			Compliant	The details of the current Environmental Representative were sent to the Director-General in May 2011.
Construction Environmental Management Plan						
7.2	Redox shall prepare and implement a Construction Environmental Management Plan to outline environmental management practices to be followed during site preparation and construction activities during each stage of the development.		✓		Compliant	Not applicable to this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
	The plan shall be submitted for the approval of the Director-General no later than one month prior to the commencement of any site preparation and construction works associated with the development.		✓			Not applicable to this reporting period



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
	Preparation and construction works associated with any stage of the development shall not commence until written approval has been received from the Director-General.		✓		Noted	
7.3	As part of the Construction Environmental Management Plan for the development, Redox shall prepare and implement the following Management Plans: (a) Noise Management Plan (b) Transport Management Plan (c) Erosion and Sediment Management Plan (d) Vegetation Management Plan		✓ ✓ ✓ ✓		Compliant	Not applicable to this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
Operation Environmental Management Plan						
7.4	Redox shall prepare and implement an Operation Environmental Management Plan to detail an environmental management framework, practices and procedures to be followed during the operation of the development. The plan shall be submitted for the approval of the Director-General no later than one month prior to the commencement of operation of stage 1 of the development.			✓	Compliant	Prepared as pre-operation requirement for Stages 1 & 2 of the development. Revision 3 was finished in November 2011. Only minor changes were made to include the mobicon as a source of noise on site as required from the environmental audit conducted in 2011. In addition, minor grammatical changes were made and all procedures were moved to become an appendix as this is easier to update when procedures are updated.
7.5	As part of the Operation Environmental Management Plan for the development, Redox shall prepare and implement the following Management Plans: (a) Noise Management Plan (b) Transport Management Plan (c) Stormwater Management Plan			✓ ✓ ✓	Compliant	Not applicable to this reporting period. Prepared as pre-operation requirement for Stages 1 & 2 of the development.



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
	(d) Waste Management Plan (e) Landscape Management Plan			✓ ✓		
7.6	At least one month prior to the operation of Stage 2, Stage 3 and Stage 4 of the development, Redox shall update and submit for the approval of the Director-General, the Operation Environmental Management Plan. Operation of Stage 2, Stage 3 and Stage 4 shall not commence until the Director-General has approved the updated Plans.			✓	Compliant	Not applicable to this reporting period. Prepared as pre-operation requirement for Stages 1 & 2 of the development.
8	ENVIRONMENTAL REPORTING					
Incident Reporting						
8.1	Redox shall notify the EPA and the Director-General of any incident with actual or potential significant off-site impacts on people or the biophysical environment as soon as practicable after the occurrence of the incident. The Applicant shall provide written details of the incident to the EPA and the Director-General within seven days of the date on which the incident occurred.	✓			Noted	No such incidents have occurred. Incidents and potential incidents are reporting as per Procedure 3114 – Incident & Near Miss Reporting.
8.2	Redox shall meet the requirements of the Director-General to address the cause or impact of any incident, as it relates to this consent, reported in accordance with 8.1, within such period as the Director-General may require.	✓			Noted	
Annual Performance Reporting						
8.3	Redox shall, throughout the life of the development, prepare and submit for the approval of the Director-General, an Annual Environmental Management Report.	✓			Compliant	This report.



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
	Redox shall submit a copy of the AEMR every year, with the first AEMR to be submitted no later than 12 months after the commencement of operation of the development.					



2.2 Compliance with Environmental Protection Licence 12041

Table 2.2: Compliance with EPL 12041

Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
1	ADMINISTRATIVE CONDITIONS						
A1	What the licence authorises and regulates						
A1.1	N/A					N/A	
A1.2	Unless otherwise further restricted by a condition of this licence, the scale at which the scheduled activity is carried out must not exceed the maximum scale specified in this condition. Fee Based Activity: Scale General chemicals storage: 0–5000 kL of active storage capacity. Chemical storage waste generation: >5–100 T.			✓ ✓	Procedure 3801 – Warehouse Limitations. Procedure 3402 - Waste Management & Disposal.	Compliant	Warehouse MHF Analysis (stock inventory). WasteLogs 2011 (NSW).
A1.3	N/A					N/A	
A1.4	Scheduled activities arising from the completion of Stage 1 can be undertaken prior to completion of scheduled development works for Stages 2, 3 and 4.	✓			OEMP	Noted	
A2	Premises to which this licence applies						
A2.1	Premises details.	✓				Noted	
A3	Other activities						
A3.1	N/A					N/A	



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Item	Licence Condition		Development Stage			Redox Procedure	Compliance	Evidence
			Gen.	Con.	Op.			
A4	Information supplied to the EPA							
A4.1	Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.		✓			OEMP	Compliant	
2	DISCHARGES TO AIR & WATER & APPLICATIONS TO LAND							
P1	Location of Monitoring/Discharge Points and Areas							
P1.1							N/A	Not applicable to this reporting period. The Acetic Acid Scrubber will be part of Stage 4 of the development.
	EPA ID. Type of Monitoring Point Type of Discharge Point Location							
	1	Discharge to air Air emissions monitoring	Discharge to air Air emissions monitoring	Acetic Acid Scrubber "Area A"				
P1.2	N/A						N/A	
P1.3	N/A						N/A	
3	LIMIT CONDITIONS							
L1	Pollution of Waters							
L1.1	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.		✓			OEMP; Procedure 3405 – Water Release from Retention Basin.	Compliant	Internal stormwater analysis results are given in Section 5 of this report.
L2	Load Limits							
L2.1	N/A						N/A	
L2.2	N/A						N/A	



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
L3	Concentration Limits						
L3.1	N/A					N/A	
L3.2	N/A					N/A	
L3.3	N/A					N/A	
L4	Volume and Mass Limits						
L4.1	N/A					N/A	
L5	Waste						
L5.1	The licensee must not cause, permit or allow any waste generated to be received at the premise except "General or Specific exempted waste" which meet all the conditions of a resource recovery exemption under Clause 51A of the <i>Protection of the Environment Operations (Waste) Regulation 2005</i> . Any waste received at the premise must only be used for the activities as specified in the particular resource recovery exemption.			✓	Waste Management Plan (OEMP); Procedure 3402 – Waste Management & Disposal.	Compliant	WasteLog 2011 (NSW).
L5.2	This condition [L5] only applies ... if those activities require an environmental protection licence.	✓				Noted	
L5.3	Except as provided by any other condition of this licence, only the hazardous and/or industrial and/or Group A waste listed [in this condition] may be generated and/or stored at the premises.			✓	Waste Management Plan (OEMP); Procedure 3402 – Waste Management & Disposal.	Compliant	WasteLog 2011 (NSW).
L5.4	The quantity of hazardous and/or industrial and/or Group A waste generated at the premises must not exceed 100 tonnes per year.			✓	Waste Management Plan (OEMP); Procedure 3402 – Waste Management & Disposal.	Compliant	WasteLog 2010 (NSW).
L5.5	The quantity of hazardous and/or industrial and/or Group A waste stored on the premises must not exceed 50 tonnes at any one time.			✓	Waste Management Plan (OEMP); Procedure 3402 – Waste Management & Disposal.	Compliant	WasteLog 2010 (NSW). Div. 20 Reject Report.



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
L6	Noise Limits						
L6.1	Noise from the premises must not exceed the sound pressure level (noise) limits at the nominated receiver locations.			✓	Noise Management Plan (OEMP); Procedure 3116 - Noise Management.	Compliant	Operational Noise Audit report, May 2009.
L6.2	Noise from the premises is to be measured at the most affected point on or within the residential boundary to determine compliance with the LAeq (15 minute) noise limits.			✓	Noise Management Plan (OEMP); Procedure 3116 - Noise Management.	N/A	
L6.3	Noise from the premises is to be measured at 1m from the dwelling facade to determine compliance with the LA1(1 minute) noise limits.			✓		N/A	
L7	Polychlorinated Biphenyls (PCBs)						
Note:	The licensee must comply with the "Chemical Control Order in Relation to Materials and Wastes Containing Polychlorinated Biphenyl, 1997".	✓				Noted	
L8	Asbestos						
Note:	The licensee must comply with the Protection of the Environment Operations (Waste) Regulation 2005.	✓				Noted	
L9	Odour						
L9.1	No condition of this licence identifies a potentially offensive odour for the purpose of section 129 of the POEO Act 1997.	✓			Significant Environmental Aspects & Potential Impacts: Odour Emissions (OEMP); Procedure 3117 - Odour Control Management.	Compliant	No complaints or reports of offensive odour received during this reporting period.
Note:	Section 129 of the POEO Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises, ... except if the emission is identified [in L9.1].						



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
4	Operating Conditions						
O1	Activities must be carried out in a competent manner						
O1.1	Licensed activities must be carried out in a competent manner. This includes: (a) the processing, handling, movement & storage of materials and substances; and (b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.			✓ ✓	Procedure 3009 – Handling, Storage, Packing, Pres. & Del. Procedure 3402 - Waste Management & Disposal.	Compliant	
O2	Maintenance of Plant and Equipment						
O2.1	All plant and equipment installed at the premises or used in connection with the licensed activity: (a) must be maintained in a proper and efficient condition; & (b) must be operated in a proper and efficient manner.			✓ ✓	Procedure 3901 - Equipment Service. Equipment Procedures: 3902, 3903, 3904, 3906, 3917, 3918, 3919.	Compliant	Equipment Asset Diary.
O3	Emergency Response						
O3.1	The licensee must maintain, and implement, a current emergency response plan for the premises. The licensee must keep the emergency response plan on the premises at all times. The plan must document systems and procedures to deal with all types of incidents that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment.	✓			Procedure 3403 - Emergency Procedure.	Compliant	Last review/approval 09/07/07.
O4	Process and management						
O4.1	The licensee must ensure that any liquid and/or non liquid waste generated and/or stored at the premises is assessed and classified in accordance with the DECC Waste Classification Guidelines as in force from time to time.	✓			Waste Management Plan (CEMP & OEMP); Procedure 3402 - Waste Management & Disposal.	Compliant	WasteLog 2011 (NSW).



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
O4.2	The licensee must ensure that waste identified for recycling is stored separately from other waste.			✓	Waste Management Plan (CEMP & OEMP); Procedure 3404 - Recycling.	Compliant	
O5	Dust						
O5.1	All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.	✓			Significant Environmental Aspects & Potential Impacts: Dust Emissions (OEMP); Procedure 3110 - Dust Control Management.	Compliant	Dust emission is not monitored. No complaints or reports of dust emissions received.
5	MONITORING & RECORDING CONDITIONS						
M1	Monitoring Records						
M1.1	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.	✓				N/A	Not applicable to this reporting period. Refer M2.2.
M1.2	All records required to be kept by this licence must be: (a) in a legible form; (b) kept for at least four years after the monitoring or event; and (c) produced to any authorised officer who asks to see them.	✓				Compliant	Environmental monitoring and pollution complaint records are kept by the Regulatory Affairs Coordinator.
M1.3	The following records must be kept in respect of any samples required to be collected for the purposes of this licence: (a) the date the sample was taken; (b) the time the sample was collected; (c) the point at which the sample was taken; and (d) the name of the person who collected the sample.	✓				N/A	Not applicable to this reporting period. Refer M2.2.



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Item	Licence Condition		Development Stage			Redox Procedure	Compliance	Evidence		
			Gen.	Con.	Op.					
M2	Requirement to Monitor Concentration of Pollutants Discharged									
M2.1	POINT 1: Air						✓		N/A	Not applicable to this reporting period. Refer M2.2.
	Pollutant	Unit of Measure	Freq.	Sampling Method						
	Acetic Acid	mg per m3	1/4'ly	Approved in writing by EPA						
M2.2	Monitoring for acetic acid is not required until completion of Stage 4.									
M3	Testing Methods – Concentration Limits									
M3.1	Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with any methodology required, imposed or approved by the EPA [as applicable].						✓		N/A	Not applicable to this reporting period. Refer M2.2.
M3.2	N/A								N/A	
M4	Recording of Pollution Complaints									
M4.1	The licensee must keep a legible record of all complaints made to the licensee, employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.				✓			Procedure 3022 - Problems & Complaints.	Compliant	No complaints received.
M4.2	The record must include details of the following: (a) the date and time of the complaint; (b) the method by which the complaint was made; (c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; (d) the nature of the complaint; (e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; (f) if no action was taken by the licensee, the reasons why no action was taken.				✓			Procedure 3022 - Problems & Complaints.	Noted	No complaints received, however Procedure 3022 details requirements for recording pollution complaints.



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
M4.3	The record of a complaint must be kept for at least four years after the complaint was made.	✓			Procedure 3022 - Problems & Complaints.	Noted	
M4.4	The record must be produced to any authorised officer of the EPA who asks to see them.	✓			Procedure 3022 - Problems & Complaints.	Noted	
M5	Telephone complaints line						
M5.1	The licensee must operate a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises, unless otherwise specified in the licence.	✓			Procedure 3022 - Problems & Complaints	Compliant	Tel: 1800 056 440 (24hr Toll Free).
M5.2	The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.	✓			Procedure 3022 - Problems & Complaints	Compliant	The telephone number is listed at http://www.redox.com/Community/
M5.3	Conditions M5.1 and M5.2 do not apply until three months after: (a) the date of issue of the licence or (b) if this licence is a replacement licence within the meaning of the POEO (Savings and Transitional) Regulation 1998, the date on which a copy of the licence was served on the licensee under clause 10 of that regulation.	✓				Noted	
M6	Requirements to Monitor Volume or Mass						
M6.1	N/A					N/A	
6	REPORTING CONDITIONS						
R1	Annual return documents						



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
R1.1	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: (a) a Statement of Compliance; and (b) a Monitoring and Complaints Summary.	✓			Procedure 3118 – Environmental Management System.	Compliant	
Period covered by Annual Return							
R1.2	An Annual Return must be prepared in respect of each reporting period, except as provided below. Do not complete the Annual Return until after the end of the reporting period.	✓			Procedure 3118 – Environmental Management System.	Compliant	Annual Return for reporting period – 05/01/10 - 04/01/11 submitted 10/01/11.
R1.3	Where this licence is transferred from the licensee to a new licensee ...	✓				N/A	
R1.4	Where this licence is surrendered by the licensee or revoked by the EPA or Minister ...	✓				N/A	
Deadline for Annual Return							
R1.5	The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period.	✓			Procedure 3118 – Environmental Management System.	Compliant	Annual Return for reporting period – 05/01/10 - 04/01/11 submitted 10/01/11.
R1.6	N/A					N/A	
Licensee must retain copy of Annual Return							
R1.7	The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due.	✓			Procedure 2718 - Permits and Licences.	Compliant	Kept by the Regulatory Affairs Coordinator with EPL records.
Certifying of Statement of Compliance and Signing of Monitoring and Complaints Summary							



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
R1.8	Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed: (a) by the licence holder; or (b) by a person approved in writing by the EPA to sign on behalf of the licence holder.	✓				Compliant	Statement of compliance signed by two company directors.
R1.9	A person who has been given written approval to certify a certificate of compliance under a licence issued under the Pollution Control Act 1970 is taken to be approved for the purpose of this condition until the date of first review of this licence.	✓				Noted	
R2	Notification of environmental harm						
Note:	The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.	✓			Procedure 3114 - Incident & Near Miss Reporting.	Noted	No such incidents occurred during the reporting period.
R2.1	Notifications must be made by telephoning the EPA's Pollution Line service on 131 555.	✓			Procedure 3114 - Incident & Near Miss Reporting.	Noted	
R2.2	The licensee must provide written details of the notification to the EPA within seven days of the date on which the incident occurred.	✓			Procedure 3114 - Incident & Near Miss Reporting.	Noted	
R3	Written report						
R3.1	Where an authorised officer of the EPA suspects on reasonable grounds that: Where this licence applies to premises, an event has occurred at the premises; and The event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises), the officer may request a written report.	✓				Noted	



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		Gen.	Con.	Op.			
R3.2	The licensee must make all reasonable inquiries in relation to the event (in R3.1) and supply the report to the EPA within such time as may be specified in the request.	✓			Procedure 3114 - Incident & Near Miss Reporting.	Noted	
R3.3	The request may require a report which includes: (a) the cause, time and duration of the event; (b) the type, volume and concentration of pollutant discharged; (c) the name, address and telephone number of employees who witnessed the event; (d) the name, address and telephone number of every other person who witnessed the event; (e) action taken by the licensee including any follow-up contact with any complainants; and (f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence.	✓			Procedure 3114 - Incident & Near Miss Reporting.	Noted	
R3.4	The EPA may make a written request for further details in relation to any of the above matters if not satisfied with the report provided by the licensee. The licensee must provide such further details within the time specified in the request.	✓				Noted	
GENERAL CONDITIONS							
G1	Copy of licence kept at the premises						
G1.1	A copy of this licence must be kept at the premises to which it applies.	✓			Procedure 2718 - Permits and Licences.	Compliant	A copy is kept at the premises by the Regulatory Affairs Coordinator & is available for inspection on request or via the company website.
G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	✓			Procedure 2718 - Permits and Licences.	Noted	
G1.3	The licence must be available for inspection by any employee or agent of the licensee at the premises.	✓			Procedure 2718 - Permits and Licences.	Compliant	
Pollution Studies and Reduction Programs							
U1	N/A					N/A	



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
Special Conditions							
E1	Construction Activities						
E1.1	Noise from the construction of the plant must not exceed the sound pressure level (noise) limits. Note the limits represent the sound pressure level (noise) contribution, at the nominated receiver locations.		✓		Construction Noise Management Plan (CEMP).	Compliant	Construction Noise Audit Report (Acoustic Dynamics, Sept 2008).
E1.2	All construction activities, including transportation of fill and spoil, must be restricted to the hours of 7am to 6pm Monday to Friday, 8am to 1pm Saturday and at no time on Sundays and public holidays.		✓		Construction Noise Management Plan (CEMP).	Compliant	
E1.3	Works outside these hours may include: - works which do not cause noise emissions to be audible at any residential property; or - delivery of materials required outside these hours for safety reasons; or - emergency work; or - other work as agreed by the Department.		✓			Noted	
E2	Noise compliance monitoring						
E2.2	After the commencement of all operations at the premises, the licensee must submit a noise compliance assessment report to the DEC's Manager Metro Illawarra, to demonstrate compliance with the limits specified in condition L6.1. The assessment must be prepared by a suitably qualified acoustical consultant.			✓	Noise Management Plan (OEMP); Procedure 3116 - Noise Management.	N/A	Not applicable to this reporting period.
E3	Acetic Acid Scrubber						
E3.1	The objective of this condition is to develop emission concentration limits to ensure that the premises can comply with Section 129 of the POEO Act 1997.	✓				N/A	Not applicable to this reporting period. The Acetic Acid Scrubber will be part of Stage 4 of the development.



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
E3.2	Prior to the commencement of construction of the plant, the licensee must submit a report to the EPA's Manager Illawarra, on the development of a site specific emission concentration limit for the acetic acid scrubber.		✓			N/A	Not applicable to this reporting period. The Acetic Acid Scrubber will be part of Stage 4 of the development, construction date TBA.
E3.3	Prior to the commencement of construction of the plant, the licensee must provide to the EPA's Manager Illawarra, the manufacturer's performance guarantees for the acetic acid scrubber, demonstrating that emissions will comply with the ground level concentration specified in the EPA's <i>Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW, August 2001</i> .		✓			N/A	Not applicable to this reporting period. The Acetic Acid Scrubber will be part of Stage 4 of the development, construction date TBA.



3 Community & Environmental Complaints

No community, environmental or pollution complaints were received during 2011 relating to the operation of the Minto facility.

Procedure 3022 – Problems & Complaints describes the method by which all problems, non-conformances, customer and community complaints would be recorded and actioned, including recording of pollution complaints in accordance with EPL 12041 Condition M4.

4 Environmental Impacts & Performance

Table 4.0: Environmental Impacts & Performance

Environmental Aspect (Operational Pathway)	Potential Environmental Impacts	Potential Risk of Impact	Duration of Potential Impact	Operational Procedure to prevent & control Impacts	Environmental Performance 2011
1. Transportation - Transport of goods to the site; - Delivery of goods to customers; and - Unloading/loading of trucks and shipping containers into transit storage areas.	Noise Emissions	Low	Intermittent	3109, 3116, 3412, 3715	Noise emissions effectively prevented and controlled. No complaints received regarding noise emissions.
	Air Emissions	Low	Intermittent	3109, 3412, 3715	Air emissions not required to be monitored. No complaints received regarding air emissions.
	Spillage of product(s) causing contamination of stormwater, soil or groundwater.	Low-Moderate	Infrequent	3022, 3109, 3114, 3412, 3702	No spillages of product during transportation causing contamination of stormwater, soil or groundwater.
	Operational Traffic Impacts	Moderate	Regular	3109, 3412, 3715	The system put in place to monitor that the routes utilised by heavy vehicles is working effectively and is substantially as it was when approved, its ongoing use is recommended". No complaints received regarding operational traffic impacts.
	Community Health	Low	Infrequent	3109, 3412	Community Health not required to be monitored. No Community Complaints received.
	Use of resources	Low-Moderate	Intermittent	3109	Use of resources not monitored with regards to the Transportation Pathway.
2. Storage & Handling - Movement of goods in and out of storage; and - Repackaging of	Spillage of goods	Low-Moderate	Infrequent	3022, 3109, 3401, 3402	No spillages of product during storage & handling causing contamination of stormwater.
	Spillage of goods causing contamination of soil/groundwater.	Low-Moderate	Infrequent	3022, 3109, 3401	No spillages of product during storage & handling causing contamination of soil or groundwater.



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Environmental Aspect (Operational Pathway)	Potential Environmental Impacts	Potential Risk of Impact	Duration of Potential Impact	Operational Procedure to prevent & control Impacts	Environmental Performance 2011
damaged goods and returned product.	Air Emissions – dust and particulate matter.	Low	Intermittent	3109, 3110	Air emissions of dust and particulate matter not required to be monitored. No complaints received regarding air emissions.
	Air Emissions - chemical reactions.	Moderate	Infrequent	3109	Air emissions caused by chemical reactions not monitored.
	Air Emissions from LPG forklifts.	Low	Constant	3109	Air emissions from LPG forklifts not monitored.
	Air Emissions from Greenhouse Gases.	Low- Moderate	Constant	3109	Greenhouse Gas emissions not required to be monitored.
	Operational Noise emissions.	Moderate	Intermittent	3022, 3109, 3116	Noise emissions effectively prevented and controlled. No complaints received regarding operational noise emissions.
	Waste – packaging (recyclable and non- recyclable).	Low	Intermittent	3109, 3401, 3402	Waste packaging not monitored with regards to storage and handling operations.
	Hazardous Waste – spillage and rejected products.	Moderate	Infrequent	3109, 3401, 3402	Refer 5.4 – In compliance with EPL (L5) waste conditions.
	Community Health	Low	Infrequent	3109, 3412	No community complaints received regarding community health impacts of storage & handling operations.
	Use of resources	Low- Moderate	Constant	3109	General use of resources not monitored for storage and handling operations.
3. Management & Administration	Waste – recyclable office waste	Low	Intermittent	3109, 3402	Paper/cardboard recycling only.
	Waste – non recyclable	Low	Intermittent	3109, 3402	Non-recyclable office waste not monitored.
	Waste – hazardous (samples)	Low	Infrequent	3109, 3402	As per hazardous waste – storage & handling above.
	Land & water pollution	Low- moderate	Intermittent	CEMP – Hazardous Materials Management Plan	No spillages of materials reported with potential for contamination of soil/ groundwater.
	Construction waste management	Low	Intermittent	CEMP – Construction Waste Management Plan	Not applicable to this report.



5 Environmental Monitoring

Aspect	Frequency	Process	Documentation	Procedure References	Responsibility
Noise Emissions	Within one month of commencement of construction activities associated with each stage of the development.	Construction Noise Audit	Construction Noise Audit report.	Procedure 3116.	Independent auditor
	Within 90 days of commencement of operation of each stage of development.	Operational Noise Audit	Operational Noise Audit Report	Procedure 3116	Independent auditor
Traffic Impacts	Monthly, four vehicles per period.	Random spot checks on routes taken.	Form 21085; QP records & Corrective Action Requests.	Procedure 3022 and 3715.	Redox Transport Coordinator
	Within 90 days of commissioning each stage of the development.	Independent Transport Audit	Independent Transport Audit report	Procedure 3715.	Independent auditor
Stormwater Quality	Weekly & prior to discharge.	Visual and parameter analysis.	Form 2190 – Water Quality Inspection Form	Procedure 3405.	Redox Chemist
	Quarterly and following chemical contamination.	Parameter analysis	Parameter Analysis Report	Procedure 3405.	NATA Approved Laboratory
Waste	Continual	Continual log of waste generation.	Form 21152, 21157 and WasteLog.	Procedure 3402.	Redox Regulatory Affairs Coordinator
Incident/Near Miss Reporting	Continual	Record details of all incidents/near misses.	Form 21139 & 21140.	Procedure 3114 and 3401.	Redox Site Environmental Officer
Air emissions – dust and particulate matter	Daily	Regular sweeping. Weekly Inspection.	Form 21110 – Sydney Warehouse Inspection.	Procedure 3110 and 3521.	Redox Store Manager
Community Complaints	Continual.	Record details of all complaints received.	Complaints Register.	Procedure 3022 and 3412.	Redox Regulatory Affairs Coordinator
Environmental Management System	Annual reporting & triennial independent auditing.	Independent environmental audit.	Environmental Audit Report.	Procedure 2718.	Independent auditor
		Environmental performance review.	AEMR - Annual Environmental Management Report.	Procedure 2718.	Redox Regulatory Affairs Coordinator



5.1 Transport Monitoring & Auditing

5.1.1 Independent Transport Auditing

No independent transport auditing was conducted during 2011.

5.1.2 Monitoring Heavy Vehicle Routes/Requirements

Table 5.1.2: Heavy Vehicle Routes/Requirements: Non-Conformance Details

Date	Time	Carrier/ Customer	Vehicle Rego #	Route Travelled	Non-Conformance Details	QP Ref.	Corrective Action Summary
No non-conformances were found during 2011							

Discussion of Results:

30 Heavy vehicles were randomly audited during 2011 for compliance with Redox Procedure 3715 - NSW Heavy Vehicle Routes/Requirements. All vehicles monitored were found to travel by the correct route.

In 2010, five of 26 (19%) heavy vehicles randomly audited were found to breach the requirements.

In 2009, four of 37 heavy vehicles randomly audited (10.8%) were found to breach the routes/requirements.

In 2008, three of 29 heavy vehicles randomly audited (10.3%) were found to breach the routes/requirements.



5.2 Noise Monitoring & Auditing

5.2.1 Construction Noise Auditing

No construction noise auditing was required during this reporting period.

5.2.2 Operational Noise Auditing

No operational noise auditing was required during this reporting period.



5.3 Stormwater Quality Monitoring

A three tiered monitoring program tests stormwater quality prior to release from the retention pits on site, including weekly internal analysis prior to discharge, quarterly external analysis, and external analysis in the event of a chemical spill.

Acceptable values for each parameter are taken to be those of:

- a) the *Clean Waters Regulations 1972*, Section 8 – Class R: Restricted Waters;
- b) *Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000* – “Default trigger values for physical and chemical stressors for south-east Australia”, for slightly disturbed ecosystems; and
- c) *Baseline Contamination Assessment for Redox Chemicals Facility Swettenham Road, Minto* (Environmental Audits of Australia, January 2003).

5.3.1 Internal Stormwater Analysis

Table 5.3.1: Results of Internal Stormwater Analysis

Date	Sample	Colour	Clarity			Odour		pH	Temp.	Specific Gravity	Dissolved oxygen	Suspended Solids	Turbidity	Pass/Fail	Tested by:
			SS visible?	Foam?	Visible Film?	Smell?	Oil/Petrol Smell?								
	LIMIT	Clear	No	No	No	No	No	6.5-8.5	15-35°C	0.99-1.01	Min. 6.5 mg/L	Max. 50 mg/L	Max. 50 NTU	Pass	Name
19/01/11	No water present														
25/01/11	No water present														
02/02/11	No water present														
07/02/11	No water present														
15/02/11	No water present														
23/02/11	No water present														
02/03/11	No water present														
08/03/11	No water present														
16/03/11	No water present														



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Date	Sample	Colour	Clarity			Odour		pH	Temp.	Specific Gravity	Dissolved oxygen	Suspended Solids	Turbidity	Pass/Fail	Tested by:
			SS visible?	Foam?	Visible Film?	Smell?	Oil/Petrol Smell?								
	LIMIT	Clear	No	No	No	No	No	6.5-8.5	15-35°C	0.99-1.01	Min. 6.5 mg/L	Max. 50 mg/L	Max. 50 NTU	Pass	Name
22/03/11	BLANK	Clear	No	No	No	No	No	7.82	23	1.00	7.4	16	0.16	Pass	MichaelS
	PIT 1	Slightly turbid	No	No	No	No	No	7.34	23	1.00	2.5	37	21.7	Pass	MichaelS
	PIT 2	Slightly turbid	No	No	No	No	No	7.79	23	1.00	8.2	106	149	Pass	MichaelS
	PIT 3	Slightly turbid	No	No	No	No	No	7.92	23	1.00	6.5	100	154	Pass	MichaelS
30/05/11	BLANK	Clear	No	No	No	No	No	7.85	15	1.00	9.0	7	0.89	Pass	MichaelS
	PIT 1	Clear	No	No	No	No	No	7.66	15	1.00	9.8	30	16.44	Pass	MichaelS
	PIT 2	Slightly turbid	No	No	No	No	No	7.71	15	1.00	10.6	89	82.5	Pass	MichaelS
	PIT 3	Slightly turbid	No	No	No	No	No	7.75	15	1.00	10.5	129	143	Pass	MichaelS
31/05/11	BLANK	Clear	No	No	No	No	No	8.33	15	1.00	10.0	5	0.89	Pass	MichaelS
	PIT 1	Clear	No	No	No	No	No	7.80	15	1.00	10.8	16	6.94	Pass	MichaelS
	PIT 2	Turbid	No	No	No	Yes	Yes	7.82	15	1.00	10.3	133	125	Pass	MichaelS
	PIT 3	Slightly turbid	No	No	No	No	No	7.83	15	1.00	10.3	54	47.6	Pass	MichaelS
21/07/11	BLANK	Clear	No	No	No	No	No	8.07	12	1.00	10.9	10	2	Pass	MichaelS
	PIT 1	Clear	No	No	No	No	No	7.94	12	1.00	10.9	1.7	6.29	Pass	MichaelS
	PIT 2	Clear	No	No	No	No	No	7.86	12	1.00	10.7	50	37.8	Pass	MichaelS
	PIT 3	Clear	No	No	No	No	No	7.72	12	1.00	10.6	58	50	Pass	MichaelS
19.08/11	BLANK	Clear	No	No	No	No	No	8.46	15	1.00	10.9	10	2	Pass	MichaelS
	PIT 1	Clear	No	No	No	No	No	7.85	15	1.00	8.7	47	24.9	Pass	MichaelS
	PIT 2	Brown	No	No	No	No	No	7.88	15	1.00	10.5	498	456	Pass	MichaelS
	PIT 3	Brown	No	No	No	No	No	7.71	15	1.00	10.4	310	344	Pass	MichaelS
31/11/11	BLANK	Clear	No	No	No	No	No	8.40	19	1.00	10.9	4	0.17	Pass	MichaelS
	PIT 1	Clear	No	No	No	No	No	7.76	19	1.00	8.8	10	6.28	Pass	MichaelS
	PIT 2	Brown	No	No	No	No	No	7.78	19	1.00	8.9	189	225	Pass	MichaelS
	PIT 3	Brown	No	No	No	No	No	7.61	19	1.00	8.8	112	132	Pass	MichaelS



Discussion of Results for Internal Stormwater Analysis

<u>Analyte</u>	<u>Results</u>
Colour	Sample colour was clear or turbid brown for all samples taken during 2010.
Clarity	-
Suspended Solids	On no occasion during 2011 were large suspended solids visible in samples despite the fact that they were turbid.
Foam	On no occasion during 2011 was foam present on stormwater samples.
Visible Film	On no occasion during 2011 as a visible film present on samples.
Odour - Smell	One sample from Pit 2 was found to have a smell during 2011.
Odour - Oil/Petrol	One sample from Pit 2 was found to have an oil/petrol smell during 2011.
pH	All pH results fell within the acceptable range of 6.5-8.5 throughout 2011. The minimum pH recorded during 2011 was 7.4 and the maximum value was 8.46.
Temperature	Temperature results mostly fell within the 15-35 °C range throughout 2011. A temperature of 12 °C was recorded for all pits in July due to a cold winter.
Specific Gravity	Specific Gravity was recorded as 1.00 for all samples during 2011.
Dissolved Oxygen	All results except one fell above the required minimum of 6.5 mg/L apart from Pit 3 on 03/05/10 for which a value of 2.6 mg/L was recorded. There had been no rainfall for sometime and only dregs of water were present in the bottom of the pits. Pit 3 was monitored further before being released although there was no sign of chemical contamination and the water was later released.
Suspended Solids	Many of the results were well above the maximum level of 50 mg/L. These samples still passed based on the fact that there is no trace chemical contamination in the water sample.
Turbidity	Many of the results were well above the maximum value for turbidity of 50 NTU. This is due to soil leaching into the pipes.
Pass/Fail	All samples passed internal stormwater analysis during 2011 despite being higher than the max values for suspended solids and turbidity. The pass was based on the fact that no traces of chemicals were found in any of the samples.

5.3.2 External Stormwater Analysis

Table 5.3.2: Results of External Stormwater Analysis

Date	Sample	Total suspended solids	Turbidity	Total Kjeldahl Nitrogen (TKN)	NOx-N	Total nitrogen	Total phosphorus
		mg/L	NTU	mg/L	mg/L	mg/L	mg/L
22/03/11	PIT 1	21	21	<0.25	0.3	0.3	0.08
	PIT 2	81	145	<0.25	1.7	1.7	0.19
	PIT 3	12	131	<0.25	1.0	1.0	0.22
21/07/11	PIT 1	3	2.6	<0.25	0.3	0.3	0.04
	PIT 2	15	23	<0.25	0.3	0.3	0.04
	PIT 3	22	38	<0.25	0.2	0.2	0.12
03/11/11	PIT 1	1	4.9	<0.5	0.1	0.1	<0.03
	PIT 2	64	191	<0.5	0.6	0.6	0.19
	PIT 3	37	120	<0.5	0.4	0.4	0.17
Method	-	APHA 2540 D	APHA 2130 B	APHA 4500-N	APHA 4500-N _{ORG} -B	Sum of TKN & NOx-N	APHA 4500 P B/D

External storm water analysis for 2011 was conducted by LabPoint in NSW.

5.3.3 External Stormwater Analysis (Chemical Spill)

N/A



5.4 Waste Management

Table 5.4: WasteLog 2011 - NSW

QP	Product Code	DG Class	Form	Waste Code	Tracking	Qty	Waste Facility	CAN	TC No.	SPO	Despatch Date	Disposal Method
45983	FORMAL20	8	L	B100	Y	220 kg	TRANSPAC	2C00047908	2T00251654	34417	25/02/11	chemical/physical treatment
52927	FECHLS39	8	L/S	B100	Y	1859 kg	TRANSPAC	2C00050017	2T00288603	35350	15/08/11	chemical/physical treatment
52441	VARIOUS	ALL	S	B100	Y	2960kg	HAZMAT	2C000050906	2T00291465	35336	16/08/11	storage
						5039 kg						
44365	CAUSOD14	8	L	C100	Y	391kg	TRANSPAC	2C00041549	2T00251647	34417	25/02/11	chemical/physical treatment
42774	AMAUQE78	8	L	C100	Y	175 kg	TRANSPAC	2C00041549	2T00251647	34417	25/02/11	chemical/physical treatment
48033	AMAUQE82	8	L	C100	Y	210 kg	TRANSPAC	2C00041549	2T00251647	34417	25/02/11	chemical/physical treatment
48416	AMAUQE78	8	L	C100	Y	175 kg	TRANSPAC	2C00041549	2T00273781	35065	24/06/11	storage
52441	VARIOUS	ALL	S	C100	Y	350 kg	HAZMAT	2C000050906	2T00291465	35336	16/08/11	storage
						1301 kg						
52231	CANITR22	5.1	S	E100	Y	25 kg	TRANSPAC	2C00050985	2T00289930	35378	26/08/11	storage
39646	NISODA10	5.1	S	E100	Y	100 kg	TRANSPAC	2C00050985	2T00289930	35378	26/08/11	storage
52441	VARIOUS	5.1	S	E100	Y	933kg	HAZMAT	2C000050906	2T00291465	35336	16/08/11	storage
						1048 kg						
49338	PAFORM40	4.1	S	F110	Y	25 kg	TRANSPAC	2C00050984	2T00289928	35378	26/08/11	storage
						25 kg						
41294	MEETKE20	3	L	G110	Y	100 kg	TRANSPAC	2C00040558	2T00251649	34417	25/02/11	storage
52665	MESPSP50	3	L	G110	Y	158 kg	TRANSPAC	2C00050983	2T00289928	35378	26/08/11	storage
						258 kg						



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QP	Product Code	DG Class	Form	Waste Code	Tracking	Qty	Waste Facility	CAN	TC No.	SPO	Despatch Date	Disposal Method
47496	TAOIFA30		L	J100	Y	540 kg	TRANSPAC	2C00040569	2T00273780	35065	24/06/11	storage
42760	ETERCU15		L	J100	Y	200 kg	TRANSPAC	2C00040569	2T00273780	35065	24/06/11	storage
						740 kg						
46299	HYPERO60	5.1/8	L	J120	Y	75 kg	SOLVECO	2C00042980	2T00254731	34303	11/03/11	chemical/physical treatment
36777	HYPERT65	5.1/8	L	J120	Y	4200 kg	SOLVECO	2C00042980	2T00254731	34303	11/03/11	chemical/physical treatment
44375	WHIOIL96		L	J120	Y	1640 kg	SOLVECO	2C00042980	2T00263089	34781	02/05/11	chemical/physical treatment
44375	WHIOIL96		L	J120	Y	1010 kg	SOLVECO	2C00042980	2T00287834	35345	11/08/11	chemical/physical treatment
44375	WHIOIL96		L	J120	Y	1280 kg	SOLVECO	2C00042980	2T00299650	35619	07/10/11	chemical/physical treatment
44375	WHIOIL96	N/A	L	J120	Y	1000 kg	SOLVECO	2C00052035	2T00303973	35738	31/10/11	chemical/physical treatment
						9205 kg						
41882	TODIIS50	6.1	L	M220	Y	250 kg	TRANSPAC	204114-96-7		34417	25/02/11	chemical/physical treatment
						250 kg						
52441	VARIOUS	ALL	S	M250	Y	170kg	HAZMAT	2C000050906	2T00291465	35336	16/08/11	storage
						170 kg						
40485	ACCARS02	N/A	L	Z500	N	1079 kg	TRANSPAC			35065	24/06/11	
51292	MALTIT11	N/A	L	Z500	N	5200 kg	TRANSPAC			35681	04/11/11	
48860	GELATI53	N/A	L	Z500	N	1200 kg	TRANSPAC			35681	04/11/11	
37813	TRETAN70	N/A	L	Z500	N	230 kg	TRANSPAC			35681	04/11/11	
53204	SORBIL40	N/A	L	Z500	N	550 kg	TRANSPAC			35681	04/11/11	
						8259 kg						
MULTIPLE	VARIOUS	N/A	S	N/A	N	8 MT	SITA			35895		LANDFILL
MULTIPLE	VARIOUS	N/A	S	N/A	N	7 MT	SITA			35268		LANDFILL
MULTIPLE	VARIOUS	N/A	S	N/A	N	8 MT	SITA			35132		LANDFILL



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QP	Product Code	DG Class	Form	Waste Code	Tracking	Qty	Waste Facility	CAN	TC No.	SPO	Despatch Date	Disposal Method
MULTIPLE	VARIOUS	N/A	S	N/A	N	10 MT	SITA			34710		LANDFILL
						35 MT						
			Trackable waste			18036 kg						
			Non-DG liquid waste			8295 kg						
			Non-DG solid waste			35 MT						



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5.5 Independent Environmental Auditing

No environmental auditing was required during this reporting period.

6 Environmental Performance

Table 6.0 presents a list of all occasions in the preceding 12-month period when environmental performance goals for the development have not been achieved, indicating the reasons for failure to meet the goals, and the actions taken to prevent recurrence of that type of incident.

Table 6.0: Environmental Performance – Quality Problem Record

QP	Performance goal not achieved	Reason	Action	Status
Transport Management				
Nil				
Noise Monitoring & Auditing				
Nil				
Stormwater & Dust Management				
QP 36632	Procedure 3405 – Problem with leaking valves on stormwater retention pits.	Pits are retaining water (although not to the extent they should be) but the valves appear to be leaking. A damaged pipe has been discovered, which could account for the turbidity in some of the samples.	The pipes are due to be cleaned and repaired in the new year, after which time the valves will be cleaned and, if necessary, replaced and all drains fitted with nets to stop any foreign material from entering.	Pending
Landscape Management				
Nil				
Waste Management				
Nil				
Environmental Reporting				
Nil				

2012
Annual Environmental Management Report



**2 Swettenham Road
Minto NSW 2566**

Prepared by: Redox Pty Ltd

Trami Tran (Regulatory Affairs Coordinator)
Authorised by Malcolm Perrins (Director)

December 2012



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Executive Summary

This Annual Environmental Management Report (AEMR) has been prepared by Redox Pty Ltd (Redox) to review the performance of the development at 2 Swettenham Road, Minto NSW against the Operational Environmental Management Plan (OEMP) and Construction Environmental Management Plan (CEMP), the conditions of consent, Environmental Protection Licence 12041 and Environmental Legislation pertaining to the site, during the period January to December 2012.

The AEMR is intended to meet the requirements of the NSW Department of Planning, under development consent condition 8.3 – Annual Performance Reporting.

Site environmental management procedures and monitoring systems are in place for noise, transport, stormwater, waste, landscape, dust and odour control, community communication and incident reporting, as per the Operational Environmental Management Plans.

Ultimate responsibility for site environmental performance rests with the Managing Director. Day-to-day environmental management is the combined responsibility of the Regulatory Affairs Coordinator and the Store Manager.

No community, environmental or pollution complaints were received during 2012 related to the Minto facility operations.



1 Introduction

This Annual Environmental Management Report (AEMR) has been prepared by Redox Pty Ltd (Redox) to review the performance of the development at 2 Swettenham Road, Minto NSW against the Operational Environmental Management Plan (OEMP), the conditions of consent, Environmental Protection Licence 12041 and Environmental Legislation pertaining to the site, during the period January to December 2012.

The AEMR is intended to meet the requirements of the NSW Department of Planning, under development consent condition 8.3 – Annual Performance Reporting.

Condition 8.3 requires that Redox, throughout the life of the development, prepare and submit for the approval of the Director-General, and Annual Environmental Management Report (AEMR). The AEMR shall review the performance of the development against the Operational Environmental Management Plan, the conditions of consent and other licences and approvals relating to the development. The AEMR shall include, but not necessarily be limited to:

- (a) Details of compliance with the conditions of consent;
- (b) A copy of the Complaints Register for the preceding twelve-month period, and details of how these complaints were addressed and resolved;
- (c) A comparison of the environmental impacts and performance of the development against the environmental impacts and performance predicted in those documents listed under Condition 1.2 of consent;
- (d) Results of all environmental monitoring required under this consent and other approvals, including interpretations and discussion by a suitably qualified person; and
- (e) A list of all occasions in the preceding twelve-month period when environmental performance goals for the development have not been achieved, indicating the reason for failure to meet the goals and the action taken to prevent recurrence of that type of incident.

Redox shall submit a copy of the AEMR to the Director-General every year.

The Director-General may require Redox to address certain matters in relation to the environmental performance of the development in response to review of the Annual Environmental Management Report. Any action required to be undertaken shall be completed within such period as the Director-General may require.

1.1 Site & Operational Overview

Redox is an importer and distributor of close to 1,000 different organic and inorganic chemicals and raw materials. Used in more than 140 different industries, including Agriculture, Detergent, Food & Beverage, Mining & Metal, Surface Coating and Chemical Manufacture, these products are supplied to all areas of industry throughout Australia and New Zealand.

Redox operates five sites in Australia and three in New Zealand. The Head Office site in Minto (this site) is the base for the company's Marketing and Administration functions for its Australian and New Zealand operations. This site consists of two office/Administration buildings and five warehouses for the storage of both dangerous and non-dangerous goods.

The 5.984ha Redox owned site is located within the Minto Industrial Estate and is surrounded predominantly by light industrial and commercial operations to the west, north and south. Bow Bowing Canal forms the eastern boundary to the site. The nearest sensitive land use is the New Generation Child Care Centre, situated on the site's northern boundary. The nearest residential properties are situated on the opposite side of Campbelltown Road.



Figure 1.1: Aerial view, Redox Minto Facility.



The Minto facility, operational since 5 December 2005, was officially opened on 26 April 2006. The construction of Stage 3 of the development, a 2935m² non-dangerous goods store, commenced August 2008 and was completed February 2009. The new store was occupied from 27 February 2009.

Operational and construction site environmental management procedures are in place for noise, transport, stormwater, waste, landscape, dust and odour control, community communication and incident reporting. Ultimate responsibility for site environmental performance rests with the Managing Director; day-to-day environmental management is the combined responsibility of the Regulatory Affairs Coordinator and the Store Manager.

1.2 Operational Environmental Management Plan

Prior to commencement of operations on the site, an Operational Environmental Management Plan (OEMP) was prepared by Redox, and approved by the Director-General of the Department of Infrastructure, Planning and Natural Resources (DIPNR). This OEMP details the environmental management framework, practices and procedures to be followed during the operation of the development. The OEMP includes:

- (a) Identification of all statutory and other obligations that Redox is required to fulfil in relation to operation of the development, including all consents, licences, approvals and consultations;
- (b) A description of the roles and responsibilities for all relevant employees involved in the operation of the development;
- (c) Overall environmental policies and principles to be applied to the operation of the development;
- (d) Standards and performance measures to be applied to the development, and a means by which environmental performance can be periodically reviewed and improved;
- (e) Management policies to ensure that environmental performance goals are met and to comply with the conditions of consent;
- (f) The listed Management Plans:
 - (i) Noise Management Plan;
 - (ii) Transport Management Plan;
 - (iii) Stormwater Management Plan;
 - (iv) Waste Management Plan;
 - (v) Landscape Management Plan; and
- (g) The environmental monitoring requirements outlined in the conditions of consent.



1.3 Development Consent Conditions

The Minister for Infrastructure and Planning, the Hon Craig Knowles MP, determined to approve the Chemical Storage and Distribution Facility, Lot 171 Swettenham Road, Minto, Campbelltown LGA (DA No: 367-11-2002-i) on 16 September 2003, subject to Development Consent Conditions.

The reason for the imposition of conditions is to:

- (a) Minimise any adverse environmental impacts associated with the development;
- (b) Ensure effective on-going environmental and safety management and monitoring;
- (c) Minimise potential safety impacts associated with the development; and
- (d) Implement the recommendations of the Commission of Inquiry into all environmental aspects of the development.

1.4 Environmental Protection Licence

Environmental Protection Licence 12041 authorises Redox to carry out Chemical Storage and Waste Activities at 2 Swettenham Road, Minto.

General obligations of the licensee under this licence, and as set out in the *Protection of the Environment Operations Act 1997* and the Regulations made under the Act, include to:

- (a) Ensure persons associated with Redox comply with this Licence,
- (b) Control the pollution of waters and the pollution of air, and
- (c) Report incidents causing or threatening material environmental harm.



2 Details of Compliance

This section is intended to address requirement (a) of DCC 8.3, to detail compliance with the conditions of consent.

2.1 Compliance with Development Consent Conditions

Table 2.1: Compliance with Development Consent Conditions

Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
1	GENERAL					
Obligation to Minimise Harm to the Environment						
1.1	Redox shall implement all practicable measures to prevent or minimise any harm to the environment that may result from the construction, commissioning, operation ... of the development.	✓			Compliant	Environmental aspects of construction and operation are identified and controlled as per the Construction & Operational Environmental Management Plans. Control measures are audited internally & externally.
Scope of Development						
1.2	Redox shall carry out the development generally in accordance with the scope documents.	✓			Compliant	These requirements are incorporated into the Operational & Construction Management Plans and drawings to ensure that the development remains the same as presented in the scope documents.
1.3	In the event of any inconsistency between the conditions of consent and/or any scope document(s), the conditions of consent and/or the most recent document shall prevail to the extent of the inconsistency.	✓			Noted	



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
Provision of Documents						
1.4	Redox shall provide all documents and reports required to be submitted to the Director-General under this consent in an appropriate electronic format.	✓			Compliant	All documents required to be submitted to the Department under development consent are submitted in electronic (pdf) format.
1.5	Nothing in this consent prevents Redox from combining reporting requirements under this consent with reporting requirements for submission to another relevant party.	✓			Noted	
Statutory Requirements						
1.6	Redox shall ensure that all licences, permits and approvals are obtained and kept up-to-date throughout the life of the development.	✓			Compliant	The Regulatory Affairs Coordinator keeps all licences, permits and approvals up-to-date; and maintains an up-to-date spreadsheet record of permits & licences.
1.7	In the event that a dispute arises between Redox and a public authority other than the Department ... the matter shall be referred to the Director General.	✓			Noted	
2	COMPLIANCE					
2.1	Redox shall ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.	✓			Compliant	Employees are made aware of their responsibilities through site procedures and training, as required. Contractors & Sub-contractors are made aware of their responsibilities through site inductions.
2.2	Redox shall be responsible for environmental impacts resulting from the actions of all persons on site, including contractors, subcontractors and visitors.	✓			Noted	Management plans and procedures define responsibilities for environmental impacts. Redox oversees all work carried out by contractors onsite.



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
2.3	Prior to each of the events listed below, Redox shall certify in writing to the satisfaction of the Director-General that it has complied with all conditions of this consent applicable prior to that event.				Noted	Not required during this reporting period.
	(a) commencement of any physical works on the land subject to this consent;		✓			
	(b) commencement of construction of stages 1, 2, 3 and 4 of the development; and		✓			
	(c) commencement of operation of stages 1, 2, 3, and 4 of the development.			✓		
2.4	Notwithstanding condition 2.3 of this consent, the Director-General may require an update report on compliance with all, or any part of the conditions of this consent.	✓			Noted	Not required during this reporting period.
2.5	Redox shall meet the requirements of the Director-General in respect of the implementation of any measure necessary to ensure compliance with the conditions of consent, and general consistency with the scope documents.	✓			Noted	
3.1	In relation to the construction and occupation of the development, Redox shall provide the Director-General and Council with the following:				Noted	Not required during this reporting period.
	(a) written notification of a Principal Certifying Authority;		✓			
	(b) copies of all construction certificates issued;		✓			
	(c) written notification of the intention to commence construction;		✓			
	(d) copies of all occupation certificates;			✓		
	(e) written notification of the intention to occupy.			✓		



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
3.2	Prior to the commencement of any construction associated with the development, Redox shall erect at least one sign at the construction site. The sign shall be maintained for the duration of construction works, and shall be removed as soon as practicable after the conclusion of construction works.		✓		Noted	
4	ENVIRONMENTAL PERFORMANCE					
Hazards and Risk Impacts						
4.1	For each of the dangerous goods classes ... Redox shall not permit the materials listed as "prohibited" to be received, stored or handled on the site.			✓	Compliant	Storage restrictions for each warehouse are entered into the Redox "Redebiz" system, which ensures "prohibited" materials are restricted from the site.
4.2	Redox shall only permit non-dangerous goods, and dangerous goods of class 8 to be stored or handled in bulk on the site.			✓	Compliant	As above.
4.3	Prior to any dangerous goods being brought to the site, Redox shall demonstrate to the satisfaction of the Director-General that it has a system in place to track the quantities and locations of dangerous goods on the site at all times.			✓	Compliant	Addressed as pre-operation requirement for Stages 1 & 2 of the development.
Bunding and Spill Management						
4.4	Redox shall ensure that all bunding installed at the development site is constructed strictly in accordance with: (a) all relevant Australian Standards; (b) a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; (c) the EPA's Environmental Protection Manual Technical Bulletin Bunding and Spill Management.		✓ ✓ ✓		Compliant	Building requirements were addressed as pre-construction requirements for Stages 1 & 2 of the development.



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
4.5	At least one month prior to the commencement of construction of the development ... Redox shall prepare and submit for the approval of the Director-General the studies set out below. (a) A Fire Safety Study (b) A Final Hazard Analysis (c) A Construction Safety Study		✓ ✓ ✓		Compliant	Not required for this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
Pre-Commissioning Studies						
4.6	No later than two months prior to the commencement of commissioning of the development, Redox shall prepare and submit for the approval of the Director-General the studies set out below: (a) A Transport of Hazardous Materials Study for the development. (b) An Emergency Plan for the development. (c) A Safety management System.			✓ ✓ ✓	Compliant	Not required during this reporting period. Addressed as pre-operation requirement for Stages 1 & 2 of the development and covering all four stages of the development.
4.7	Prior to the commencement of construction, Redox shall submit to the Director-General a Security Management Plan for the development.		✓		Compliant	Not applicable to this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
Traffic and Transport						
Community Enhancement Program						
4.8	Prior to the commencement of operation of the development ... Redox shall negotiate an agreed outcome with Council for an appropriate level of contribution towards mitigating any cumulative social/community impacts as a result of the development.			✓	Compliant	Not applicable to this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
Site Access, Internal Roads and Parking						
4.9	Redox shall ensure that all heavy vehicles access the site in a forward direction via the Holmes Road entrance, not via the Swettenham Road entrance.			✓	Compliant	The Holmes Road Secure Access System does not accommodate vehicles entering or exiting the site in a reverse direction. The Swettenham Road entrance accepts only company directors, visitors and emergency vehicles to the site. A sign is posted at the Swettenham Road entrance to instruct drivers that all deliveries and pick-ups must enter and exit via Holmes Road.
4.10	Redox shall develop and implement, in consultation with Council, a road hierarchy for heavy vehicles traveling to and from the site. The Applicant shall submit details of the road hierarchy for the approval of the Director-General prior to the commencement of operations on the site.			✓	Compliant	Not applicable to this reporting period. Addressed as pre-operation requirement for Stages 1 & 2 of the development.
4.11	Prior to the commencement of operations, Redox shall submit for the Director-General's approval a Transport Code of Conduct for the development.			✓	Compliant	Not applicable to this reporting period. Addressed as pre-operational requirement for Stages 1 & 2 of the development.
4.12	Prior to the commencement of any B-double transport to the site, Redox shall demonstrate to the satisfaction of the Director-General that the B-double reclassification of Holmes Road has been approved by the RTA in association with Council.			✓	Compliant	B-double transport has been approved for Holmes Rd.
4.13	The use of landscaping shall not affect driver sight distance for vehicles entering and exiting the site.		✓		Compliant	Addressed as pre-construction (landscaping design) requirement for Stages 1 & 2 of the development.
4.14	Redox shall design and construct all internal road works, including assoc. parking facilities and loading bays:				Compliant	Not applicable to this reporting period. Addressed as pre-construction requirement for
	(a) in accordance with relevant RTA and Council standards and codes, and Australian Standards;		✓			



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
	(b) with clearly marked visitor, disabled, ambulance and service vehicle parking areas; and		✓			Stages 1 & 2 of the development.
	(c) with signage to demarcate all on-site vehicle movements.		✓			
Road Works						
4.15	Redox shall ensure that the deceleration lane at Swettenham Road is designed in accordance with Council's Specification for Construction of Sub-divisional Road and Drainage Works and that the land is constructed to the satisfaction of Council.		✓		Compliant	Not applicable to this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
4.16	Redox shall ensure that the compensatory pedestrian footpath is designed and constructed to the satisfaction of Council.		✓		Compliant	Not applicable to this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
Noise Impacts						
Construction Noise						
4.17	Redox shall ensure that all site preparation and construction activities associated with the development do not exceed the criteria at the nominated locations.		✓		Compliant	Not applicable to this reporting period. The Construction Noise Management Plan details measures to ensure that construction activities do not exceed the noise criteria at the nominated locations.
4.18	Redox shall ensure that site preparation and construction activities associated with the development do not exceed 62 dB(A) at the New Generation Childcare Centre.		✓		Compliant	Not applicable to this reporting period. The Construction Noise Management Plan details measures to ensure that construction activities do not exceed the noise criteria at the New Generation Child Care Centre.
4.19	Redox shall only undertake noisy site preparation works and noisy construction activities associated with the development between the nominated hours.		✓		Compliant	Not applicable to this reporting period. The Construction Noise Management Plan details the permitted hours for noisy construction activities.



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
4.20	The hours of site preparation works and construction activities ... may be varied with the prior written approval of the Director-General.		✓		Noted	Not applicable to this reporting period.
Operational Noise						
4.21	Redox shall design, construct, operate and maintain the development to ensure that the noise contributions from the development to the background acoustic environment do not exceed the maximum allowable noise contributions specified.	✓			Compliant	The Construction and Operational Noise Management Plans detail measures to ensure that construction and operational activities do not exceed the maximum allowable noise contributions.
Measurement of Noise Impacts						
4.22	Noise from the development shall be: (a) measured at the most affected point on or within the residential boundary to determine compliance with LAeq (15 min.) noise limits; or (b) measured at 1 metre from the dwelling façade to determine compliance with LA1(1 min.) noise limits.	✓			Compliant	Refer to Operational Noise Audit (Hibbs & Assoc., Feb. 2007) and Construction Noise Audit (Acoustic Dynamics, Sept. 2008) methodologies.
Soil and Water Impacts						
4.23	Redox shall comply with section 120 of the <i>Protection of the Environment Operations Act 1997</i> , which prohibits the pollution of waters.	✓			Compliant	The Construction & Operational Environmental Management Plans detail measures to prevent the pollution of waters.
Soil, Contamination and Geotechnics						
4.24	Redox shall ensure that all materials displaced during site preparation and construction works are stabilised, relocated and made secure so that they will not detrimentally affect any watercourse or riparian zone.		✓		Compliant	Not applicable to this reporting period. The Erosion & Sedimentation Management Plan (CEMP) details measures to ensure that all displaced materials are stabilized, secured and/or relocated.



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
4.25	Prior to the commencement of any site preparation or construction work, Redox shall submit for the approval of the Director-General, a geo-technical assessment of the site.		✓		Compliant	Not required during this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
4.26	Prior to the commencement of any site preparation or construction work, Redox shall submit for the approval of the Director-General, a contamination review of the site.		✓		Compliant	Not required during this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
4.27	Depending on the outcome of the investigations required by Condition 4.26, the Director-General may require Redox to prepare and implement a Soil Contamination Protocol.		✓		Noted	
Bow Bowling Canal and Riparian Zone						
4.28	Redox shall establish and maintain a riparian zone, consisting of local native plant species, in the area between the development and the watercourse within the property boundary.		✓		Compliant	Not applicable to this reporting period. The riparian zone was established during development Stages 1 & 2 as per the Vegetation Management Plan (CEMP).
4.29	Redox shall maintain the riparian zone, for a period of at least two years after final planting. Every six months during that period, the Applicant shall submit to the satisfaction of the Department, a status detailing the progress of the implementation of the Vegetation Construction Management plan.			✓	Compliant	The riparian zone was maintained as per the Vegetation Management Plan (CEMP) and Procedure 3103 – Landscape Management for the required two years post planting. The final vegetation status report was approved by the Department 26/03/2008.
4.30	The Applicant shall design and construct any stormwater outlet structure located within 40 metres of Bow Bowling Canal to ensure that the structure does not compromise the stability or function of the riparian zone.		✓		Compliant	Not applicable to this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
Waste Generation and Management						
4.31	Redox shall not receive waste at the site for storage, treatment, processing or reprocessing, and shall not dispose of waste generated by the development on the site.			✓	Compliant	Addressed by Waste Management Plan (OEMP) and Site Procedure 3402 – Waste Management & Disposal.
4.32	Redox shall ensure that only the hazardous and/or Industrial and/or Group A waste listed, are generated and/or stored at the site.			✓	Compliant	Addressed by Waste Management Plan (OEMP) and Site Procedure 3402 – Waste Management & Disposal.
4.33	The quantity of hazardous and/or Industrial and/or Group A waste generated at the site per year shall not exceed 100 tonnes.			✓	Compliant	Addressed by Waste Management Plan (OEMP) and Site Procedure 3402 – Waste Management & Disposal.
4.34	The quantity of hazardous and/or Industrial and/or Group A waste stored at the sit shall not exceed 50 tonnes at any one time.			✓	Compliant	Addressed by Waste Management Plan (OEMP) and Site Procedure 3402 – Waste Management & Disposal.
Air Quality Impacts						
Odour						
4.35	Redox shall design, construct, operate and maintain the development to prevent the emission of any offensive odour from the site that is attributable to the operation of the development.	✓			Compliant	Addressed by Health, Safety & Environment Procedure 3117 – Odour Control Management.
Acetic Acid Scrubber						
4.36	The Applicant shall design, construct, commission and operate the acetic acid scrubber to ensure that the emissions from the scrubber meet the requirements specified in the Environment Protection Licence.	✓			N/A	



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
4.37	Prior to the commencement of decanting activities involving acetic acid on the site, the Applicant shall submit to the Director-General and the EPA the manufacturer's performance guarantee and the detailed final design of the acetic acid scrubber.			✓	N/A	
Dust Emissions						
4.38	Redox shall design, construct, commission, operate and maintain the development in a manner that minimises dust emissions.	✓			Compliant	Addressed by Health, Safety & Environment Procedure 3110 – Dust Control Management.
Visual Amenity Impacts						
4.39	Redox shall prepare an external design panel indicating the proposed external design finishes, materials and configuration, in consultation with Council.		✓		Compliant	Not applicable to this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
4.4	Redox shall ensure that all external lighting associated with the development is mounted, screened and directed in such a manner so as not to create a nuisance to surrounding properties or roadways.		✓		Compliant	Not applicable to this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
4.41	This consent does not permit the display of any advertisement, or the erection of any advertising structure, on the site.	✓			Noted	
5	ENVIRONMENTAL MONITORING AND AUDITING					
5.1	Redox shall undertake all monitoring, including recording and reporting of monitoring results, as required under this consent, and as may be specified under an Environmental Protection Licence.	✓			Generally compliant	Refer to Section 5 of this report for environmental monitoring results.



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
Transport Auditing						
5.2	Within 90 days of commissioning each stage of the development, and then as may be required by the Director-General, Redox shall commission an independent Transport Audit of the development.			✓	Compliant	Not applicable to this reporting period.
5.3	Within 28 days of conducting the Audit, Redox shall provide the Director-General and Council with a copy of the Transport Audit Report.			✓	Compliant	Not applicable to this reporting period.
Noise Monitoring and Auditing						
Construction Noise						
5.4	Within one month of the commencement of construction activities associated with each stage of the development, Redox shall submit to the Director-General and the EPA a Construction Noise Audit.		✓		Compliant	Not applicable to this reporting period.
5.5	Redox may seek the Director-General's approval, in consultation with the EPA, to dispense with the requirement to undertake a Construction Noise Audit for stage 2, 3 and/or 4 of the development.		✓		Noted	
Operational Noise						
5.6	Within 90 days of the commencement of operation of each stage of the development, Redox shall conduct an Operational Noise Audit of its operations.			✓	Compliant	Not applicable to this reporting period.
5.7	Within 28 days of conducting the Audit, Redox shall provide the Director-General and EPA with a copy of the Noise Audit report.			✓	Compliant	Not applicable to this reporting period.



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
Stormwater Quality Monitoring						
5.8	Prior to the commencement of operations at the site, Redox shall submit for the approval of the Director-General, in consultation with Council, a Stormwater Quality Monitoring Program.			✓	Compliant	Not applicable to this reporting period. Addressed as pre-operational requirement for Stages 1 & 2 of the development.
Air Quality Monitoring and Auditing						
Acetic Acid Scrubber						
5.9	Redox shall periodically determine the pollutant concentrations discharged from the acetic acid scrubber.			✓	N/A	
5.10	Within 90 days of commencing acetic acid decanting activities at the site ... Redox shall conduct an Air Quality Audit of its operations to confirm the air emission performance of the acetic acid scrubber.			✓	N/A	
5.11	Within 28 days of conducting the Audit referred to under condition 5.10 of this consent, Redox shall provide the Director-General and EPA with a copy of the Air Quality Audit report.			✓	N/A	
Independent Hazard Auditing						
5.12	Twelve months after the commencement of operation of Stage 1 of the development ... Redox shall commission an independent, qualified person or team to undertake a Hazard Audit of the development. Further Hazard Audits shall be undertaken every three years or within 12 months of commissioning Stages 2, 3 and 4 of the development.			✓	Compliant	Not applicable to this reporting period. Last audit was conducted November 2010.



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
Independent Environmental Auditing						
5.13	Twelve months after the commencement of operation of each stage of the development, and every three years thereafter, Redox shall commission an independent, qualified person or team to undertake an Environmental Audit of the development.			✓	Compliant	Not applicable to this reporting period. Last audit was conducted November 2010.
5	ENVIRONMENTAL MONITORING AND AUDITING					
6.1	Subject to confidentiality, Redox shall make all documents required under this consent available for public inspection on request.	✓			Compliant	Addressed by Procedure 3104 – Community Right to Know Policy. Documentation is provided under Managing Director's approval.
Complaints Procedure						
6.2	Prior to the commencement of construction of the development, Redox shall ensure that the following are available: (a) a 24-hour, toll-free telephone number on which complaints about the development may be registered; (b) a postal address to which written complaints may be sent; and (c) an email address to which complaints may be transmitted. The telephone number, postal address and email address shall be advertised on at least one occasion prior to the commencement of construction of each stage of the development, through a medium approved by the Director-General.		✓ ✓ ✓ ✓		Compliant	Not applicable to this reporting period.
6.3	Redox shall record details of all complaints received ... in an up-to-date Complaints Register. The Complaints Register shall be made available upon request.	✓			Compliant	No complaints received during this reporting period. Complaints are recorded and actioned as per Procedure 3022 – Problems and Complaints.



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
Community Communication Strategy						
6.4	Prior to the commencement of operations at the site, Redox shall prepare and implement a Community Communication Strategy for the development. The Strategy shall be approved by the Director-General prior to the commencement of any operations on the site.			✓	Compliant	Not applicable to this reporting period. Addressed as pre-operation requirement for Stages 1 & 2 of the development.
7	ENVIRONMENTAL MANAGEMENT					
Environmental Representative						
7.1	Prior to the commencement of construction of the development, Redox shall notify the Director-General of the name and contact details of a suitably qualified and experienced Environmental Representative, and any changes to that appointment that may occur from time to time.	✓			Compliant	The details of the current Environmental Representative were sent to the Director-General in May 2011.
Construction Environmental Management Plan						
7.2	Redox shall prepare and implement a Construction Environmental Management Plan to outline environmental management practices to be followed during site preparation and construction activities during each stage of the development.		✓		Compliant	Not applicable to this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
	The plan shall be submitted for the approval of the Director-General no later than one month prior to the commencement of any site preparation and construction works associated with the development.		✓			Not applicable to this reporting period



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
	Preparation and construction works associated with any stage of the development shall not commence until written approval has been received from the Director-General.		✓		Noted	
7.3	As part of the Construction Environmental Management Plan for the development, Redox shall prepare and implement the following Management Plans: (a) Noise Management Plan (b) Transport Management Plan (c) Erosion and Sediment Management Plan (d) Vegetation Management Plan		✓ ✓ ✓ ✓		Compliant	Not applicable to this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
Operation Environmental Management Plan						
7.4	Redox shall prepare and implement an Operation Environmental Management Plan to detail an environmental management framework, practices and procedures to be followed during the operation of the development. The plan shall be submitted for the approval of the Director-General no later than one month prior to the commencement of operation of stage 1 of the development.			✓	Compliant	Prepared as pre-operation requirement for Stages 1 & 2 of the development. Revision 3 was finished in November 2011. Only minor changes were made to include the mobicon as a source of noise on site as required from the environmental audit conducted in 2011. In addition, minor grammatical changes were made and all procedures were moved to become an appendix as this is easier to update when procedures are updated.
7.5	As part of the Operation Environmental Management Plan for the development, Redox shall prepare and implement the following Management Plans: (a) Noise Management Plan (b) Transport Management Plan (c) Stormwater Management Plan			✓ ✓ ✓	Compliant	Not applicable to this reporting period. Prepared as pre-operation requirement for Stages 1 & 2 of the development.



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		General	Construction	Operation		
	(d) Waste Management Plan (e) Landscape Management Plan			✓ ✓		
7.6	At least one month prior to the operation of Stage 2, Stage 3 and Stage 4 of the development, Redox shall update and submit for the approval of the Director-General, the Operation Environmental Management Plan. Operation of Stage 2, Stage 3 and Stage 4 shall not commence until the Director-General has approved the updated Plans.			✓	Compliant	Not applicable to this reporting period. Prepared as pre-operation requirement for Stages 1 & 2 of the development.
8	ENVIRONMENTAL REPORTING					
Incident Reporting						
8.1	Redox shall notify the EPA and the Director-General of any incident with actual or potential significant off-site impacts on people or the biophysical environment as soon as practicable after the occurrence of the incident. The Applicant shall provide written details of the incident to the EPA and the Director-General within seven days of the date on which the incident occurred.	✓			Noted	No such incidents have occurred. Incidents and potential incidents are reporting as per Procedure 3114 – Incident & Near Miss Reporting.
8.2	Redox shall meet the requirements of the Director-General to address the cause or impact of any incident, as it relates to this consent, reported in accordance with 8.1, within such period as the Director-General may require.	✓			Noted	
Annual Performance Reporting						
8.3	Redox shall, throughout the life of the development, prepare and submit for the approval of the Director-General, an Annual Environmental Management Report.	✓			Compliant	This report.



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Consent Condition	Compliance Requirements	Requirement			Status	Evidence
		General	Construction	Operation		
	Redox shall submit a copy of the AEMR every year, with the first AEMR to be submitted no later than 12 months after the commencement of operation of the development.					



2.2 Compliance with Environmental Protection Licence 12041

Table 2.2: Compliance with EPL 12041

Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
1	ADMINISTRATIVE CONDITIONS						
A1	What the licence authorises and regulates						
A1.1	N/A					N/A	
A1.2	Unless otherwise further restricted by a condition of this licence, the scale at which the scheduled activity is carried out must not exceed the maximum scale specified in this condition. Fee Based Activity: Scale General chemicals storage: 0–5000 kL of active storage capacity. Chemical storage waste generation: >5–100 T.			✓ ✓	Procedure 3801 – Warehouse Limitations. Procedure 3402 - Waste Management & Disposal.	Compliant	Warehouse MHF Analysis (stock inventory). WasteLogs 2012 (NSW)
A1.3	N/A					N/A	
A1.4	Scheduled activities arising from the completion of Stage 1 can be undertaken prior to completion of scheduled development works for Stages 2, 3 and 4.	✓			OEMP	Noted	
A2	Premises to which this licence applies						
A2.1	Premises details.	✓				Noted	
A3	Other activities						
A3.1	N/A					N/A	



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Item	Licence Condition		Development Stage			Redox Procedure	Compliance	Evidence
			Gen.	Con.	Op.			
A4	Information supplied to the EPA							
A4.1	Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.		✓			OEMP	Compliant	
2	DISCHARGES TO AIR & WATER & APPLICATIONS TO LAND							
P1	Location of Monitoring/Discharge Points and Areas							
P1.1							N/A	Not applicable to this reporting period. The Acetic Acid Scrubber will be part of Stage 4 of the development.
	EPA ID.	Type of Monitoring Point						
	1	Discharge to air Air emissions monitoring	Discharge to air Air emissions monitoring			✓		
P1.2	N/A						N/A	
P1.3	N/A						N/A	
3	LIMIT CONDITIONS							
L1	Pollution of Waters							
L1.1	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.		✓			OEMP; Procedure 3405 – Water Release from Retention Basin.	Compliant	Internal storm water analysis results are given in Section 5 of this report.
L2	Load Limits							
L2.1	N/A						N/A	
L2.2	N/A						N/A	



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
L3	Concentration Limits						
L3.1	N/A					N/A	R1.2
L3.2	N/A					N/A	
L3.3	N/A					N/A	
L4	Volume and Mass Limits						
L4.1	N/A					N/A	
L5	Waste						
L5.1	The licensee must not cause, permit or allow any waste generated to be received at the premise except “General or Specific exempted waste” which meet all the conditions of a resource recovery exemption under Clause 51A of the <i>Protection of the Environment Operations (Waste) Regulation 2005</i> .. Any waste received at the premise must only be used for the activities as specified in the particular resource recovery exemption.			✓	Waste Management Plan (OEMP); Procedure 3402 – Waste Management & Disposal.	Compliant	WasteLog 2012 (NSW).
L5.2	This condition [L5] only applies ... if those activities require an environmental protection licence.	✓				Noted	
L5.3	Except as provided by any other condition of this licence, only the hazardous and/or industrial and/or Group A waste listed [in this condition] may be generated and/or stored at the premises.			✓	Waste Management Plan (OEMP); Procedure 3402 – Waste Management & Disposal.	Compliant	WasteLog 2012 (NSW).
L5.4	The quantity of hazardous and/or industrial and/or Group A waste generated at the premises must not exceed 100 tonnes per year.			✓	Waste Management Plan (OEMP); Procedure 3402 – Waste Management & Disposal.	Compliant	WasteLog 2012 (NSW).
L5.5	The quantity of hazardous and/or industrial and/or Group A waste stored on the premises must not exceed 50 tonnes at any one time.			✓	Waste Management Plan (OEMP); Procedure 3402 – Waste Management & Disposal.	Compliant	WasteLog 2012 (NSW).



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
L6	Noise Limits						
L6.1	Noise from the premises must not exceed the sound pressure level (noise) limits at the nominated receiver locations.			✓	Noise Management Plan (OEMP); Procedure 3116 - Noise Management.	Compliant	Operational Noise Audit report, May 2009.
L6.2	Noise from the premises is to be measured at the most affected point on or within the residential boundary to determine compliance with the LAeq (15 minute) noise limits.			✓	Noise Management Plan (OEMP); Procedure 3116 - Noise Management.	N/A	Operational Noise Audit report, May 2009.
L6.3	Noise from the premises is to be measured at 1m from the dwelling facade to determine compliance with the LA1(1 minute) noise limits.			✓		N/A	
L7	Polychlorinated Biphenyls (PCBs)						
Note:	The licensee must comply with the "Chemical Control Order in Relation to Materials and Wastes Containing Polychlorinated Biphenyl, 1997".	✓				Noted	
L8	Asbestos						
Note:	The licensee must comply with the Protection of the Environment Operations (Waste) Regulation 2005.	✓				Noted	
L9	Odour						
L9.1	No condition of this licence identifies a potentially offensive odour for the purpose of section 129 of the POEO Act 1997.	✓			Significant Environmental Aspects & Potential Impacts: Odour Emissions (OEMP); Procedure 3117 - Odour Control Management.	Compliant	No complaints or reports of offensive odour received during this reporting period.
Note:	Section 129 of the POEO Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises, ... except if the emission is identified [in L9.1].						



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
4	Operating Conditions						
O1	Activities must be carried out in a competent manner						
O1.1	Licensed activities must be carried out in a competent manner. This includes: (a) the processing, handling, movement & storage of materials and substances; and (b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.			✓ ✓	Procedure 3009 – Handling, Storage, Packing, Pres. & Del. Procedure 3402 - Waste Management & Disposal.	Compliant	
O2	Maintenance of Plant and Equipment						
O2.1	All plant and equipment installed at the premises or used in connection with the licensed activity: (a) must be maintained in a proper and efficient condition; & (b) must be operated in a proper and efficient manner.			✓ ✓	Procedure 3901 - Equipment Service. Equipment Procedures: 3902, 3903, 3904, 3906, 3917, 3918, 3919.	Compliant	Equipment Asset Diary.
O3	Emergency Response						
O3.1	The licensee must maintain, and implement, a current emergency response plan for the premises. The licensee must keep the emergency response plan on the premises at all times. The plan must document systems and procedures to deal with all types of incidents that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment.	✓			Procedure 3403 - Emergency Procedure.	Compliant	Last reviewed/amended on 28/01/2012
O4	Process and management						
O4.1	The licensee must ensure that any liquid and/or non liquid waste generated and/or stored at the premises is assessed and classified in accordance with the DECC Waste Classification Guidelines as in force from time to time.	✓			Waste Management Plan (CEMP & OEMP); Procedure 3402 - Waste Management & Disposal.	Compliant	WasteLog 2012 (NSW).



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
O4.2	The licensee must ensure that waste identified for recycling is stored separately from other waste.			✓	Waste Management Plan (CEMP & OEMP); Procedure 3404 - Recycling.	Compliant	
O5	Dust						
O5.1	All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.	✓			Significant Environmental Aspects & Potential Impacts: Dust Emissions (OEMP); Procedure 3110 - Dust Control Management.	Compliant	Dust emission is not monitored. No complaints or reports of dust emissions received.
5	MONITORING & RECORDING CONDITIONS						
M1	Monitoring Records						
M1.1	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.	✓				N/A	Not applicable to this reporting period. Refer M2.2.
M1.2	All records required to be kept by this licence must be: (a) in a legible form; (b) kept for at least four years after the monitoring or event; and (c) produced to any authorised officer who asks to see them.	✓				Compliant	Environmental monitoring and pollution complaint records are kept by the Regulatory Affairs Coordinator.
M1.3	The following records must be kept in respect of any samples required to be collected for the purposes of this licence: (a) the date the sample was taken; (b) the time the sample was collected; (c) the point at which the sample was taken; and (d) the name of the person who collected the sample.	✓				N/A	Not applicable to this reporting period. Refer M2.2.



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Item	Licence Condition		Development Stage			Redox Procedure	Compliance	Evidence		
			Gen.	Con.	Op.					
M2	Requirement to Monitor Concentration of Pollutants Discharged									
M2.1	POINT 1: Air						✓		N/A	Not applicable to this reporting period. Refer M2.2.
	Pollutant	Unit of Measure	Freq.	Sampling Method						
	Acetic Acid	mg per m3	1/4'ly	Approved in writing by EPA						
M2.2	Monitoring for acetic acid is not required until completion of Stage 4.									
M3	Testing Methods – Concentration Limits									
M3.1	Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with any methodology required, imposed or approved by the EPA [as applicable].						✓		N/A	Not applicable to this reporting period. Refer M2.2.
M3.2	N/A								N/A	
M4	Recording of Pollution Complaints									
M4.1	The licensee must keep a legible record of all complaints made to the licensee, employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.				✓			Procedure 3022 - Problems & Complaints.	Compliant	No complaints received.
M4.2	The record must include details of the following: (a) the date and time of the complaint; (b) the method by which the complaint was made; (c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; (d) the nature of the complaint; (e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; (f) if no action was taken by the licensee, the reasons why no action was taken.				✓			Procedure 3022 - Problems & Complaints.	Noted	No complaints received, however Procedure 3022 details requirements for recording pollution complaints.



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
M4.3	The record of a complaint must be kept for at least four years after the complaint was made.	✓			Procedure 3022 - Problems & Complaints.	Noted	
M4.4	The record must be produced to any authorised officer of the EPA who asks to see them.	✓			Procedure 3022 - Problems & Complaints.	Noted	
M5	Telephone complaints line						
M5.1	The licensee must operate a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises, unless otherwise specified in the licence.	✓			Procedure 3022 - Problems & Complaints	Compliant	Tel: 1800 056 440 (24hr Toll Free).
M5.2	The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.	✓			Procedure 3022 - Problems & Complaints	Compliant	The telephone number is listed at http://www.redox.com/Community/
M5.3	Conditions M5.1 and M5.2 do not apply until three months after: (a) the date of issue of the licence or (b) if this licence is a replacement licence within the meaning of the POEO (Savings and Transitional) Regulation 1998, the date on which a copy of the licence was served on the licensee under clause 10 of that regulation.	✓				Noted	
M6	Requirements to Monitor Volume or Mass						
M6.1	N/A					N/A	
6	REPORTING CONDITIONS						
R1	Annual return documents						



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
R1.1	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: (a) a Statement of Compliance; and (b) a Monitoring and Complaints Summary.	✓			Procedure 3118 – Environmental Management System.	Compliant	
Period covered by Annual Return							
R1.2	An Annual Return must be prepared in respect of each reporting period, except as provided below. Do not complete the Annual Return until after the end of the reporting period.	✓			Procedure 3118 – Environmental Management System.	Compliant	Annual Return for reporting period – 05/01/11 - 04/01/12 submitted 10/01/12.
R1.3	Where this licence is transferred from the licensee to a new licensee ...	✓				N/A	
R1.4	Where this licence is surrendered by the licensee or revoked by the EPA or Minister ...	✓				N/A	
Deadline for Annual Return							
R1.5	The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period.	✓			Procedure 3118 – Environmental Management System.	Compliant	Annual Return for reporting period – 05/01/11 - 04/01/12 submitted 10/01/12.
R1.6	N/A					N/A	
Licensee must retain copy of Annual Return							
R1.7	The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due.	✓			Procedure 2718 - Permits and Licences.	Compliant	Kept by the Regulatory Affairs Coordinator with EPL records.
Certifying of Statement of Compliance and Signing of Monitoring and Complaints Summary							



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
R1.8	Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed: (a) by the licence holder; or (b) by a person approved in writing by the EPA to sign on behalf of the licence holder.	✓				Compliant	Statement of compliance signed by two company directors.
R1.9	A person who has been given written approval to certify a certificate of compliance under a licence issued under the Pollution Control Act 1970 is taken to be approved for the purpose of this condition until the date of first review of this licence.	✓				Noted	
R2	Notification of environmental harm						
Note:	The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.	✓			Procedure 3114 - Incident & Near Miss Reporting.	Noted	No such incidents occurred during the reporting period.
R2.1	Notifications must be made by telephoning the EPA's Pollution Line service on 131 555.	✓			Procedure 3114 - Incident & Near Miss Reporting.	Noted	
R2.2	The licensee must provide written details of the notification to the EPA within seven days of the date on which the incident occurred.	✓			Procedure 3114 - Incident & Near Miss Reporting.	Noted	
R3	Written report						
R3.1	Where an authorised officer of the EPA suspects on reasonable grounds that: Where this licence applies to premises, an event has occurred at the premises; and The event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises), the officer may request a written report.	✓				Noted	



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
R3.2	The licensee must make all reasonable inquiries in relation to the event (in R3.1) and supply the report to the EPA within such time as may be specified in the request.	✓			Procedure 3114 - Incident & Near Miss Reporting.	Noted	
R3.3	The request may require a report which includes: (a) the cause, time and duration of the event; (b) the type, volume and concentration of pollutant discharged; (c) the name, address and telephone number of employees who witnessed the event; (d) the name, address and telephone number of every other person who witnessed the event; (e) action taken by the licensee including any follow-up contact with any complainants; and (f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence.	✓			Procedure 3114 - Incident & Near Miss Reporting.	Noted	
R3.4	The EPA may make a written request for further details in relation to any of the above matters if not satisfied with the report provided by the licensee. The licensee must provide such further details within the time specified in the request.	✓				Noted	
GENERAL CONDITIONS							
G1	Copy of licence kept at the premises						
G1.1	A copy of this licence must be kept at the premises to which it applies.	✓			Procedure 2718 - Permits and Licences.	Compliant	A copy is kept at the premises by the Regulatory Affairs Coordinator & is available for inspection on request or via the company website.
G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	✓			Procedure 2718 - Permits and Licences.	Noted	
G1.3	The licence must be available for inspection by any employee or agent of the licensee at the premises.	✓			Procedure 2718 - Permits and Licences.	Compliant	
Pollution Studies and Reduction Programs							
U1	N/A					N/A	



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
Special Conditions							
E1	Construction Activities						
E1.1	Noise from the construction of the plant must not exceed the sound pressure level (noise) limits. Note the limits represent the sound pressure level (noise) contribution, at the nominated receiver locations.		✓		Construction Noise Management Plan (CEMP).	Compliant	Construction Noise Audit Report (Acoustic Dynamics, Sept 2008).
E1.2	All construction activities, including transportation of fill and spoil, must be restricted to the hours of 7am to 6pm Monday to Friday, 8am to 1pm Saturday and at no time on Sundays and public holidays.		✓		Construction Noise Management Plan (CEMP).	Compliant	
E1.3	Works outside these hours may include: - works which do not cause noise emissions to be audible at any residential property; or - delivery of materials required outside these hours for safety reasons; or - emergency work; or - other work as agreed by the Department.		✓			Noted	
E2	Noise compliance monitoring						
E2.2	After the commencement of all operations at the premises, the licensee must submit a noise compliance assessment report to the DEC's Manager Metro Illawarra, to demonstrate compliance with the limits specified in condition L6.1. The assessment must be prepared by a suitably qualified acoustical consultant.			✓	Noise Management Plan (OEMP); Procedure 3116 - Noise Management.	N/A	Not applicable to this reporting period.
E3	Acetic Acid Scrubber						
E3.1	The objective of this condition is to develop emission concentration limits to ensure that the premises can comply with Section 129 of the POEO Act 1997.	✓				N/A	Not applicable to this reporting period. The Acetic Acid Scrubber will be part of Stage 4 of the development.



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
E3.2	Prior to the commencement of construction of the plant, the licensee must submit a report to the EPA's Manager Illawarra, on the development of a site specific emission concentration limit for the acetic acid scrubber.		✓			N/A	Not applicable to this reporting period. The Acetic Acid Scrubber will be part of Stage 4 of the development, construction date TBA.
E3.3	Prior to the commencement of construction of the plant, the licensee must provide to the EPA's Manager Illawarra, the manufacturer's performance guarantees for the acetic acid scrubber, demonstrating that emissions will comply with the ground level concentration specified in the EPA's <i>Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW, August 2001</i> .		✓			N/A	Not applicable to this reporting period. The Acetic Acid Scrubber will be part of Stage 4 of the development, construction date TBA.



3 Community & Environmental Complaints

No community, environmental or pollution complaints were received during 2012 relating to the operation of the Minto facility.

Procedure 3022 – Problems & Complaints describes the method by which all problems, non-conformances, customer and community complaints would be recorded and actioned, including recording of pollution complaints in accordance with EPL 12041 Condition M4.

4 Environmental Impacts & Performance

Table 4.0: Environmental Impacts & Performance

Environmental Aspect (Operational Pathway)	Potential Environmental Impacts	Potential Risk of Impact	Duration of Potential Impact	Operational Procedure to prevent & control Impacts	Environmental Performance 2012
1. Transportation - Transport of goods to the site; - Delivery of goods to customers; and - Unloading/loading of trucks and shipping containers into transit storage areas.	Noise Emissions	Low	Intermittent	3109, 3116, 3412, 3715	Noise emissions effectively prevented and controlled. No complaints received regarding noise emissions.
	Air Emissions	Low	Intermittent	3109, 3412, 3715	Air emissions not required to be monitored. No complaints received regarding air emissions.
	Spillage of product(s) causing contamination of stormwater, soil or groundwater.	Low-Moderate	Infrequent	3022, 3109, 3114, 3412, 3702	No spillages of product during transportation causing contamination of stormwater, soil or groundwater.
	Operational Traffic Impacts	Moderate	Regular	3109, 3412, 3715	The system put in place to monitor that the routes utilised by heavy vehicles is working effectively and is substantially as it was when approved, its ongoing use is recommended". No complaints received regarding operational traffic impacts.
	Community Health	Low	Infrequent	3109, 3412	Community Health not required to be monitored. No Community Complaints received.
	Use of resources	Low-Moderate	Intermittent	3109	Use of resources not monitored with regards to the Transportation Pathway.
2. Storage & Handling - Movement of goods in and out of storage; and - Repackaging of	Spillage of goods	Low-Moderate	Infrequent	3022, 3109, 3401, 3402	No spillages of product during storage & handling causing contamination of stormwater.
	Spillage of goods causing contamination of soil/groundwater.	Low-Moderate	Infrequent	3022, 3109, 3401	No spillages of product during storage & handling causing contamination of soil or groundwater.



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Environmental Aspect (Operational Pathway)	Potential Environmental Impacts	Potential Risk of Impact	Duration of Potential Impact	Operational Procedure to prevent & control Impacts	Environmental Performance 2012
damaged goods and returned product.	Air Emissions – dust and particulate matter.	Low	Intermittent	3109, 3110	Air emissions of dust and particulate matter not required to be monitored. No complaints received regarding air emissions.
	Air Emissions - chemical reactions.	Moderate	Infrequent	3109	Air emissions caused by chemical reactions not monitored.
	Air Emissions from LPG forklifts.	Low	Constant	3109	Air emissions from LPG forklifts not monitored.
	Air Emissions from Greenhouse Gases.	Low- Moderate	Constant	3109	Greenhouse Gas emissions not required to be monitored.
	Operational Noise emissions.	Moderate	Intermittent	3022, 3109, 3116	Noise emissions effectively prevented and controlled. No complaints received regarding operational noise emissions.
	Waste – packaging (recyclable and non- recyclable).	Low	Intermittent	3109, 3401, 3402	Waste packaging not monitored with regards to storage and handling operations.
	Hazardous Waste – spillage and rejected products.	Moderate	Infrequent	3109, 3401, 3402	Refer 5.4 – In compliance with EPL (L5) waste conditions.
	Community Health	Low	Infrequent	3109, 3412	No community complaints received regarding community health impacts of storage & handling operations.
	Use of resources	Low- Moderate	Constant	3109	General use of resources not monitored for storage and handling operations.
3. Management & Administration	Waste – recyclable office waste	Low	Intermittent	3109, 3402	Paper/cardboard recycling only.
	Waste – non recyclable	Low	Intermittent	3109, 3402	Non-recyclable office waste not monitored.
	Waste – hazardous (samples)	Low	Infrequent	3109, 3402	As per hazardous waste – storage & handling above.
	Land & water pollution	Low- moderate	Intermittent	CEMP – Hazardous Materials Management Plan	No spillages of materials reported with potential for contamination of soil/ groundwater.
	Construction waste management	Low	Intermittent	CEMP – Construction Waste Management Plan	Not applicable to this report.



5 Environmental Monitoring

Aspect	Frequency	Process	Documentation	Procedure References	Responsibility
Noise Emissions	Within one month of commencement of construction activities associated with each stage of the development.	Construction Noise Audit	Construction Noise Audit report.	Procedure 3116.	Independent auditor
	Within 90 days of commencement of operation of each stage of development.	Operational Noise Audit	Operational Noise Audit Report	Procedure 3116	Independent auditor
Traffic Impacts	Monthly, four vehicles per period.	Random spot checks on routes taken.	Form 21085; QP records & Corrective Action Requests.	Procedure 3022 and 3715.	Redox Transport Coordinator
	Within 90 days of commissioning each stage of the development.	Independent Transport Audit	Independent Transport Audit report	Procedure 3715.	Independent auditor
Storm water Quality	Weekly & prior to discharge.	Visual and parameter analysis.	Form 2190 – Water Quality Inspection Form	Procedure 3405.	Redox Chemist
	Quarterly and following chemical contamination.	Parameter analysis	Parameter Analysis Report	Procedure 3405.	NATA Approved Laboratory
Waste	Continual	Continual log of waste generation.	Form 21152, 21157 and WasteLog.	Procedure 3402.	Redox Regulatory Affairs Coordinator
Incident/Near Miss Reporting	Continual	Record details of all incidents/near misses.	Form 21139 & 21140.	Procedure 3114 and 3401.	Redox Site Environmental Officer
Air emissions – dust and particulate matter	Daily	Regular sweeping. Weekly Inspection.	Form 21110 – Sydney Warehouse Inspection.	Procedure 3110 and 3521.	Redox Store Manager
Community Complaints	Continual.	Record details of all complaints received.	Complaints Register.	Procedure 3022 and 3412.	Redox Regulatory Affairs Coordinator
Environmental Management System	Annual reporting & triennial independent auditing.	Independent environmental audit.	Environmental Audit Report.	Procedure 2718.	Independent auditor
		Environmental performance review.	AEMR – Annual Environmental Management Report.	Procedure 2718.	Redox Regulatory Affairs Coordinator

5.1 Transport Monitoring & Auditing

5.1.1 Independent Transport Auditing

No independent transport auditing was conducted during 2012.

5.1.2 Monitoring Heavy Vehicle Routes/Requirements

Table 5.1.2: Heavy Vehicle Routes/Requirements: Non-Conformance Details

Date	Time	Carrier/ Customer Name	Vehicle Rego #	Route Travelled	Non- Conformance Details	QP Ref.	Corrective Action Summary
02/02/2012	9.20am	Border Express	WGP669	Travelled from Campbelltown road then left into Ben Lenard Road and right into Holmes Road	Incorrect route	QP56598	Drive was also given location map and transport routes.
15/08/2012	2.35pm	Careys	YOV999	Turned left onto Campbelltown Road passed front office.	Incorrect route	QP61010	Drive was also given location map and transport routes.
10/12/2012	9.50am	Dumens	054997	Left Ben Lenard road then left onto Campbelltown and passed the main office	Incorrect route	QP63260	Drive was also given location map and transport routes. Driver was given "Non- conformance" document which outlines the problem and then completed section titled "proposed Corrective Action."
10/12/2012	2.00pm	Pace	BQ96FO	Pace driver left site and went along Campbelltown Road in front of Main Office	Incorrect route	QP63262	Drive was also given location map and transport routes. Driver was given "Non- conformance" document which outlines the problem and then completed section titled "proposed Corrective Action."
31/12/2012	8.40am	Coastal	CTS033	Coastal driver left site and went along Campbelltown Road in front of Main Office onto Raby Road then	Incorrect route	QP63572	Drive was also given location map and transport routes. Driver was given "Non- conformance" document which outlines the



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				onto the freeway heading North			problem and then completed section titled "proposed Corrective Action."

Discussion of Results:

26 Heavy vehicles were randomly audited during 2012 for compliance with Redox Procedure 3715 - NSW Heavy Vehicle Routes/Requirements. Five (5) out of twenty six (26) vehicles monitored were found to travel by the incorrect route.

30 Heavy vehicles were randomly audited during 2011 for compliance with Redox Procedure 3715 - NSW Heavy Vehicle Routes/Requirements. All vehicles monitored were found to travel by the correct route.

In 2010, five of 26 (19%) heavy vehicles randomly audited were found to breach the requirements.

In 2009, four of 37 heavy vehicles randomly audited (10.8%) were found to breach the routes/requirements.

In 2008, three of 29 heavy vehicles randomly audited (10.3%) were found to breach the routes/requirements.



5.2 Noise Monitoring & Auditing

5.2.1 Construction Noise Auditing

No construction noise auditing was required during this reporting period.

5.2.2 Operational Noise Auditing

No operational noise auditing was required during this reporting period.



5.3 Stormwater Quality Monitoring

A three tiered monitoring program tests stormwater quality prior to release from the retention pits on site, including weekly internal analysis prior to discharge, quarterly external analysis, and external analysis in the event of a chemical spill.

Acceptable values for each parameter are taken to be those of:

- the *Clean Waters Regulations 1972*, Section 8 – Class R: Restricted Waters;
- Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000* – “Default trigger values for physical and chemical stressors for south-east Australia”, for slightly disturbed ecosystems; and
- Baseline Contamination Assessment for Redox Chemicals Facility Swettenham Road, Minto* (Environmental Audits of Australia, January 2003).

5.3.1 Internal Stormwater Analysis

Table 5.3.1: Results of Internal Stormwater Analysis

Date	Sample	Colour	Clarity			Odour		pH	Temp.	Specific Gravity	Dissolved oxygen	Suspended Solids	Turbidity	Pass/Fail	Tested by:
			SS visible?	Foam?	Visible Film?	Smell?	Oil/Petrol Smell?								
	LIMIT	Clear	No	No	No	No	No	6.5-8.5	15-35°C	0.99-1.01	Min. 6.5 mg/L	Max. 50 mg/L	Max. 50 NTU	Pass	Name
01/02/2012	BLANK	Clear	No	No	No	No	No	8.33	21.5	1.00	8.2	31.5	0.17	Pass	MichaelS
	PIT 1	Clear	No	No	No	No	No	8.23	21.5	1.00	7.3	31	13.12	Pass	MichaelS
	PIT 2	Brown	No	No	No	No	No	7.87	21.5	1.00	9.3	115	56.8	Pass	MichaelS
	PIT 3	Brown	No	No	No	No	No	7.76	21.5	1.00	8.6	78	65.5	Pass	MichaelS
March	Insufficient rainfall														
April	Insufficient rainfall														
May	Insufficient rainfall														
05/06/2012	BLANK	Clear	No	No	No	No	No	8.33	21	1.00	8.2	5	0.17	Pass	MichaelS



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	PIT 1	Turbid Brown	No	No	No	No	No	7.88	13	1.002	7.7	148	55.3	Pass	MichaelS
	PIT 2	Turbid brown	No	No	No	No	No	7.83	13	1.002	10	64	39.2	Pass	MichaelS
	PIT 3	Clear	No	No	No	No	No	7.68	13	1.002	10.7	41	23.4	Pass	MichaelS



Discussion of Results for Internal Stormwater Analysis

<u>Analyte</u>	<u>Results</u>
Colour	Sample colour was clear or turbid brown for all samples taken during 2012.
Clarity	-
Suspended Solids	Large suspended solids found in for pits 2 and 3 for samples conducted in February 2012 and also in samples conducted in June 2012 in pits 1 and 2.
Foam	On no occasion during 2012 that foam present in stormwater samples.
Visible Film	On no occasion during 2012 that visible film present in samples.
Odour - Smell	On no occasion during 2012 that odour/smell was detected.
Odour - Oil/Petrol	On no occasion during 2012 that odour of oil/petrol detected.
pH	All pH results fell within the acceptable range of 6.5-8.5 throughout 2012. The minimum pH recorded during 2012 was 7.68 and the maximum value was 8.33.
Temperature	Temperature results mostly fell within the 15-35 °C range throughout 2012. Temperature levels at 13 °C in all three pits were record in June due to cold weather.
Specific Gravity	Specific Gravity was recorded as 1.00 within the required range (0.99-1.01) for all samples during 2012.
Dissolved Oxygen	All results fell above the required minimum of 6.5 mg/L of dissolved oxygen.
Suspended Solids	Despite large suspended solids were detected in some results that were above the maximum level of 50 mg/L. These samples still passed the test results due to no trace of chemical contamination in the water samples.
Turbidity	Few of the results were well above the maximum value for turbidity of 50 NTU. This is due to soil leaching into the pipes.
Pass/Fail	All samples passed internal stormwater analysis during 2012 despite few samples being higher than the max values for suspended solids and turbidity. The pass was based on the fact that no traces of chemicals were found in any of the samples.



5.3.2 External Stormwater Analysis

N/A

5.3.3 External Stormwater Analysis (Chemical Spill)

N/A



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5.4 Waste Management

Table 5.4: WasteLog 2012 - NSW

QP	Product Code	Product Name	DG Class	Form	Waste Code	Tracking	Qty	DISPOSAL COMPANY	CAN	TC No.	SPO	Despatch Date	Disposal Method
44375	WHIOIL96	WHITE OIL		L	J100		1000 kg	SOLVECO	2C0052035	2T0037264	1930401	16/08/12	chemical/physical treatment
44375	WHIOIL96	WHITE OIL		L	J100		1000 kg	SOLVECO	2C0052035	2T00382957	1982049	19/09/12	chemical/physical treatment
44375	WHIOIL96	WHITE OIL		L	J100		1847 kg	SOLVECO	2C0052035	2T00357991	1898051	24/06/12	chemical/physical treatment
44375	WHIOIL96	WHITE OIL		L	J100		2000 kg	SOLVECO	2C0052035	2T00338184	36113	04/01/12	dispose
							5,847kg						
	CHEDIS1000	VARIOUS	N/A	S			8040 kg	SITA			1934270	22/08/12	Chemical/physical treatment
	CHEDIS1000	VARIOUS	N/A	S			5640kg	SITA			1934883	23/08/12	Chemical/physical treatment
	CHEDIS1000	VARIOUS	N/A	S			20,000kg	SITA			1902414	03/07/2012	dispose
	CHEDIS1000	VARIOUS	N/A	S			20,000kg	SITA			1902414	12/07/2012	dispose
							53,680kkg						
56396	CHEDIS1000	SODIUM LAURYL ETHYL SULPHATE		L	M250		615kg	TRANSPACIF	2C00060524	2T000359789	1904891	03/07/12	chemical/physical treatment
56396	CHEDIS1000	MONOECHANOLAMINE		L	C100		1000kg	TRANSPACIF	2C00059764	2T000359786	1904891	03/07/12	chemical/physical treatment
56396	CHEDIS1000	WASTE RESIDUE	N/A	S	N100		205 kg	TRANSPACIF	2C00059880	2T000359788	1904891	03/07/12	chemical/physical treatment
		Tractable waste	7,667 kg										
		Non- DG liquid waste	7,462kg										
		Non-DG Solid waste	53,885kg										



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5.5 Independent Environmental Auditing

No environmental auditing was required during this reporting period.



6 Environmental Performance

Table 6.0 presents a list of all occasions in the preceding 12-month period when environmental performance goals for the development have not been achieved, indicating the reasons for failure to meet the goals, and the actions taken to prevent recurrence of that type of incident.

Table 6.0: Environmental Performance – Quality Problem Record

QP	Performance goal not achieved	Reason	Action	Status
Transport Management				
Nil				
Noise Monitoring & Auditing				
Nil				
Stormwater & Dust Management				
QP 36632	Procedure 3405 – Problem with leaking valves on stormwater retention pits.	Pits are retaining water (although not to the extent they should be) but the valves appear to be leaking. A damaged pipe has been discovered, which could account for the turbidity in some of the samples.	The pipes are due to be cleaned and repaired in the new year, after which time the valves will be cleaned and, if necessary, replaced and all drains fitted with nets to stop any foreign material from entering.	Pending
Landscape Management				
Nil				
Waste Management				
Nil				
Environmental Reporting				
Nil				

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Redox Pty Ltd



**2 Swettenham Road
Minto NSW 2566**

Prepared by: Redox Pty Ltd

Trami Tran (Regulatory Affairs Coordinator)
Authorised by Malcolm Perrins (Director)

December 2013



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Executive Summary

This Annual Environmental Management Report (AEMR) has been prepared by Redox Pty Ltd (Redox) to review the performance of the development at 2 Swettenham Road, Minto NSW against the Operational Environmental Management Plan (OEMP) and Construction Environmental Management Plan (CEMP), the conditions of consent, Environmental Protection Licence 12041 and Environmental Legislation pertaining to the site, during the period January to December 2013.

The AEMR is intended to meet the requirements of the NSW Department of Planning, under development consent condition 8.3 – Annual Performance Reporting.

Site environmental management procedures and monitoring systems are in place for noise, transport, stormwater, waste, landscape, dust and odour control, community communication and incident reporting, as per the Operational Environmental Management Plans.

Ultimate responsibility for site environmental performance rests with the Managing Director. Day-to-day environmental management is the combined responsibility of the Regulatory Affairs Coordinator and the Store Manager.

No community, environmental or pollution complaints were received during 2013 related to the Minto facility operations.



1 Introduction

This Annual Environmental Management Report (AEMR) has been prepared by Redox Pty Ltd (Redox) to review the performance of the development at 2 Swettenham Road, Minto NSW against the Operational Environmental Management Plan (OEMP), the conditions of consent, Environmental Protection Licence 12041 and Environmental Legislation pertaining to the site, during the period January to December 2013.

The AEMR is intended to meet the requirements of the NSW Department of Planning, under development consent condition 8.3 – Annual Performance Reporting.

Condition 8.3 requires that Redox, throughout the life of the development, prepare and submit for the approval of the Director-General, and Annual Environmental Management Report (AEMR). The AEMR shall review the performance of the development against the Operational Environmental Management Plan, the conditions of consent and other licences and approvals relating to the development. The AEMR shall include, but not necessarily be limited to:

- (a) Details of compliance with the conditions of consent;
- (b) A copy of the Complaints Register for the preceding twelve-month period, and details of how these complaints were addressed and resolved;
- (c) A comparison of the environmental impacts and performance of the development against the environmental impacts and performance predicted in those documents listed under Condition 1.2 of consent;
- (d) Results of all environmental monitoring required under this consent and other approvals, including interpretations and discussion by a suitably qualified person; and
- (e) A list of all occasions in the preceding twelve-month period when environmental performance goals for the development have not been achieved, indicating the reason for failure to meet the goals and the action taken to prevent recurrence of that type of incident.

Redox shall submit a copy of the AEMR to the Director-General every year.

The Director-General may require Redox to address certain matters in relation to the environmental performance of the development in response to review of the Annual Environmental Management Report. Any action required to be undertaken shall be completed within such period as the Director-General may require.

1.1 Site & Operational Overview

Redox is an importer and distributor of close to 1,000 different organic and inorganic chemicals and raw materials. Used in more than 140 different industries, including Agriculture, Detergent, Food & Beverage, Mining & Metal, Surface Coating and Chemical Manufacture, these products are supplied to all areas of industry throughout Australia and New Zealand.

Redox operates five sites in Australia and three in New Zealand. The Head Office site in Minto (this site) is the base for the company's Marketing and Administration functions for its Australian and New Zealand operations. This site consists of two office/Administration buildings and five warehouses for the storage of both dangerous and non-dangerous goods.

The 5.984ha Redox owned site is located within the Minto Industrial Estate and is surrounded predominantly by light industrial and commercial operations to the west, north and south. Bow Bowing Canal forms the eastern boundary to the site. The nearest sensitive land use is the New Generation Child Care Centre, situated on the site's northern boundary. The nearest residential properties are situated on the opposite side of Campbelltown Road.



Figure 1.1: Aerial view, Redox Minto Facility.



The Minto facility, operational since 5 December 2005, was officially opened on 26 April 2006. The construction of Stage 3 of the development, a 2935m² non-dangerous goods store, commenced August 2008 and was completed February 2009. The new store was occupied from 27 February 2009.

Operational and construction site environmental management procedures are in place for noise, transport, stormwater, waste, landscape, dust and odour control, community communication and incident reporting. Ultimate responsibility for site environmental performance rests with the Managing Director; day-to-day environmental management is the combined responsibility of the Regulatory Affairs Coordinator and the Store Manager.

1.2 Operational Environmental Management Plan

Prior to commencement of operations on the site, an Operational Environmental Management Plan (OEMP) was prepared by Redox, and approved by the Director-General of the Department of Infrastructure, Planning and Natural Resources (DIPNR). This OEMP details the environmental management framework, practices and procedures to be followed during the operation of the development. The OEMP includes:

- (a) Identification of all statutory and other obligations that Redox is required to fulfil in relation to operation of the development, including all consents, licences, approvals and consultations;
- (b) A description of the roles and responsibilities for all relevant employees involved in the operation of the development;
- (c) Overall environmental policies and principles to be applied to the operation of the development;
- (d) Standards and performance measures to be applied to the development, and a means by which environmental performance can be periodically reviewed and improved;
- (e) Management policies to ensure that environmental performance goals are met and to comply with the conditions of consent;
- (f) The listed Management Plans:
 - (i) Noise Management Plan;
 - (ii) Transport Management Plan;
 - (iii) Stormwater Management Plan;
 - (iv) Waste Management Plan;
 - (v) Landscape Management Plan; and
- (g) The environmental monitoring requirements outlined in the conditions of consent.



1.3 Development Consent Conditions

The Minister for Infrastructure and Planning, the Hon Craig Knowles MP, determined to approve the Chemical Storage and Distribution Facility, Lot 171 Swettenham Road, Minto, Campbelltown LGA (DA No: 367-11-2002-i) on 16 September 2003, subject to Development Consent Conditions.

The reason for the imposition of conditions is to:

- (a) Minimise any adverse environmental impacts associated with the development;
- (b) Ensure effective on-going environmental and safety management and monitoring;
- (c) Minimise potential safety impacts associated with the development; and
- (d) Implement the recommendations of the Commission of Inquiry into all environmental aspects of the development.

1.4 Environmental Protection Licence

Environmental Protection Licence 12041 authorises Redox to carry out Chemical Storage and Waste Activities at 2 Swettenham Road, Minto.

General obligations of the licensee under this licence, and as set out in the *Protection of the Environment Operations Act 1997* and the Regulations made under the Act, include to:

- (a) Ensure persons associated with Redox comply with this Licence,
- (b) Control the pollution of waters and the pollution of air, and
- (c) Report incidents causing or threatening material environmental harm.



2 Details of Compliance

On 4 November 2013, ENVIRON Australia Ltd (ENVIRON) and Moore Management were engaged by Redox Pty Ltd (Redox) to conduct an Independent Environmental Audit and Hazard Audit of the Redox Chemical Storage and Distribution Centre at 2 Swettenham Road, Minto, New South Wales (NSW) 2566.

The Audits are required to be undertaken every three years pursuant to Conditions 5.12 and 5.13 of the Project Consent, issued by the (now) NSW Department of Planning and Industry (DP&I).

2.1 Compliance with Development Consent Conditions

Table 2.1: Compliance with Development Consent Conditions

Table 2.1 is intended to address the findings and the recommendations issued by the abovementioned independent Hazard and Environmental Auditors.

Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
1	GENERAL					
Obligation to Minimise Harm to the Environment						
1.1	Redox shall implement all practicable measures to prevent or minimise any harm to the environment that may result from the construction, commissioning, operation ... of the development.	✓			Compliant	ENVIRON observations and interviews with site representatives demonstrated that the existing environmental management system and processes are considered to address the consent condition requirements. Procedures for managing environmental issues have been prepared as noted in Redox's list of site procedures. During ENVIRON's site walk over evidence of the implementation of some of the procedures was observed. The environmental management of the facility is considered appropriate to minimise potential impacts on the environment.



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
Scope of Development						
1.2	The Applicant shall carry out the development generally in accordance with requirements a) to s). Note, due to the large number of requirements these have not been replicated here. Refer to Appendix A for the full list of requirements.	✓			Compliant	Noted. Facility personnel advised that facility operations are conducted in accordance with the consent conditions and the requirements of this condition. ENVIRON reviewed a selection of the documents listed in this condition and notes that these documents provide additional information in response to regulatory agency enquiries of the EIS or associated studies. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audits undertaken in 2006 and 2010.
1.3	In the event of any inconsistency between the conditions of consent and/or any scope document(s), the conditions of consent and/or the most recent document shall prevail to the extent of the inconsistency.	✓			Noted	N/A
Provision of Documents						
1.4	Where practicable, the Applicant shall provide all documents and reports required to be submitted to the Director-General under this consent in an appropriate electronic format. Provision of documents and reports to other parties, as required under this consent, shall be in a format acceptable to those parties and shall	✓			Compliant	Noted.
1.5	Nothing in this consent prevents Redox from combining reporting requirements under this consent with reporting requirements for submission to another relevant party.	✓			Compliant	Noted.



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
Statutory Requirements						
1.6	The Applicant shall ensure all licences, permits & approvals are obtained and kept up-to-date as required throughout the life of the development. No condition of this consent removes the obligation for the Applicant to obtain, renew or comply with such licences, permits or approvals.	✓			Compliant	Facility personnel reported that a list of all environmental licences, permits and approvals required to be kept by the site, amongst other matters and tasks, is maintained by the Regulatory Affairs Coordinator. This list is reviewed on a monthly basis by the Regulatory Affairs Coordinator to ensure licences/ permits are renewed prior to their expiry date. Redox is a member of the Plastics and Chemicals Industries Association (PACIA) and receives industry bulletins on regulatory matters relevant to their business, as well as attending PACIA meetings to keep up to date on industry matters. Redox also has a subscription to WorkCover NSW to receive news bulletins on dangerous goods. It should be noted that at the time of the audit, the Notification of Dangerous Goods on Premises with NSW WorkCover had expired and was in the process of being renewed by NSW WorkCover.
1.7	In the event that a dispute arises between the Applicant and Council or a public authority, other than the Department, in relation to a specification or requirement under this consent, the matter shall be referred by either party to the Director-General, or if not resolved to the Minister, whose determination shall be final and binding on all parties.	✓			Noted	So noted. Facility personnel advised that there have not been any prior disputes in relation to the consent that have required referral to the Director-General.
2	COMPLIANCE					



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
2.1	Redox shall ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.	✓			Compliant	Redox has prepared a number of procedures to assist with complying with the conditions of the consent. Personnel are provided with either formal or on-the-job training in these procedures and other environmental management matters and have access to all Redox procedures through the company's intranet system. Internal audits are undertaken at the facility, mostly on an annual basis, that cover off various processes, procedures and departmental activities. In particular, internal audit of the Warehouse, Transport and Distribution operations and procedures related to environmental management was completed in February 2013. A number of non-compliances were noted in relation to document management and display of traffic signage which have reportedly been corrected and closed out. Training of contractors and subcontractors, to ensure compliance and awareness of relevant Redox procedures, is undertaken either by Redox personnel during contractor induction or the recruitment agency (e.g. Redox provides the agency with a contractors induction pack for delivery to contract staff). Specific training is provided to employees and/or contractors on hazard identification, environmental awareness, and dangerous goods. Records are kept for employee and contractor/ sub-contractor training.



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
						It is noted that Redox is currently updating their training matrix to include detail on job specific training including refresher training requirements. It is recommended that the training procedure include a system to notify when refresher training is required for employees and contractors.
2.2	Redox shall be responsible for environmental impacts resulting from the actions of all persons on site, including contractors, subcontractors and visitors.	✓			Compliant	Noted.
2.3	Prior to each of the events listed below, Redox shall certify in writing to the satisfaction of the Director-General that it has complied with all conditions of this consent applicable prior to that event.				Compliant	Facility personnel advised that the Director-General was notified in writing of the site's compliance with the relevant consent conditions prior to each of the events a) to c) for Stages 1, 2 and 3. No further enquiries were made as this condition is not applicable to this audit. Note: Stage 4 has not yet been constructed.
	(a) commencement of any physical works on the land subject to this consent; (b) commencement of construction of stages 1, 2, 3 and 4 of the development; and (c) commencement of operation of stages 1, 2, 3, and 4 of the development.		✓ ✓	✓		
2.4	Notwithstanding condition 2.3 of this consent, the Director-General may require an update report on compliance with all, or any part of the conditions of this consent.	✓			N/A	Noted.
2.5	The Applicant shall meet the requirements of the Director-General in respect of the implementation of any measure necessary to ensure compliance with the conditions of this consent, and general consistency with the documents listed in Condition 1.2. The Director-General may direct that such a measure be implemented in response to the information contained within any report, plan,	✓			N/A	Noted. Facility personnel advised that to date there has been no additional Director-General requirements as outlined in condition 2.5.



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
	correspondence or other document submitted in accordance with the conditions of this consent, within such time as the Director-General may require.					
3.1	In relation to the construction and occupation of the development, Redox shall provide the Director-General and Council with the following: (a) written notification of a Principal Certifying Authority; (b) copies of all construction certificates issued; (c) written notification of the intention to commence construction; (d) copies of all occupation certificates; (e) written notification of the intention to occupy.		✓ ✓ ✓	✓ ✓	Noted	The last stage of construction occurred in 2008 and it is assumed compliance with this condition was confirmed by the previous Independent Environmental Audits undertaken in 2006 and 2010.
3.2	Prior to the commencement of any construction associated with the development, Redox shall erect at least one sign at the construction site. The sign shall be maintained for the duration of construction works, and shall be removed as soon as practicable after the conclusion of construction works.		✓		N/A	The last stage of construction occurred in 2008 and it is assumed compliance with this condition was confirmed by the previous Independent Environmental Audits undertaken in 2006 and 2010.
4	ENVIRONMENTAL PERFORMANCE					
Hazards and Risk Impacts						
4.1	For each of the dangerous goods classes and materials listed in the table below, the Applicant shall not permit the materials listed as “prohibited” to be received, stored, or handled on the site. To avoid any doubt the Applicant shall only permit the materials listed as “permitted” to be received, stored or handled on the site. This condition does not apply to those materials that may be associated with office, laboratory, construction, maintenance or vehicular/ equipment components (including forklifts) of the			✓	Non-compliant, however error has been corrected. Refer to Action table 2.3.	Facility personnel advised that the company’s Redebiz business operating system is used to track the types and quantities of dangerous goods and non-dangerous goods stored at the site. The Redebiz system has the capability to restrict particular types of materials from being ordered and limit the quantities of materials ordered. Redebiz has been programmed to prevent



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Consent Condition	Compliance Requirements	Requirement			Status	Findings																																
		General	Construction	Operation																																		
	development, and are not purchased and sold as part of the principal commercial operations of the development. <table><tr><th>DG Class</th><th>Prohibited</th><th>Permitted</th></tr><tr><td>Class 1</td><td>All</td><td>None</td></tr><tr><td>Class 2</td><td>All</td><td>None</td></tr><tr><td>Class 3</td><td>PG I Subclass 6.1</td><td>PG II & III (unless otherwise prohibited)</td></tr><tr><td>Class 4</td><td>All</td><td>None</td></tr><tr><td>Class 5</td><td>All except those listed as permitted</td><td>Solids of Class 5.1, PG III</td></tr><tr><td>Class 6</td><td>Subclass 3 All Class 6.2</td><td>All Class 6.1 (unless other, but not Class 6.1 with subclass 3)</td></tr><tr><td>Class 7</td><td>All</td><td>None</td></tr><tr><td>Class 8</td><td>None</td><td>All</td></tr><tr><td>Class 9</td><td>None</td><td>All</td></tr><tr><td>Non-DG</td><td>None</td><td>All</td></tr></table>	DG Class	Prohibited	Permitted	Class 1	All	None	Class 2	All	None	Class 3	PG I Subclass 6.1	PG II & III (unless otherwise prohibited)	Class 4	All	None	Class 5	All except those listed as permitted	Solids of Class 5.1, PG III	Class 6	Subclass 3 All Class 6.2	All Class 6.1 (unless other, but not Class 6.1 with subclass 3)	Class 7	All	None	Class 8	None	All	Class 9	None	All	Non-DG	None	All				those dangerous goods listed in condition 4.1 as prohibited from being present. ENVIRON was provided a copy of the Stock Manifest of dangerous and non-dangerous goods for 1 November 2013. A review of the list noted that for that particular day, the following non-compliances to this condition were identified: - Class 3 Packaging Group I (“Diethyl Ether, Traded”) was stored in Building B1; - A variety of Class 4.1 and Class 5.1 materials were stored either in the laboratory or office. These materials were all noted to be laboratory samples and therefore are not considered non-compliances under this condition. Facility personnel noted that a computer programming error allowed the prohibited Class 3 PGI material to be ordered. This program error has now been resolved and should not occur again. The prohibited material has since been transferred off-site. Whilst this is noted as a non-compliance, Redox has already corrected the non-compliance. It is recommended that Redox include a review of the materials tracking system as part of the internal audit program to ensure that compliance with this condition is maintained.
DG Class	Prohibited	Permitted																																				
Class 1	All	None																																				
Class 2	All	None																																				
Class 3	PG I Subclass 6.1	PG II & III (unless otherwise prohibited)																																				
Class 4	All	None																																				
Class 5	All except those listed as permitted	Solids of Class 5.1, PG III																																				
Class 6	Subclass 3 All Class 6.2	All Class 6.1 (unless other, but not Class 6.1 with subclass 3)																																				
Class 7	All	None																																				
Class 8	None	All																																				
Class 9	None	All																																				
Non-DG	None	All																																				
4.2	Redox shall only permit non-dangerous goods, and dangerous goods of class 8 to be stored or handled in bulk on the site.			✓	Compliant	Facility personnel advised that this condition is noted and that currently no bulk non-dangerous goods or dangerous goods of Class 8 are																																



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
						stored at the site. ENVIRON reviewed the Stock Manifest for 1 November 2013 and did not identify any materials stored in bulk on the site, and no evidence of bulk storage was observed during the site walk over.
4.3	Prior to any dangerous goods being brought to the site, Redox shall demonstrate to the satisfaction of the Director-General that it has a system in place to track the quantities and locations of dangerous goods on the site at all times.			✓	N/A Refer to Action Plan table 5	ENVIRON sighted the company's Redebiz business operating system which is used to track the types, quantities and locations of dangerous goods and non-dangerous goods stored at the site. Facility personnel advised that the Redebiz system was demonstrated to NSW DP&I representatives during their visit on 15 August 2013 (as part of their follow-up after receipt of independent audit reports) and that they were satisfied with its capabilities. However, Redox does not have documented evidence to confirm this. In addition, ENVIRON was provided with correspondence, dated 7 September 2005, sent to the then Department of Infrastructure, Planning and Natural Resources advising them of the process used to track quantities and locations of dangerous goods at the site. This process was a paper based and computer based system used prior to the current Redebiz system. It is recommended that Redox obtain written confirmation from the Director-General that the department is satisfied with the current Redebiz system.



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
Bunding and Spill Management						
4.4	Redox shall ensure that all bunding installed at the development site is constructed strictly in accordance with: (a) all relevant Australian Standards; (b) a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; (c) the EPA's Environmental Protection Manual Technical Bulletin Bunding and Spill Management.		✓ ✓ ✓		Compliant	ENVIRON was advised that bunding was constructed per design requirements, developed in accordance with the requirements of this condition. During ENVIRON's site walk over, it was observed that warehouse areas were bunded to contain spills within the building and blind sumps/ drains were present within and at the entrance to the warehouse areas. The site perimeter was also bunded.
4.5	At least one month prior to the commencement of construction of the development ... Redox shall prepare and submit for the approval of the Director-General the studies set out below. (a) A Fire Safety Study (b) A Final Hazard Analysis (c) A Construction Safety Study		✓ ✓ ✓		N/A	The last stage of construction occurred in 2008 with the nature of operations remaining the same since that time. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010.
Pre-Commissioning Studies						
4.6	No later than two months prior to the commencement of commissioning of the development, Redox shall prepare and submit for the approval of the Director-General the studies set out below: (a) A Transport of Hazardous Materials Study for the development. (b) An Emergency Plan for the development. (c) A Safety management System.			✓ ✓ ✓	Compliant	Facility personnel advised that approval was received from the Director-General for all three study reports. ENVIRON was provided a copy of correspondence from the Department approving the study reports with the exception of the Safety Management System (SMS). The correspondence from the Department noted that comments on the SMS had been provided to Redox in August 2005. Further correspondence on whether these comments had been actioned and the SMS subsequently approved were not available to ENVIRON. However, ENVIRON considers that Redox would have addressed the



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
						Departments comments given Redox has previously demonstrated appropriate responses to agency requests. ENVIRON was provided a copy of: • The Transport of Hazardous Materials study by Dick Benbow & Associates, 29 June 2005, Revision 3; • The Emergency Management Plan by Redox, 3 July 2012, Version 4; • The Safety Management System, Procedure 3880, 4 December 2009, Version 3. ENVIRON's review of each of these studies/ plans indicate that have been prepared to substantially address the requirements of a) to c).
4.7	Prior to the commencement of construction, Redox shall submit to the Director-General a Security Management Plan for the development.		✓		N/A	The last stage of construction occurred in 2008 with the nature of operations remaining the same since that time. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010.
Traffic and Transport						
Community Enhancement Program						
4.8	Prior to the commencement of operation, or within such time as agreed by the Director-General, the Applicant shall negotiate an agreed outcome with Council for an appropriate level of contribution (financial or in-kind) and as applicable, towards mitigating any cumulative social and/or community impacts as a result of the proposed development.			✓	Compliant	Facility personnel advised that the only contribution Redox has made to Council associated with the development is for the construction of an off- or on-ramp to the M5 motorway. It is understood the contribution was negotiated between Department of Infrastructure, Planning and Natural Resources (now Department of Planning and



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
						Infrastructure) and Redox. There have been no other contributions made to Council in relation to this condition.
Site Access, Internal Roads and Parking						
4.9	The Applicant shall ensure all heavy vehicles access the site in a forward direction via the Holmes Road entrance and not via Swettenham Rd entrance. Not applicable during emergencies or as directed by relevant authority (including the police and emergency services).			✓	Compliant	Redox has implemented a Transport Management Plan to minimise amenity impacts on the locality from heavy vehicle accessing and leaving the site. The Plan has been prepared to meet the requirements of condition 7.5(b) and to ensure heavy vehicles access the site in a forward direction via the Holmes Road entrance and not Swettenham Road. Redox monitors the movement of heavy vehicles on a 4 audits per month schedule to confirm that vehicle movements follow the designated routes when transporting materials to and / or from Redox as outlined in their procedure for NSW Heavy Vehicle Requirements and as specified in the transporter agreement with the transport company. ENVIRON sighted a number of the vehicle movement audit forms for year 2013, and noted that of nine forms viewed, three were not compliant (i.e. had not followed the designated route) and thus were not entering the site via Holmes Road on the first attempt. Facility personnel advised that where vehicles are noncompliant with this requirement, a Problem Record is raised in the Redebiz system and a corrective action



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
						request issued to the driver/ transport company. ENVIRON viewed a non-compliance Problem Record in Redebiz to confirm the process. ENVIRON also observed during the site walk over that a one-way internal road system operates at the site so that all vehicles are only allowed to move in one direction. This is reinforced with painted arrows on the roads indicating the traffic direction.
4.10	The Applicant shall develop and implement, in consultation with Council, a road hierarchy for heavy vehicles travelling to and from the site, with the Holmes Rd, Ben Lomond Rd, Airds Rd, Rose Payten Drive, Campbelltown Rd, and M5 Motorway forming the principal route to and from the site. The Applicant shall submit details of the road hierarchy for the approval of the Director-General prior to commencement of operations on the site.			✓	Compliant	Facility personnel advised that a road hierarchy for heavy vehicles using the roads specified is in place and has been communicated to the transport companies. Redox provided to ENVIRON a copy of the Road Hierarchy for Heavy Vehicles (dated 9 February 2009, Revision 2) and correspondence from Department of Planning (dated 21 May 2009) confirming approval of the road hierarchy from the Director-General and Campbelltown City Council.
4.11	Prior to the commencement of operations, Redox shall submit for the Director-General's approval a Transport Code of Conduct for the development.			✓	N/A	The last stage of construction occurred in 2008 with the nature of operations remaining the same since that time. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010.
4.12	Prior to the commencement of any B-double transport to the site, Redox shall demonstrate to the satisfaction of the Director-General that the B-double reclassification of Holmes Road has been approved by the RTA in association with Council.			✓	N/A	The last stage of construction occurred in 2008 with the nature of operations remaining the same since that time. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audits undertaken in 2006 and/or 2010.



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
4.13	The use of landscaping shall not affect driver sight distance for vehicles entering and exiting the site.		✓		Compliant	During the site walk over, ENVIRON observed that landscaping did not affect driver sight distance during entry and exit of the site.
4.14	Redox shall design and construct all internal road works, including assoc. parking facilities and loading bays:				Compliant	Facility personnel advised that internal road works and parking infrastructure complies with RTA (now RMS) and Council standards and codes. A copy of the design engineers, Algorry Zappia & Associates Pty Ltd, Certificate was provided to confirm the internal driveway and parking area gradients and levels comply with AS2890.1 and AS2890.2.
	(a) In accordance with the relevant RTA and Council standards & codes, and Australian Standards including AS2890.1-1993 and AS2890.2-1989;		✓			
	(b) With clearly marked visitor, disabled, ambulance and service vehicle parking areas; and		✓			
	(c) With signage to demarcate all vehicle movements within the site.		✓			During the site walk over, ENVIRON observed that parking areas were clearly marked for visitor, disabled, ambulance and service vehicle use, and signage was in place to indicate vehicle movements and directions within the site.
Road Works						
4.15	The Applicant shall ensure that the deceleration lane at Swettenham Rd entrance is designed in accordance with Council's <i>Specification for Construction of Subdivisional Road and Drainage Works</i> and that the land is constructed to the satisfaction of Council. The Applicant shall submit detailed engineering plans of the deceleration lane for the approval of Council prior to the commencement of any construction activities associated with Stage 1 of the development.		✓		Compliant	Facility personnel indicated that the deceleration lane at the Swettenham Road entrance and the land was constructed to Council's satisfaction. The Certificate of Compliance issued by Algorry Zappia & Associates is understood to also apply to this condition. Correspondence from Council approving the deceleration lane was not available,
4.16	The Applicant shall ensure that a compensatory pedestrian footpath is designed and constructed to the satisfaction of Council. The footpath shall be within the site boundaries along the length of Swettenham Rd deceleration lane. This footpath shall		✓		N/A	The last stage of construction occurred in 2008. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audits undertaken in 2006 and/or 2010.



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
	be dedicated to Council as a Public Road prior to commencement of operations.					
Noise Impacts						
Construction Noise						
4.17	The Applicant shall ensure that all site preparation and construction activities associated with the development do not exceed the criteria at the nominated locations specified in Table 1. For the purpose of this condition, construction noise shall be determined at the locations under the conditions specified for operational noise, as provided in conditions 4.21 and 4.22 of this consent.		✓		Compliant	The last construction works undertaken at the site (for Stage 3) were completed at the end of 2008. Facility personnel advised that there were no non-compliance issues associated with construction noise limits during this time. ENVIRON reviewed the noise assessment report undertaken during Stage 3 construction works (Minto Storage and Distribution Centre, Stage 3 Construction Noise Audit, 29 September 2008 by Acoustic Dynamics Pty Ltd) which reported that predicted noise emission levels at nearby residential receivers were below the relevant noise criteria. In addition, ENVIRON was provided a copy of correspondence from the Department of Planning, dated 24 October 2008, that confirmed the Stage 3 Construction Noise Audit met the requirements of the consent condition 5.4 and construction noise was
4.18	The Applicant shall ensure that site preparation and construction activities associated with the development do not exceed 62 dB(A) _{(LAeq(15 minute))} at the New Generation Childcare Centre, 30 Swettenham Road, St Andrews, during normal operating hours and/or occupation of the Childcare Centre.		✓		Compliant	As previously mentioned, the last construction works undertaken at the site were for Stage 3 which was completed at the end of 2008. ENVIRON reviewed the noise assessment report undertaken during Stage 3 construction works (Minto Storage and Distribution Centre, Stage 3 Construction Noise Audit, 29 September 2008 by Acoustic



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
						Dynamics Pty Ltd) which reported that predicted noise emission levels at the New Generation Childcare Centre was below the relevant noise criteria. In addition, ENVIRON was provided a copy of correspondence from the Department of Planning, dated 24 October 2008, that confirmed the Stage 3 Construction Noise Audit met the requirements of the consent condition 5.4 and construction noise was below the required criteria.
4.19	The Applicant shall only undertake noisy site preparation works and noisy construction activities (including transportation of fill and spoil) associated with the development, between the following hours: a) 7:00 am to 6:00 pm Mondays to Fridays, inclusive; b) 8:00 am to 1:00 pm on Saturdays; and c) At no time on Sundays or public holidays.		✓		Compliant	Not applicable to this reporting period. The Construction Noise Management Plan details the permitted hours for noisy construction activities.
4.20	The hours of site preparation works and construction activities specified under condition 4.17 of this consent may be varied with the prior written approval of the Director-General. Any request to alter the hours of site preparation works or construction activities specified under condition 4.17 shall be: a) considered on a case-by-case basis; b) accompanied by details of the nature and need for activities to be conducted during the varied site preparation and construction hours; c) details of how potentially affected members of the community will be consulted and informed of the proposed varied site preparation and construction hours; and d) accompanied by written evidence of the EPA's agreement with the proposed variation in construction times, after providing any information necessary for		✓		N/A	So noted. However, there are currently no site preparation or construction works being undertaken, the last construction works being undertaken during 2008.



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	the EPA to reasonably determine that activities undertaken during the varied construction hours will not adversely impact on the acoustic amenity of receptors in the vicinity of the site.					
Operational Noise						
4.21	The Applicant shall design, construct, operate and maintain the development to ensure that the noise contributions from the development to the background acoustic environment do not exceed the maximum allowable noise contributions specified in Table 2, at those locations and during those periods indicated. The maximum allowable noise contributions apply under: a) Wind speeds up to 3ms ⁻¹ (measured at 10 metres above ground level); or b) Temperature inversion conditions up to 3°C per 100 metres and wind speeds up to 2 ms ⁻¹ (measured at 10 metres above ground level).	✓			Compliant	Facility personnel advised that the site has been constructed to design plans as approved by DP&I. ENVIRON was provided with the most recent noise assessment undertaken in May 2009 by Acoustic Dynamics (Minto Storage and Distribution Centre, Stage 3 Operational Noise Audit, 10 June 2009 by Acoustic Dynamics). The noise assessment was conducted after the construction of Stage 3, during normal operational times. The noise contributions from the development were measured to be below the maximum allowable noise contributions specified in Table 2.
Measurement of Noise Impacts						
4.22	Noise from the development shall be: a) Measured at the most affected point on or within the residential boundary to determine compliance with LAeq(15minute) noise limits; or b) Measured at 1 metre from the dwelling façade to determine compliance with LA1(1 minute) noise limits.	✓			Compliant	ENVIRON noted from the Stage 3 Operational Noise Report by Acoustic Dynamics, 10 June 2009, that noise contribution readings were taken at the locations specified by this condition.
Soil and Water Impacts						
4.23	Redox shall comply with section 120 of the <i>Protection of the Environment Operations Act 1997</i> , which prohibits the pollution of waters.	✓			Compliant	The Construction & Operational Environmental Management Plans detail measures to prevent the pollution of waters.
Soil, Contamination and Geotechnics						



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4.24	The Applicant shall ensure that all materials displaced during site preparation and construction works are stabilised or relocated and made secure so that these materials will not detrimentally affect any watercourse or riparian area.		✓		N/A	Not applicable to this reporting period. So noted. ENVIRON notes this condition is not applicable to the current operations and has been excluded from ENVIRON's scope of work.
4.25	Prior to the commencement of any site preparation or construction work, Redox shall submit for the approval of the Director-General, a geo-technical assessment of the site.		✓		N/A	Not required during this reporting period. So noted. ENVIRON notes this condition is not applicable to the current operations and has been excluded from ENVIRON's scope of work.
4.26	Prior to the commencement of any site preparation of construction work on the site, the Applicant shall submit for the approval of the Director-General, a contamination review of the site to confirm the presence, or otherwise of any contamination on the site, and to demonstrate that any contamination on the site is not inconsistent with the development. The contamination review shall be prepared by a suitably qualified person(s) and shall detail any additional measures that shall be implemented to address contamination, if identified, and if required.		✓		N/A	So noted. ENVIRON notes this condition is not applicable to the current operations and has been excluded from ENVIRON's scope of work.
4.27	Depending on the outcome of the investigations required by Condition 4.26, the Director-General may require Redox to prepare and implement a Soil Contamination Protocol.		✓		N/A	So noted. ENVIRON notes this condition is not applicable to the current operations and has been excluded from ENVIRON's scope of work.
Bow Bowling Canal and Riparian Zone						
4.28	The Applicant shall establish and maintain a riparian zone, consisting of local native plant species, in the area between the development and the watercourse within the property boundary. The zone shall be designed to ensure bed and bank stability of this		✓		Compliant	Facility personnel advised the riparian zone was established in early 2006 and planted with local native species. Maintenance of this area and other site landscaped areas is undertaken by Redox's Maintenance Officer



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	area, and to prevent any sedimentation and water quality impacts on Bow Bowling Canal resulting from the development. The riparian zone shall be designed and constructed to meet the requirements of the Department and shall be addressed as part of the Vegetation Construction Environmental Management Plan (condition 7.2(d) – should be 7.2(c)(v)).					under a landscape maintenance program which outlines the schedule for maintaining the landscaped areas in a tidy and healthy state.
4.29	The Applicant shall maintain the riparian zone, as required by condition 4.28, for a period of at least two years after final planting. Every six months during that period the Applicant shall submit to the satisfaction of the Department, a status detailing the progress of implementation of the Vegetation Construction Environmental Management Plan (condition 7.2d).			✓	Compliant	Facility personnel advised that a progress report was submitted to the Department every six months during the two year period after final planting of the riparian zone. ENVIRON was provided copies of the Vegetation Management Report – Progress/ Status Reports for two of the four reporting periods (August 2006 and February 2007) during the two year period and copies of correspondence from the Department of Planning confirming receipt of reports for three of the four reporting periods (including the final progress report). The Department of Planning correspondence indicated the progress reports were approved as satisfying the requirements of this condition.
4.30	The Applicant shall design and construct any stormwater outlet structure located within 40 metres of Bow Bowling Canal to ensure that the structure does not compromise the stability or function of the riparian zone. The design of any outlet structure within the riparian zone, including pipelines and spillways, shall be in accordance with the Departments guideline <i>Stormwater Outlet Structures to Streams</i> and shall be approved by the Director-General prior to the commencement of any construction works within the riparian zone. Amendment - The Applicant shall design and construct any stormwater outlet associated with the development for Bow Bowling Canal in accordance		✓		Compliant	Stormwater outlets from the site discharge directly into Bow Bowling Canal. There are no outlet structures discharging into the riparian zone. The Redox Operational Environmental Management Plan dated November 2011 (Revision 3) notes that there are two stormwater outlets draining to Bow Bowling Canal and that these were designed in accordance with Council's Standard Design Requirements SD88.



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	with Council's guideline Standard Design Requirements SD88 – Standard Main Channel Outlet Design.					
Waste Generation and Management						
4.31	The Applicant shall not receive waste at the site for storage, treatment, processing or reprocessing, and shall not dispose of waste generated by the development on the site, except as may be expressly permitted by an EP Licence for the development under the <i>Protection of the Environment Operations Act 1997</i> .			✓	Compliant	Facility personnel advised that wastes from off-site sources are not received, stored, treated, or processed at the site and any wastes generated by site activities are disposed of by waste contractors to off-site facilities. This was confirmed during ENVIRON's site walk around and through a review of selected waste disposal documentation.
4.32	Except as provided by any EP Licences issued for the development, the Applicant shall ensure that only the following hazardous &/or industrial and/or Group A waste listed below are generated &/or stored at the site: i) Acidic solutions or acids in solid form; ii) Basic solution or bases in solid form; iii) Non-toxic salts; iv) Zinc compounds; v) Waste oil/water, hydrocarbons/water mixtures or emulsions; vi) Containers that are contaminated with residues of substances referred to in the National Environment Protection (Movement of Controlled Wastes between States and Territories) Measure list of hazardous, industrial and liquid waste codes; vii) Surface active agents (surfactants), containing principally organic constituents and which may contain metals and inorganic materials; viii) Boron compounds; ix) Cadmium, cadmium compounds;			✓	Compliant	ENVIRON reviewed the waste log for 2011 and 2012 and noted that waste materials with waste codes E100, F110 and Z500 were generated and stored at the site during 2011. These waste types are not one of the permitted wastes specified in this condition. However, the condition does make reference to permitted waste types under the Environment Protection Licence. A review of the Environment Protection Licence confirmed that the site is licensed as a chemical storage waste generation activity permitting hazardous waste, restricted solid waste, liquid waste and combinations of these to be generated or stored in quantities between 5 to 100 tonnes a year. ENVIRON considers that the site is therefore in compliance with this condition. In addition, ENVIRON contacted the EPA to



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	x) Chromium compounds (hexavalent and trivalent); xi) Cobalt compounds; xii) Copper compounds; xiii) Ethers; xiv) Phenols, phenol compounds including chlorophenols; xv) Phosphorus compounds excluding mineral phosphates; xvi) Selenium, selenium compounds; xvii) Waste chemical substances arising from research and development or teaching activities including those which are not identified and/or new and whose effects on human health and/or the environment are not known; xviii) Fire debris and fire washwaters; xix) Halogenated organic solvents; xx) Inorganic fluorine compounds excluding calcium fluoride; xxi) Inorganic sulphides; xxii) Isocyanate compounds; xxiii) Lead, lead compounds; xxiv) Nickel compounds; xxv) Organic phosphorous compounds;					confirm the waste description for Z500 is no longer used and should not be used to describe wastes. Redox should consider reclassifying wastes to codes other than Z500.
4.33	The quantity of hazardous and/or Industrial and/or Group A waste generated at the site per year shall not exceed 100 tonnes.			✓	Compliant	ENVIRON reviewed the waste log for 2011 and 2012 that is maintained by the Regulatory Affairs Coordinator. The waste logs reported the total waste generated (excluding general waste) for each of these years was less than 100 tonnes.
4.34	The quantity of hazardous and/or Industrial and/or Group A waste stored at the sit shall not exceed 50 tonnes at any one time.			✓	Compliant	ENVIRON reviewed the waste log for 2011 and 2012 and noted that the total waste stored (excluding general waste) at any one time did not exceed the 50 tonnes condition requirement.



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		General	Construction	Operation		
4.34A	Amendment – Prior to the commencement of construction of the truck wash facility at the site, the Applicant shall consult with Sydney Water with respect to the design of the facility to ensure that discharges to the sewer from the development can meet any relevant standards set by Sydney Water. Prior to the operational use of the truck wash facility, the Applicant shall demonstrate to the Director-General that a Trade Waste Agreement has been entered into with Sydney Water for the discharge of wastewater generated by that facility.				Compliant	Facility personnel advised that Sydney Water was consulted during the design of the truck wash facility. ENVIRON was provided a copy of correspondence from the Department acknowledging that Sydney Water had approved in-principle the truck wash facility. Compliance with this condition is also supported by the issue of a Consent to Discharge Industrial Trade Wastewater (Consent No. 29981) issued by Sydney Water, dated 25 August 2010.
Air Quality Impacts						
Odour						
4.35	Redox shall design, construct, operate and maintain the development to prevent the emission of any offensive odour from the site that is attributable to the operation of the development.	✓			Compliant	It is assumed the development has been designed and constructed so as to prevent the emission of offensive odours as it has been audited previously following completion of the earlier stages. There are understood to have been no changes to the facility since Stage 3 was completed in 2008. Redox has in place procedures that specify that if any materials delivered to site from a supplier, has a discernible odour or cannot be appropriately stacked (which may lead to packaging damage and release of odours) then this material is returned to the supplier at the earliest possible time, or if this is not possible is transported to another facility (i.e. a subcontract warehouse).
Acetic Acid Scrubber						



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		General	Construction	Operation		
4.36	The Applicant shall design, construct, commission and operate the acetic acid scrubber to ensure that the emissions from the scrubber meet the requirements specified in the Environment Protection Licence.	✓			N/A	Facility personnel advised that the acetic acid scrubber (part of Stage 4) has not been constructed and there are no foreseeable plans to undertake these activities or construct Stage 4 at the site.
4.37	Prior to the commencement of decanting activities involving acetic acid on the site, the Applicant shall submit to the Director-General and the EPA the manufacturer's performance guarantee and the detailed final design of the acetic acid scrubber.			✓	N/A	Not applicable. Decanting activities associated with Stage 4 of the development have not been undertaken at this stage and there are no foreseeable plans to undertake these activities at the site.
Dust Emissions						
4.38	Redox shall design, construct, commission, operate and maintain the development in a manner that minimises dust emissions.	✓			Compliant	The site has developed and implemented a Dust Control Management procedure to minimise dust emissions from site activities. Measures that are in place include immediate clean-up of any spilled materials such as from damaged packages, daily sweeping and vacuuming of warehouse floors, keeping the garage doors to each vacuuming of other hardstand areas such as driveways and external paved areas. In addition, the Store Manager undertakes weekly inspections of the warehouses to ensure that these areas are kept clean and tidy, amongst other criteria. During ENVIRON's site walk over, the site was observed to be in a clean and tidy state with no significant dust emissions being generated.
Visual Amenity Impacts						



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		General	Construction	Operation		
4.39	Redox shall prepare an external design panel indicating the proposed external design finishes, materials and configuration, in consultation with Council. The Applicant shall submit the design panel to the Director-General for approval prior to the commencement of the construction.		✓		N/A	Not applicable to this reporting period. ENVIRON notes this condition is not applicable to the current operations and has been excluded from ENVIRON's scope of work.
4.40	The Applicant shall ensure that all external lighting associated with the development is mounted, screened and directed in such a manner so as not to create a nuisance to surrounding properties or roadways. The lighting must be the minimum level of illumination necessary and shall comply with AS4282 (INT) 1995 Control of Obtrusive Effects of Outdoor Lighting.	✓			Compliant	External lighting present on the site is used primarily for security purposes rather than for operational activities. Facility personnel noted that external lighting complies with AS4282 and that to date there have been no complaints made in relation to the lighting at the site.
4.41	This consent does not permit the display of any advertisement, or the erection of any advertising structure on the site. This does not apply to any advertisement or structure that cannot be seen from the nearest public space, nor any signage specified elsewhere in this consent (refer condition 3.2).	✓				Facility personnel advised that a sign is located at the Swettenham Road entrance that advertises vacant positions at the facility. This sign has approximate dimensions of 1.5 m x 1.5 m. There are no other advertisements or advertisement structures erected on the site.
4.4	Redox shall ensure that all external lighting associated with the development is mounted, screened and directed in such a manner so as not to create a nuisance to surrounding properties or roadways.		✓		Compliant	Not applicable to this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
4.41	This consent does not permit the display of any advertisement, or the erection of any advertising structure, on the site.	✓			Noted	
5	ENVIRONMENTAL MONITORING AND AUDITING					
5.1	Redox shall undertake all monitoring, including recording and reporting of monitoring results, as required under this consent, and as may be specified	✓			Compliant	Redox currently undertakes monitoring and reporting of the following: · Stormwater quality prior to discharge to Bow Bowing Canal, as required by this



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	under an Environmental Protection Licence.					consent (refer condition 5.8). Copies of laboratory reports for the analysis of stormwater samples were provided to ENVIRON. The consent also specifies the following to be monitored, as relevant: · Transport Auditing (refer condition 5.2); · Noise monitoring (construction and operational) (refer condition 5.4 to 5.7); and · Air quality (refer condition 5.9 to 5.11). There are no requirements specified in the EP Licence for monitoring of air, noise or water emissions for the current activities at the site. In addition, the site monitors and reports on their trade wastewater discharge as required by the Consent to Discharge Industrial Trade Wastewater issued by Sydney Water Corporation.
Transport Auditing						
5.2	Within 90 days of commissioning each stage of the development, and then as may be required by the Director-General, the Applicant shall commission an independent Transport Audit of the development. This Audit shall: a) Be undertaken by a suitably qualified and experienced person, approved by the Director General prior to the commencement of the Audit; b) Assess whether the heavy vehicles associated with the development are complying with the measures detailed in Traffic Management Plan (condition 7.5(b)) and as required by this consent; and c) If any non-compliance is detected, identify what additional measures will be implemented to ensure			✓	Compliant	Redox provided a copy of the correspondence from the Department of Planning approving the consultant to be used for the Transport Audit for Stage 3. The Transport Audit report identified one non-conformance related to a 'No Entry' sign not meeting Australian Standard requirements. The report included a recommended corrective action which facility management has noted as being closed out. A copy of internal documentation requesting action on the Audit report recommendation and subsequent implementation of the recommendation was provided to ENVIRON to demonstrate this matter had been addressed.



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	compliance.					
5.3	Within 28 days of conducting the Audit (for 5.2), the Applicant shall provide the Director-General and Council with a copy of the audit report. If the Audit identifies any non-compliance with the Transport Management Plan or any Consent conditions, the Applicant shall detail what additional measures would be implemented to ensure compliance, indicating who would implement these measures, when by and how effectiveness of the measures would be measured & reported to the Director-General.			✓	Compliant	The Transport Audit report for Stage 3 was submitted to the Department of Planning within the required timeframe. Further communication from the Department requested Redox provide an action plan detailing the response to the Auditor's recommendation and facility personnel advised this was undertaken and that the recommendation has been implemented. Refer to condition 5.2 for further details.
Noise Monitoring and Auditing						
Construction Noise						
5.4	Within one month of commencement of construction activities associated with each stage development, the Applicant shall submit to the Director-General and the EPA a Construction Noise Audit to demonstrate compliance with the construction noise limits specified in conditions 4.17 & 4.18. The Audit shall be completed by a suitably qualified acoustic consultant, approved by the Director-General prior to commencement of the Audit. Should the Audit indicate that construction activities are above the set noise criteria, the report shall identify additional measures to be implemented to ensure compliance, indicating who would implement the measures, when by, and how the effectiveness of		✓		Compliant	Redox provided a copy of the last construction noise audit (for Stage 3) and correspondence from the Department of Planning approving the consultant to be used, Acoustic Dynamics Pty Ltd, for the Construction Noise Audit for Stage 3. The Construction Noise Audit report (Minto Storage and Distribution Centre, Stage 3 Construction Noise Audit, 29 September 2008 by Acoustic Dynamics) noted that noise emission levels at the nearby receivers were below the relevant criteria and that no special noise mitigation measures were required for the Stage 3 construction works.
5.5	Redox may seek the Director-General's approval, in consultation with the EPA, to dispense with the requirement to undertake a Construction Noise Audit for stage 2, 3 and/or 4 of the development.		✓		N/A	Stage 4 has not yet been constructed and the facility has not sought Director-General approval for dispensation of this condition.



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Operational Noise						
5.6	Within 90 days of the commencement of operation of each stage of the development, Redox shall conduct an Operational Noise Audit of its operations.			✓	Compliant	Not applicable to this reporting period. Stage 3 (of 4) is the latest stage to have been constructed and is operational. An operational noise audit was undertaken in May 2009 (Redox Pty Ltd – Minto Storage and Distribution Centre, Stage 3 Operational Noise Audit, 10 June 2009, by Acoustic Dynamics). ENVIRON reviewed the audit report which concluded that the site operations complied with the relevant noise criteria and that no additional noise mitigation measures were required for the operation of Stage 3. Correspondence from the Department approving the consultant to be used for the operational noise audit was not available. However, as the consultant, Acoustic Dynamics Pty Ltd, was previously approved for the construction noise audit in 2008, ENVIRON has assumed approval would have been granted as a suitably qualified and experienced person.
5.7	Within 28 days of conducting the Audit, Redox shall provide the Director-General and EPA with a copy of the Noise Audit report.			✓	Compliant	Not applicable to this reporting period. ENVIRON was provided a copy of correspondence from the Department approving the Operational Noise Audit undertaken in early 2007. Facility personnel provided a copy of the subsequent Audit report for the operation of Stage 3, prepared in June 2009. ENVIRON was informed the 2009 Audit report was submitted to the Department, although no record was available to confirm this.



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Stormwater Quality Monitoring						
5.8	Prior to commencement of operations, the Applicant shall submit for the approval of the Director-General, in consultation with Council, a Stormwater Quality Monitoring Program. The Program shall form part of the Stormwater Operational Environmental Management Plan (per condition 7.5(c)). The Program shall include, but not limited to: a) Identification of contaminants to be tested, including those required under the Clean Water Regulation (Class R classification) b) Monitoring frequencies c) Methodologies for stormwater quality monitoring The Stormwater Quality Monitoring Program shall be submitted to Director-General for approval prior to commencement of operations.			✓	Compliant	Facility personnel advised that the Stormwater Quality Monitoring Program forms part of the Stormwater Management Plan which is contained within the Operational Environmental Management Plan (OEMP). The Stormwater Quality Monitoring Program was approved by the Director-General. ENVIRON was provided a copy of correspondence from the Department approving the OEMP (of which the Stormwater Management Plan is part of). ENVIRON notes that the Stormwater Quality Monitoring Program and the related Water Release from Retention Basin procedure (No. 3405) includes consideration of monitoring frequencies, methodologies and parameters to be tested including for Class R classification.
Air Quality Monitoring and Auditing						
Acetic Acid Scrubber						
5.9	Redox shall periodically determine the pollutant concentrations discharged from the acetic acid scrubber.			✓	N/A	Not applicable. Facility personnel advised that the acetic acid scrubber (part of Stage 4) has not been constructed and there are no foreseeable plans to undertake these activities or construct Stage 4 at the site.
5.10	Within 90 days of commencing acetic acid decanting activities at the site ... Redox shall conduct an Air Quality Audit of its operations to confirm the air emission performance of the acetic acid scrubber.			✓	N/A	Not applicable. Decanting activities are associated with Stage 4 of the development which has not been undertaken. There are no foreseeable plans to undertake these activities.
5.11	Within 28 days of conducting the Audit referred to under condition 5.10 of this consent, Redox shall provide the Director-General and EPA with a copy of the Air Quality Audit report.			✓	N/A	Not applicable. Refer to condition 5.10.



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		General	Construction	Operation		
Independent Hazard Auditing						
5.12	Twelve months after the commencement of operation of Stage 1 of the development ... Redox shall commission an independent, qualified person or team to undertake a Hazard Audit of the development. Further Hazard Audits shall be undertaken every three years or within 12 months of commissioning Stages 2, 3 and 4 of the development.			✓	Compliant	Facility personnel advised that Independent Hazard Audits were undertaken for the facility in 2006 and 2010. ENVIRON was provided with copies of Department of Planning correspondence for the Audit Report to confirm these had been undertaken. Redox has commissioned another Independent Hazard Audit to be completed by Moore Management by the end of December 2013. ENVIRON sighted documentation to confirm that the Moore Management consultant undertaking the audit has been approved by the Director-General.
Independent Environmental Auditing						
5.13	Twelve months after the commencement of operation of each stage of the development, and every three years thereafter, Redox shall commission an independent, qualified person or team to undertake an Environmental Audit of the development.			✓	Compliant	Facility personnel advised that Independent Environmental Audits were undertaken for the facility in 2006 and 2010. ENVIRON was provided with copies of Department of Planning correspondence for the Audit Report to confirm these had been undertaken. Redox has commissioned another Independent Environmental Audit to be completed by ENVIRON Australia Pty Ltd by the end of December 2013. ENVIRON has been approved by the Director-General to undertake the audit.
5	ENVIRONMENTAL MONITORING AND AUDITING					
6.1	Subject to confidentiality, Redox shall make all documents required under this consent available for public inspection on request.	✓			Compliant	Redox has a Community Right to Know Policy that commits to providing information on its activities and listening and responding to community concerns. Redox has committed to making the following information



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						available to interested parties: inputs, outputs, processes and storage; future plans; compliance with the Responsible Care Program; emergency response information, safety data sheets for products; environmental information on emissions, waste and reportable incidents; and licences and risk assessments undertaken. The website also provides some of this information.
Complaints Procedure						
6.2	Prior to the commencement of construction of the development, Redox shall ensure that the following are available: (a) a 24-hour, toll-free telephone number on which complaints about the development may be registered; (b) a postal address to which written complaints may be sent; and (c) an email address to which complaints may be transmitted. The telephone number, postal address and email address shall be advertised on at least one occasion prior to the commencement of construction of each stage of the development, through a medium approved by the Director-General.		✓ ✓ ✓ ✓		Compliant	Facility personnel advised that during construction of the development, a 24-hour toll free telephone number, a postal address and email address were available for registering complaints. ENVIRON notes that the current Redox website provides the postal and street address, a toll-free number and an email address to make contact with the site.
6.3	Redox shall record details of all complaints received ... in an up-to-date Complaints Register. The Complaints Register shall be made available upon request.	✓			Compliant	Redox documents complaints in its Redebiz system. A screenshot of the complaints register (recorded as a Problem in Redebiz) was provided to ENVIRON indicating that the system can record the condition requirements a) to f). ENVIRON understands that the complaints register on Redebiz would be made available for inspection by the Director-General upon request.



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Community Communication Strategy						
6.4	Prior to the commencement of operations at the site, Redox shall prepare and implement a Community Communication Strategy for the development. The Strategy shall be approved by the Director-General prior to the commencement of any operations on the site.			✓	Compliant	Redox has implemented a Community Communication Strategy to address community concerns and outline mechanisms for providing information. Facility personnel provided ENVIRON with documentation confirming the Director-General's approval of the Community Communication Strategy.
7	ENVIRONMENTAL MANAGEMENT					
Environmental Representative						
7.1	Prior to the commencement of construction of the development, Redox shall notify the Director-General of the name and contact details of a suitably qualified and experienced Environmental Representative, and any changes to that appointment that may occur from time to time.	✓			Compliant	Facility personnel advised that during construction, commissioning and operation of the development, an Environmental Representative was and continues to be employed on a full-time basis. The current Environmental Representative has confirmed to ENVIRON that their duties and responsibilities encompassed the requirements outlined in this condition. Facility personnel noted that the Environmental Representative has changed a number of times since the development obtained consent. The Director-General has previously been notified of these changes in personnel and the company has recently informed the Director-General of the latest Representative.
Construction Environmental Management Plan						



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		General	Construction	Operation		
7.2	Redox shall prepare and implement a Construction Environmental Management Plan to outline environmental management practices to be followed during site preparation and construction activities during each stage of the development.		✓		N/A	Not applicable to this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
	✓		Not applicable to this reporting period			
	The plan shall be submitted for the approval of the Director-General no later than one month prior to the commencement of any site preparation and construction works associated with the development.		✓			
	Preparation and construction works associated with any stage of the development shall not commence until written approval has been received from the Director-General.		✓		Noted	
7.3	As part of the Construction Environmental Management Plan for the development, Redox shall prepare and implement the following Management Plans:				N/A	Not applicable to this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
	(a) Noise Management Plan		✓			It should be noted that the Vegetation Management Plan (referred to as the Landscape Management Plan in Redox's Operational Environmental Management Plan) continues to be used during the operation of the site.
	(b) Transport Management Plan		✓			
	(c) Erosion and Sediment Management Plan		✓			
	(d) Vegetation Management Plan		✓			
Operation Environmental Management Plan						
7.4	The Applicant shall prepare and implement an Operational Environmental Management Plan to detail an environmental management framework, practices and procedures to be followed during the operation of the development. The Plan shall include, but not necessarily limited to:			✓	Non –Compliant, Refer to Action Plan table 2.3	Redox has prepared and implemented an Operational Environmental Management Plan (OEMP) taking into account the requirements i) to vii) of this condition. ENVIRON's review of the current Plan (dated November 2011, Revision 3)



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
	i) Identification of all statutory & other obligations required to fulfil in relation to operation of phase 1 of the development, including all consents, licences, approvals and consultations ii) A description of the roles and responsibilities for all relevant employees involved in the operation of the development iii) Overall environmental policies and principles to be applied to be applied to the operation of the development iv) Standards and performance measures to be applied to the development, and a means by which environmental performance can be periodically reviewed and improved, where appropriate v) Management policies to ensure that environmental performance goals are met and to comply with the conditions of this consent vi) The Management Plans listed under Condition 7.5 of this consent vii) The environmental monitoring requirements under conditions 5.8 (stormwater quality monitoring) and 5.9 (pollutant concentrations at acetic acid scrubber) of this consent, inclusive. The Plan shall be submitted for the approval of the Director-General no later than one month prior to commencement of operation of stage 1, or such period agreed by the Director-General. Operation shall not commence until written approval received					indicated that the requirements of condition 7.4 have been considered and included in the Plan, as required, although it should be noted that: - For requirement i), obligations in relation to consent conditions and the Environment Protection Licence only are included. The Plan should be improved by including consideration of obligations under other Environmentally related approvals that apply to the site including the Consent to Discharge Industrial Trade Wastewater issued by Sydney Water Corporation and the Notification of Dangerous Goods on Premise issued by NSW WorkCover. - For requirement vii), environmental monitoring under condition 5.8 (i.e. stormwater quality) only applies. As the acetic acid scrubber has not been yet been constructed, there is no current requirement to undertake air quality monitoring of this activity. Facility personnel advised that the Director-General's approval of the OEMP was obtained. ENVIRON was provided a copy of correspondence from the Department approving the OEMP. Based on ENVIRON's site walk over and a review of a sample of documentation, it is considered that the OEMP is being implemented by the facility, in particular in the areas of waste management, stormwater management, incident reporting and storage of dangerous goods.



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
7.5	As part of the Operation Environmental Management Plan for the development, Redox shall prepare and implement the following Management Plans: (a) Noise Management Plan (b) Transport Management Plan (c) Stormwater Management Plan (d) Waste Management Plan (e) Landscape Management Plan			✓ ✓ ✓ ✓ ✓	Compliant	ENVIRON has sighted each of specified management plans required under this condition and confirm the plans have been prepared and are implemented as required. ENVIRON was provided a copy of correspondence from the Department approving the OEMP (which contains each of these plans) and acknowledging that Campbelltown City Council and the (then) Department of Environment and Conservation (i.e. EPA) had been consulted with respect to the OEMP. Based on ENVIRON's site walk over and a review of a sample of documentation, it is considered that the Management Plans specified in requirements a) to e) of this condition are being implemented by the facility. For example, the following observations were made: • Excessive levels of noise were not noted, particularly when forklifts and transport vehicles were in use; • The storage areas and yard areas were clean and tidy, and waste materials were stored in dedicated areas. Waste logs were maintained to monitor the quantities generated on site; • Traffic flow requirements at the site were signposted and the traffic movement was in compliance with site requirements. Traffic route inspection forms were provided to ENVIRON to confirm checks on compliance with transport procedures were undertaken as required;



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
						Laboratory reports for the analysis of stormwater quality was provided to ENVIRON to demonstrate that monitoring is undertaken. The stormwater isolation valves at the stormwater pits were sighted by ENVIRON.
7.6	At least one month prior to the operation of Stage 2, Stage 3 and Stage 4 of the development, Redox shall update and submit for the approval of the Director-General, the Operation Environmental Management Plan. Operation of Stage 2, Stage 3 and Stage 4 shall not commence until the Director-General has approved the updated Plans.			✓	Compliant	Not applicable to this reporting period. Prepared as pre-operation requirement for Stages 1 & 2 of the development.
8	ENVIRONMENTAL REPORTING					
Incident Reporting						
8.1	Redox shall notify the EPA and the Director-General of any incident with actual or potential significant off-site impacts on people or the biophysical environment as soon as practicable after the occurrence of the incident. The Applicant shall provide written details of the incident to the EPA and the Director-General within seven days of the date on which the incident occurred.	✓			Compliant	Facility personnel advised there have been no incidents with actual or potentially significant off-site impacts requiring notification to the EPA or Department of Planning and Infrastructure. A review of the incident register by ENVIRON notes that in the past few years (2010 to 2013) there have been between 6 to 9 incidents each year, of which approximately half related to injuries. There were no significant environmental issues reported.
8.2	Redox shall meet the requirements of the Director-General to address the cause or impact of any incident, as it relates to this consent, reported in accordance with 8.1, within such period as the Director-General may require.	✓			N/A	Noted. Facility personnel advised that there have been no requirements by the Director-General for this condition as no incidents have been notified to the EPA or the Director-General.
Annual Performance Reporting						



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
8.3	The Applicant shall, throughout the life of the development, prepare & submit for the approval of the Director-General, an Annual Environmental Management Report (AEMR). The AEMR shall review the performance of the development against the Operation Environmental Management Plan (refer to condition 7.4 of this consent), the conditions of this consent and other licences and approvals relating to this development. The AEMR shall include, but not necessarily be limited to: a) Details of compliance with the conditions of this consent; b) A copy of the Complaints Register (refer to condition 6.3 of this consent) for the preceding twelve-month period (exclusive of personal details), and details of how these complaints were addressed and resolved; c) A comparison of the environmental impacts and performance of the development against the environmental impacts and performance predicted in those documents listed under condition 1.2 of this consent; d) Results of all environmental monitoring required under this consent and other approvals, including interpretations and discussion by a suitably qualified person; and e) A list of all occasions in the preceding twelve month period when environmental performance goals for the development have not been achieved, indicating the reason for failure to meet the goals and the action taken to prevent recurrence of that type of incident. The Applicant shall submit a copy of the AEMR to the Director-General every year, with the first AEMR to be submitted no later than twelve months after the commencement of operation. The Director-General	✓			Compliant	Facility personnel advised that an AEMR has been submitted to the Director-General each year since operations commenced. The latest AEMR for 2012 was submitted in early 2013. ENVIRON was provided a copy of the 2012 AEMR and notes that the requirements a) to e) of this condition have been addressed in the AEMR. In the AEMR, Redox noted that there was one environmental performance goal that had not been achieved at the time of report preparation (per requirement e)) and the associated action was reported as "pending." Facility personnel noted that there has been no acknowledgement of receipt of this AEMR by the Department of Planning and Infrastructure to date.



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
	may require the Applicant to address certain matters in relation the environmental performance of the development in response to review of the Annual Environmental Report. Any action required shall be completed within such period as the Director-General may require.					

2.2 Compliance with Environmental Protection Licence 12041

Table 2.2: Compliance with EPL 12041

Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
1	ADMINISTRATIVE CONDITIONS						
A1	What the licence authorises and regulates						
A1.1	N/A					N/A	
A1.2	This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation. Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition. Fee Based Activity: Scale General chemicals storage: 0–5000 kL of active storage capacity.			✓	Procedure 3801 – Warehouse Limitations.	Compliant	ENVIRON's review of the stock manifest dated 1 November 2013 notes that quantities of dangerous held at that time were below the maximum limit.



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Item	Licence Condition		Development Stage			Redox Procedure	Compliance	Evidence
			Gen.	Con.	Op.			
	Chemical storage waste generation: >5–100 T.				✓	Procedure 3402 - Waste Management & Disposal.		
A2	Premises to which this licence applies							
A2.1	Premises details.		✓				Noted	
A3	Other activities							
A3.1	N/A						N/A	
A4	Information supplied to the EPA							
2	DISCHARGES TO AIR & WATER & APPLICATIONS TO LAND							
P1	Location of Monitoring/Discharge Points and Areas							
P1.1	Air							
	EPA ID.	Type of Monitoring Point	Type of Discharge Point	Location				
	1	Discharge to air Air emissions monitoring	Discharge to air Air emissions monitoring	Acetic Acid Scrubber "Area A"	✓		Compliant	Not applicable to this reporting period. The Acetic Acid Scrubber will be part of Stage 4 of the development. The facility has not constructed the tank farm/ decanting area or the acetic acid scrubber, which are part of Stage 4, so this requirement is not applicable at this stage.
P1.2	N/A						N/A	
P1.3	N/A						N/A	
3	LIMIT CONDITIONS							
L1	Pollution of Waters							
L1.1	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.		✓			OEMP; Procedure 3405 – Water Release from Retention Basin.	Compliant	Facility personnel advised that stormwater isolation valves are used at the three oil and silt arrestor pits on site, which are located near the chemical storage warehouses. These isolation valves are in a permanently closed position to prevent potentially contaminated stormwater being released to



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
							Bow Bowing Canal. Testing of stormwater samples is undertaken prior to discharge to the canal to ensure stormwater quality meets acceptable criteria. Trade waste water generated at the site is licensed under a Consent to Discharge Industrial Trade WasteWater issued by Sydney Water Corporation. Trade wastewater is discharged to sewer and no other discharges were observed by ENVIRON during the site walk over.
L2	Load Limits						
L2.1	N/A					N/A	
L2.2	N/A					N/A	
L3	Concentration Limits						
L3.1	N/A					N/A	R1.2
L3.2	N/A					N/A	
L3.3	N/A					N/A	
L4	Volume and Mass Limits						
L4.1	N/A					N/A	
L5	Waste						
L5	Waste – The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled “Waste” and meeting the definition, if any, in the column titled “Description” in the table below. Note: Refer to Appendix B for the full conditions.			✓	Waste Management Plan (OEMP); Procedure 3402 – Waste Management & Disposal.	Compliant	Waste from off - site sources are not received at the facility. The only wastes present at the site are those that have been generated by site activities.
L6	Noise Limits						



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
L6.1	Noise from the premises must not exceed the sound pressure level (noise) limits at the nominated receiver locations.			✓	Noise Management Plan (OEMP); Procedure 3116 - Noise Management.	Compliant	ENVIRON was provided with the most recent noise assessment undertaken in May 2009 by Acoustic Dynamics (Minto Storage and Distribution Centre, Stage 3 Operational Noise Audit, 10 June 2009 by Acoustic Dynamics). The noise assessment was conducted after the construction of Stage 3, during normal operational times. The noise contributions from the development were measured to be below the maximum allowable noise contributions specified under this condition.
L7	Polychlorinated Biphenyls (PCBs)						
	Polychlorinated Biphenyls (PCBs) – the licensee must or where no specific conditions are outlined in this licence, the licensee must comply with the “Chemical Control Order in Relation to Materials and Waste Containing Polychlorinated Biphenyl, 1997.”	✓				N/A	The first stage of the site was constructed in 2005 and given its age ENVIRON considers that it is unlikely that PCBs would be present on-site.
L8	Asbestos						
	The licensee must comply with the Protection of the Environment Operations (Waste) Regulation 2005.	✓				N/A	The first stage of the site was constructed in 2005 and given its age ENVIRON considers it is unlikely that asbestos containing materials would be present onsite.
L9	Odour						
L9	No condition of this licence identifies a potentially offensive odour for the purpose of section 129 of the POEO Act 1997. Section 129 of the POEO Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises, ... except if the emission is identified [in L9.1].	✓			Significant Environmental Aspects & Potential Impacts: Odour Emissions (OEMP); Procedure 3117 - Odour Control Management.	Compliant	Redox has in place procedures to prevent the release of offensive odours. These procedures specify that if any materials delivered to site from a supplier, has a discernible odour or cannot be appropriately stacked (which may lead to packaging damage and release of odours) then this material is returned to the supplier at the earliest possible time, or if this is not possible is transported to another facility (i.e. a subcontract warehouse).
4	Operating Conditions						
O1	Activities must be carried out in a competent manner						



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
O1.1	Licensed activities must be carried out in a competent manner. This includes: (a) the processing, handling, movement & storage of materials and substances; and (b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.			✓ ✓	Procedure 3009 – Handling, Storage, Packing, Pres. & Del. Procedure 3402 - Waste Management & Disposal.	Compliant	The facility has implemented a number of procedures to manage the handling, storage and transport of materials and waste within the facility. During ENVIRON's site walk over, the implementation of some of these procedures was observed and it was considered that the environmental management of the facility was appropriate to minimise potential impacts on the environment.
O2	Maintenance of Plant and Equipment						
O2.1	All plant and equipment installed at the premises or used in connection with the licensed activity: (a) must be maintained in a proper and efficient condition; & (b) must be operated in a proper and efficient manner.			✓ ✓	Procedure 3901 - Equipment Service. Equipment Procedures: 3902, 3903, 3904, 3906, 3917, 3918, 3919.	Compliant	ENVIRON observed during the site walk over that plant and equipment was maintained in proper condition and that a maintenance schedule is in place to ensure regular inspections and maintenance are undertaken. ENVIRON did not audit the maintenance program.
O3	Emergency Response						
O3.1	The licensee must maintain, and implement as necessary, a current emergency response plan for the premises. The licensee must keep the emergency response plan on the premises at all times. The emergency response plan must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment. If a current emergency response plan does not exist at the date on which this condition is attached to the licence, the licensee must develop an emergency response plan within three months of that date.	✓			Procedure 3403 - Emergency Procedure.	Non-Compliant, refer to Action Plan table 2.3 below.	The facility has in place an Emergency Management Plan and related procedures (e.g. emergency procedure, spill procedure) that address the requirements of this condition. Changes to the POEO Act 1997 required licensed facilities to prepare and implement a Pollution Incident Response Management Plan (PIRMP) by 1 September 2012. A review of Redox's existing Emergency Management Plan by ENVIRON notes that this plan addresses many of the requirements of a PIRMP, however, some information was observed to be missing or the level of detail could be improved. These included, for example: • A description of the hazards to human health or the environment associated with the site activities; • The maximum quantity likely to be stored or held for any pollutants; • The contact details for all relevant authorities (e.g. EPA, local Council); • A detailed map showing the location of stormwater drains;



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
							- The dates on which the PIRMP has been tested and the name of the person who carried out the test; - The dates on which the plan as updated; - The manner in which the plan is to be tested and maintained; - The PIRMP is to be made publicly available. Redox should review the Emergency Management Plan to ensure all information required for a PIRMP, as required under the POEO Act and associated Regulations are included in the plan. Further information can be found at http://www.epa.nsw.gov.au/legislation/poelegisamend2011.htm
O4	Process and management						
O4.1	The licensee must ensure that any liquid and/or non liquid waste generated and/or stored at the premises is assessed and classified in accordance with the DECC Waste Classification Guidelines as in force from time to time.	✓			Waste Management Plan (CEMP & OEMP); Procedure 3402 - Waste Management & Disposal.	Compliant	The facility tracks waste generated at the site through the use of a waste log that records the waste name, waste code, quantity, waste disposal company, hazard and/or dangerous goods classification amongst other information. Wastes that are to be recycled are segregated from other waste types and stored in separate waste bins. Refer to previous comment made for condition 4.32 of the Project Consent (Table 1) regarding waste classifications (i.e. Z500).
O4.2	The licensee must ensure that waste identified for recycling is stored separately from other waste.			✓	Waste Management Plan (CEMP & OEMP); Procedure 3404 - Recycling.	Compliant	Refer to O4.1
O5	Dust						
O5.1	All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.	✓			Significant Environmental Aspects & Potential Impacts: Dust Emissions (OEMP);	Compliant	As previously mentioned for Development Consent condition 4.38, the site has developed and implemented a Dust Control Management procedure to minimise dust emissions from site activities. Measures that are in place include immediate clean-up of any spilled materials such as from damaged packages,



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence								
		Gen.	Con.	Op.											
					Procedure 3110 - Dust Control Management.		daily sweeping and vacuuming of warehouse floors, keeping the garage doors to each warehouse area closed when access is not required, and regular sweeping and vacuuming of other hardstand areas such as driveways and external paved areas. In addition, the Store Manager undertakes weekly inspections of the warehouses to ensure that these areas are kept clean and tidy, amongst other criteria. During ENVIRON's site walk over, the site was observed to be in a clean and tidy state with no significant dust emissions being generated.								
5	MONITORING & RECORDING CONDITIONS														
M1	Monitoring Records														
M1.1 M2.1 M2.2	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition. For each monitoring/ discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample a the frequency, specified opposite in the other columns: Point 1 <table><tr><th>Pollutan t</th><th>Units of Measure</th><th>Frequenc y</th><th>Sampling Method</th></tr><tr><td>Acetic Acid</td><td>mg/m³</td><td>Quarterly</td><td>Method approved in writing by the Authority</td></tr></table> Monitoring for acetic acid is not required until the	Pollutan t	Units of Measure	Frequenc y	Sampling Method	Acetic Acid	mg/m ³	Quarterly	Method approved in writing by the Authority	✓				N/A	Stage 4 of the facility has not yet been constructed and acetic acid is not currently being stored or decanted at the site and thus this condition is not currently applicable.
Pollutan t	Units of Measure	Frequenc y	Sampling Method												
Acetic Acid	mg/m ³	Quarterly	Method approved in writing by the Authority												



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
	completion of stage 4, approximately 31 July 2009.						
M4	Recording of Pollution Complaints						
M4.1	The licensee must keep a legible record of all complaints made to the licensee, employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.	✓			Procedure 3022 – Problems & complaints.	Compliant	No complaints received. The facility documents complaints in its Redebiz system. A review of the summary of complaints recorded in Redebiz by ENVIRON confirmed that condition requirements a) to f) are required to be entered into the system.
M4.2	The record must include details of the following: (a) the date and time of the complaint; (b) the method by which the complaint was made; (c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; (d) the nature of the complaint; (e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; (f) if no action was taken by the licensee, the reasons why no action was taken.	✓			Procedure 3022 - Problems & Complaints.	Noted	No complaints received, however Procedure 3022 details requirements for recording pollution complaints.
M4.3	The record of a complaint must be kept for at least four years after the complaint was made.	✓			Procedure 3022 - Problems & Complaints.	Noted	
M4.4	The record must be produced to any authorised officer of the EPA who asks to see them.	✓			Procedure 3022 - Problems & Complaints.	Noted	
M5	Telephone complaints line						



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
M5.1	The licensee must operate a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises, unless otherwise specified in the licence.	✓			Procedure 3022 - Problems Complaints &	Compliant	ENVIRON notes that the Redox website provides a telephone number and a toll-free number and an email address to make contact with the site.
M5.2	The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.	✓			Procedure 3022 - Problems Complaints &	Compliant	The telephone number is listed at http://www.redox.com/Community/
M5.3	Conditions M5.1 and M5.2 do not apply until three months after: (a) the date of issue of the licence or (b) if this licence is a replacement licence within the meaning of the POEO (Savings and Transitional) Regulation 1998, the date on which a copy of the licence was served on the licensee under clause 10 of that regulation.	✓				N/A	Noted
6	REPORTING CONDITIONS						
R1	Annual return documents						
R1.1	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: (a) a Statement of Compliance; and (b) a Monitoring and Complaints Summary. A copy of the form in which the Annual Return must be supplied to the EPA accompanies this licence. Before the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.	✓			Procedure 3118 - Environmental Management System.	Compliant	The facility completes an Annual Return each year. A copy of the latest Annual Return (for 2012) was provided to ENVIRON to confirm this had been prepared and submitted. ENVIRON's review of the NSW EPA website noted that Redox has submitted an Annual Return since January 2005.
Special Conditions							
E1	Construction Activities						



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence								
		Gen.	Con.	Op.											
E1.1 E1.2	Noise from the construction of the plant must not exceed the sound pressure level (noise) limits presented in the table below. <table><tr><td>Locations</td><td>Day L_{Aeq}(15min) (dB(A))</td></tr><tr><td>St Andrews Residences</td><td>46</td></tr><tr><td>Minto Residences</td><td>46</td></tr><tr><td>Childcare Centre (30 Swettenham Rd)</td><td>62</td></tr></table> All construction activities, including transportation of fill and spoil, must be restricted to the hours of 7am to 6pm Monday to Friday, 8am to 1pm Saturday and at no time on Sundays and public holidays.	Locations	Day L _{Aeq} (15min) (dB(A))	St Andrews Residences	46	Minto Residences	46	Childcare Centre (30 Swettenham Rd)	62		✓		Construction Noise Management Plan (CEMP).	N/A	There have been no construction activities undertaken since 2008 and it is assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010.
Locations	Day L _{Aeq} (15min) (dB(A))														
St Andrews Residences	46														
Minto Residences	46														
Childcare Centre (30 Swettenham Rd)	62														
E2	Noise compliance monitoring														
E2.2	After the commencement of all operations at the premises, the licensee must submit a noise compliance assessment report to the DEC's Manager Metro Illawarra, to demonstrate compliance with the limits specified in condition L6.1. The assessment must be prepared by a suitably qualified acoustical consultant.			✓	Noise Management Plan (OEMP); Procedure 3116 - Noise Management.	N/A	The last stage of construction occurred in 2008 with the nature of operations remaining the same since that time. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010.								
E3	Acetic Acid Scrubber														
E3.1	The objective of this condition is to develop emission concentration limits to ensure that the premises can comply with Section 129 of the POEO Act 1997.	✓				N/A	Not applicable to this reporting period. The Acetic Acid Scrubber will be part of Stage 4 of the development.								
E3.2	Prior to the commencement of construction of the plant, the licensee must submit a report to the EPA's Manager Illawarra, on the development of a site specific emission concentration limit for the acetic acid scrubber.		✓			N/A	Not applicable to this reporting period. The Acetic Acid Scrubber will be part of Stage 4 of the development, construction date TBA.								



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
E3.3	Prior to the commencement of construction of the plant, the licensee must provide to the EPA's Manager Illawarra, the manufacturer's performance guarantees for the acetic acid scrubber, demonstrating that emissions will comply with the ground level concentration specified in the EPA's <i>Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW, August 2001</i> .		✓			N/A	Not applicable to this reporting period. The Acetic Acid Scrubber will be part of Stage 4 of the development, construction date TBA.

Action Plan

Table 2.3. Action Plan

Item No.	Reference	Recommendation	Time-Frame	Responsible Person	Action Taken	Completed Date
4.1	For each of the dangerous goods classes and materials listed in the table below, the Applicant shall not permit the materials listed as "prohibited" to be received, stored, or handled on the site. To avoid any doubt the Applicant shall only permit the materials listed as "permitted" to be received, stored or handled on the site. This condition does not apply to those materials that may be associated with office, laboratory, construction, maintenance or vehicular/ equipment components (including forklifts) of the development, and are not purchased and sold as part of the principal commercial operations of the development.	A review of the Stock Manifest at 1 November 2013 noted that for that particular day, following non-compliances to this condition were identified: Class 3 Packaging Group I ("Diethyl Ether Traded") was stored in Building B1; Redox should investigate the reason for the presence of this prohibited material and implement appropriate measures to ensure future incidents do	N/A	IT	Facility personnel noted that a computer programming error allowed the prohibited Class 3 PGI material to be ordered. ENVIRON has been informed that this program error has now been resolved and should not occur again. The prohibited material has since been transferred off-site.	6 November 2013



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	<table><tr><th>DG Class</th><th>Prohibited</th><th>Permitted</th></tr><tr><td>Class 1</td><td>All</td><td>None</td></tr><tr><td>Class 2</td><td>All</td><td>None</td></tr><tr><td>Class 3</td><td>PG I Subclass 6.1</td><td>PG II & III (unless otherwise prohibited)</td></tr><tr><td>Class 4</td><td>All</td><td>None</td></tr><tr><td>Class 5</td><td>All except those listed as permitted</td><td>Solids of Class 5.1, PG III</td></tr><tr><td>Class 6</td><td>Subclass 3 All Class 6.2</td><td>All Class 6.1 (unless other, but not Class 6.1 with subclass 3)</td></tr><tr><td>Class 7</td><td>All</td><td>None</td></tr><tr><td>Class 8</td><td>None</td><td>All</td></tr><tr><td>Class 9</td><td>None</td><td>All</td></tr><tr><td>Non-DG</td><td>None</td><td>All</td></tr></table>	DG Class	Prohibited	Permitted	Class 1	All	None	Class 2	All	None	Class 3	PG I Subclass 6.1	PG II & III (unless otherwise prohibited)	Class 4	All	None	Class 5	All except those listed as permitted	Solids of Class 5.1, PG III	Class 6	Subclass 3 All Class 6.2	All Class 6.1 (unless other, but not Class 6.1 with subclass 3)	Class 7	All	None	Class 8	None	All	Class 9	None	All	Non-DG	None	All	not occur. Whilst this is noted as a non-compliance, Redox has already corrected the non-compliance. It is recommended that Redox include a review of the materials tracking system as part of the internal audit program to ensure that compliance with this condition is maintained.				
DG Class	Prohibited	Permitted																																					
Class 1	All	None																																					
Class 2	All	None																																					
Class 3	PG I Subclass 6.1	PG II & III (unless otherwise prohibited)																																					
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Class 7	All	None																																					
Class 8	None	All																																					
Class 9	None	All																																					
Non-DG	None	All																																					
4.3	Prior to any dangerous goods being brought to the site, the Applicant shall demonstrate to the satisfaction of the Director-General that it has a system in place to track the quantities and locations of dangerous goods on the site at all times.	It is recommended that Redox obtain written confirmation from the Director-General that the department is satisfied with the current Redebiz system that used to track quantities and locations of dangerous goods.	N/A	IT	Facility personnel stated that: The DG approved the Pick system upon inspection in 2010. Redebiz is the upgraded version of the Pick system. On 15/08/2013, Redox demonstrated the use of Redebiz to track quantities and locations of the dangerous goods to the NSW DPI auditors and Redox informed ENVIRON that they were satisfied with the current intranet system. Redox continues to																																		



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					improve the Redebiz systems to meet the changing demands and any future Regulatory requirements.	
7.4	The Applicant shall prepare and implement an Operational Environmental Management Plan to detail an environmental management framework,	ENVIRON's review of the current Plan (dated November 2011, Revision	N/A	Trami Tran Michael Sims	Noted	
EP Licence O4.1	The licensee must maintain, and implement as necessary, a current emergency response plan for the premises. The licensee must keep the emergency response plan on the premises at all times. The emergency response plan must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment. If a current emergency response plan does not exist at the date on which this condition is attached to the licence, the licensee must develop an emergency response plan within three months of that date.	Changes to the POEO Act 1997 required licensed facilities to prepare and implement a Pollution Incident Response Management Plan (PIRMP) by 1 September 2012. A review of Redox's existing Emergency Management Plan by ENVIRON notes that this plan addresses many of the requirements of a PIRMP, however, some information was observed to be missing or the level of detail could be improved. These included, for example: • A description of the hazards to human health or the environment associated with the site activities; • The maximum quantity likely to be stored or held for any pollutants; • The contact details for all relevant authorities (e.g. EPA, local Council); • A detailed map showing the location of stormwater drains; • The dates on which the	N/A	Trami Tran	Redox have stated that they shall review the Emergency Management Plan to ensure all information required for a PIRMP, as required under the POEO Act and associated Regulations are included in the plan.	5/05/2015



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		PIRMP has been tested and the name of the person who carried out the test; • The dates on which the plan as updated; • The manner in which the plan is to be tested and maintained; • The PIRMP is to be made publicly available. Redox should review the Emergency Management Plan to ensure all information required for a PIRMP, as required under the POEO Act and associated Regulations, are included in the plan. Further information can be found at http://www.epa.nsw.gov.au/legislation/poelegisamen d2011.htm.				

Compliance with Consent to Discharge Industrial Trade Wastewater

Table 3. Compliance with Consent to Discharge Industrial Trade Wastewater (No. 29981)

Item No.	Requirement and Reference	Compliant?	Findings
1	The customer may discharge trade wastewater into the sewer in a manner whereby the substance characteristics of the trade wastewater are of a type and discharged at a rate, level or concentration equal to or less than that described in this schedule.	yes	The facility holds a consent from Sydney Water to discharge trade wastewater to the sewer. ENVIRON has not reviewed compliance with all the conditions of the consent, however, the facility has maintained the consent, reports on trade wastewater quality to Sydney Water and facility personnel have advised that there have been no notices or penalties issued by Sydney Water for noncompliance with the consent. A selection of trade wastewater sample analysis reports for 2012 and 2013 were provided to ENVIRON for review and it is noted that the parameters to be monitored, as specified in the consent, are being monitored.

Compliance with Notification of Dangerous Goods on Premises

Table 4. Compliance with Notification of Dangerous Goods on Premises (No. NDG037356)

Item No.	Requirement and Reference	Compliant?	Findings



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-	The Notification details maximum storage capacities for each storage facility	yes	A review of the stock manifest at 1 November 2013 indicates the quantities stored at each storage facility (i.e. depot), are below the specified maximum storage quantities notified to WorkCover. It should be noted that at the time of the audit, the Notification had expired and was in the process of being renewed by NSW WorkCover. ENVIRON was provided with copies of correspondence from WorkCover indicating that due to the WorkCover's delayed invitation to renotify, Redox were granted an extension on their Notification. The extended expiry date for their Notification was to 28 September 2013. A copy of a tax invoice from WorkCover, dated 2 October 2013, for receipt of payment for the renewal of the Notification indicates that Redox's renewal is in progress.



3 Community & Environmental Complaints

No community, environmental or pollution complaints were received during 2013 relating to the operation of the Minto facility.

Procedure 3022 – Problems & Complaints describes the method by which all problems, non-conformances, customer and community complaints would be recorded and actioned, including recording of pollution complaints in accordance with EPL 12041 Condition M4.

4 Environmental Impacts & Performance

Table 5.0: Environmental Impacts & Performance

Environmental Aspect (Operational Pathway)	Potential Environmental Impacts	Potential Risk of Impact	Duration of Potential Impact	Operational Procedure to prevent & control Impacts	Environmental Performance 2012
1. Transportation - Transport of goods to the site; - Delivery of goods to customers; and - Unloading/loading of trucks and shipping containers into transit storage areas.	Noise Emissions	Low	Intermittent	3109, 3116, 3412, 3715	Noise emissions effectively prevented and controlled. No complaints received regarding noise emissions.
	Air Emissions	Low	Intermittent	3109, 3412, 3715	Air emissions not required to be monitored. No complaints received regarding air emissions.
	Spillage of product(s) causing contamination of stormwater, soil or groundwater.	Low-Moderate	Infrequent	3022, 3109, 3114, 3412, 3702	No spillages of product during transportation causing contamination of stormwater, soil or groundwater.
	Operational Traffic Impacts	Moderate	Regular	3109, 3412, 3715	The system put in place to monitor that the routes utilised by heavy vehicles is working effectively and is substantially as it was when approved, its ongoing use is recommended". No complaints received regarding operational traffic impacts.
	Community Health	Low	Infrequent	3109, 3412	Community Health not required to be monitored. No Community Complaints received.
	Use of resources	Low-Moderate	Intermittent	3109	Use of resources not monitored with regards to the Transportation Pathway.
2. Storage & Handling - Movement of goods in and out of storage; and - Repackaging of	Spillage of goods	Low-Moderate	Infrequent	3022, 3109, 3401, 3402	No spillages of product during storage & handling causing contamination of stormwater.
	Spillage of goods causing contamination of soil/groundwater.	Low-Moderate	Infrequent	3022, 3109, 3401	No spillages of product during storage & handling causing contamination of soil or groundwater.



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Environmental Aspect (Operational Pathway)	Potential Environmental Impacts	Potential Risk of Impact	Duration of Potential Impact	Operational Procedure to prevent & control Impacts	Environmental Performance 2012
damaged goods and returned product.	Air Emissions – dust and particulate matter.	Low	Intermittent	3109, 3110	Air emissions of dust and particulate matter not required to be monitored. No complaints received regarding air emissions.
	Air Emissions - chemical reactions.	Moderate	Infrequent	3109	Air emissions caused by chemical reactions not monitored.
	Air Emissions from LPG forklifts.	Low	Constant	3109	Air emissions from LPG forklifts not monitored.
	Air Emissions from Greenhouse Gases.	Low- Moderate	Constant	3109	Greenhouse Gas emissions not required to be monitored.
	Operational Noise emissions.	Moderate	Intermittent	3022, 3109, 3116	Noise emissions effectively prevented and controlled. No complaints received regarding operational noise emissions.
	Waste – packaging (recyclable and non- recyclable).	Low	Intermittent	3109, 3401, 3402	Waste packaging not monitored with regards to storage and handling operations.
	Hazardous Waste – spillage and rejected products.	Moderate	Infrequent	3109, 3401, 3402	Refer 5.4 – In compliance with EPL (L5) waste conditions.
	Community Health	Low	Infrequent	3109, 3412	No community complaints received regarding community health impacts of storage & handling operations.
	Use of resources	Low- Moderate	Constant	3109	General use of resources not monitored for storage and handling operations.
3. Management & Administration	Waste – recyclable office waste	Low	Intermittent	3109, 3402	Paper/cardboard recycling only.
	Waste – non recyclable	Low	Intermittent	3109, 3402	Non-recyclable office waste not monitored.
	Waste – hazardous (samples)	Low	Infrequent	3109, 3402	As per hazardous waste – storage & handling above.
	Land & water pollution	Low- moderate	Intermittent	CEMP – Hazardous Materials Management Plan	No spillages of materials reported with potential for contamination of soil/ groundwater.
	Construction waste management	Low	Intermittent	CEMP – Construction Waste Management Plan	Not applicable to this report.



5 Environmental Monitoring

Aspect	Frequency	Process	Documentation	Procedure References	Responsibility
Noise Emissions	Within one month of commencement of construction activities associated with each stage of the development.	Construction Noise Audit	Construction Noise Audit report.	Procedure 3116.	Independent auditor
	Within 90 days of commencement of operation of each stage of development.	Operational Noise Audit	Operational Noise Audit Report	Procedure 3116	Independent auditor
Traffic Impacts	Monthly, four vehicles per period.	Random spot checks on routes taken.	Form 21085; QP records & Corrective Action Requests.	Procedure 3022 and 3715.	Redox Transport Coordinator
	Within 90 days of commissioning each stage of the development.	Independent Transport Audit	Independent Transport Audit report	Procedure 3715.	Independent auditor
Storm water Quality	Weekly & prior to discharge.	Visual and parameter analysis.	Form 2190 – Water Quality Inspection Form	Procedure 3405.	Redox Chemist
	Quarterly and following chemical contamination.	Parameter analysis	Parameter Analysis Report	Procedure 3405.	NATA Approved Laboratory
Waste	Continual	Continual log of waste generation.	Form 21152, 21157 and WasteLog.	Procedure 3402.	Redox Regulatory Affairs Coordinator
Incident/Near Miss Reporting	Continual	Record details of all incidents/near misses.	Form 21139 & 21140.	Procedure 3114 and 3401.	Redox Site Environmental Officer
Air emissions – dust and particulate matter	Daily	Regular sweeping. Weekly Inspection.	Form 21110 – Sydney Warehouse Inspection.	Procedure 3110 and 3521.	Redox Store Manager
Community Complaints	Continual.	Record details of all complaints received.	Complaints Register.	Procedure 3022 and 3412.	Redox Regulatory Affairs Coordinator
Environmental Management System	Annual reporting & triennial independent auditing.	Independent environmental audit.	Environmental Audit Report.	Procedure 2718.	Independent auditor
		Environmental performance review.	AEMR – Annual Environmental Management Report.	Procedure 2718.	Redox Regulatory Affairs Coordinator

5.1 Transport Monitoring & Auditing

5.1.1 Independent Transport Auditing

No independent transport auditing was conducted during 2013.

5.1.2 Monitoring Heavy Vehicle Routes/Requirements

Table 5.1.2: Heavy Vehicle Routes/Requirements: Non-Conformance Details

Date	Time	Carrier/ Customer Name	Vehicle Rego #	Route Travelled	Non- Conformance Details	QP Ref.	Corrective Action Summary
15/5/2013	7.30am	MWT-Semi Driver	AF32TI	Left Campbelltown Road pass main office	Incorrect route	QP67121	Driver was also given location map and transport routes.
26/7/2013	2.35pm	Border Express	AA48 SI	Left Ben Lenard road then left onto Campbelltown and passed the main office	Incorrect route	QP68891	Driver was also given location map and transport routes.
15/10/2013	9.50am	Kings Transport	BW40 NB	Passed main office	Incorrect route	QP70266	Driver was also given location map and transport routes. Driver was given "Non- conformance" document which outlines the problem and then completed section titled "proposed Corrective Action."

Discussion of Results:

35 Heavy vehicles were randomly audited during 2013 for compliance with Redox Procedure 3715 - NSW Heavy Vehicle Routes/Requirements. Three (3) out of thirty five (35) vehicles monitored were found to travel by the incorrect route. Wrong route often taken by new transport contract drivers who are unfamiliar with Redox's policy.

5.2 Noise Monitoring & Auditing

N/A - No operational noise auditing was required during this reporting period.

5.2.1 Construction Noise Auditing

No construction noise auditing was required during this reporting period.



5.2.2 Operational Noise Auditing

No operational noise auditing was required during this reporting period.



5.3 Stormwater Quality Monitoring

A three tiered monitoring program tests stormwater quality prior to release from the retention pits on site, including weekly internal analysis prior to discharge, quarterly external analysis, and external analysis in the event of a chemical spill.

Acceptable values for each parameter are taken to be those of:

- the *Clean Waters Regulations 1972*, Section 8 – Class R: Restricted Water;
- Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000* – “Default trigger values for physical and chemical stressors for south-east Australia”, for slightly disturbed ecosystems; and
- Baseline Contamination Assessment for Redox Chemicals Facility Swettenham Road, Minto* (Environmental Audits of Australia, January 2003).

5.3.1 Internal Stormwater Analysis

Table 5.3.1: Results of Internal Stormwater Analysis

Date	Sample	Colour	Clarity			Odour		pH	Temp.	Specific Gravity	Dissolved oxygen	Suspended Solids	Turbidity	Pass/Fail	Tested by:
			SS visible?	Foam?	Visible Film?	Smell?	Oil/Petrol Smell?								
	LIMIT	Clear	No	No	No	No	No	6.5-8.5	15-35°C	0.99-1.01	Min. 6.5 mg/L	Max. 50 mg/L	Max. 50 NTU	Pass	Name
January	Insufficient rainfall														
February	Insufficient rainfall														
1/3/2013	Blank	Clear	No	No	No	No	No	-	-	-	7.7	-	-	-	Michael Sims
	PIT 1	Clear	No	No	No	No	No	7.46	20	1	8.6	26.4	20.4	Pass	Michael Sims
	PIT 2	brown	No	No	No	No	No	7.65	20	1	8.5	512	165	Pass	Michael Sims



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	PIT3	brown	No	No	No	No	No	7.36	20	1	9.4	165	225	Pass	Michael Sims
April	Insufficient rainfall														
May	Insufficient rainfall														
15/6/2013	PIT 1	Clear	No	No	No	No	No	7.88	14	-	10.6	38	17.85	Pass	Michael Sims
	PIT 2	Light Brown	No	No	No	No	No	7.98	14	-	10	191	117	Pass	Michael Sims
	PIT 3	Light Brown	No	No	No	No	No	7.9	14	-	10.9	166	148	Pass	Michael Sims
July	Insufficient rainfall														
August	Insufficient rainfall														
September	Insufficient rainfall														
October	Insufficient rainfall														
11/11/2013	BLANK	Clear	No	No	No	No	No	8.0	18	1	-	-		Pass	Michael Sims
	PIT 1	Clear	No	No	No	No	No	7.72	18	1	8.4	19	5.76	Pass	Michael Sims
	PIT 2	Clear	No	No	No	No	No	7.85	18	1	8.2	58	34.9	Pass	Michael Sims
	PIT 3	Clear	No	No	No	No	No	7.71	18	1	8.0	62	71.6	Pass	Michael Sims
December	Insufficient rainfall														



Discussion of Results for Internal Stormwater Analysis

<u>Analyte</u>	<u>Results</u>
Colour	Samples taken during 2013 were either clear or light brown in colour.
Clarity	n/a
Suspended Solids	On no occasion during 2013 were large suspended solids visible in samples despite the fact that they were turbid.
Foam	No foam present in all samples.
Visible Film	No visible film present in samples.
Odour - Smell	No odour-smell detected in any of the samples.
Odour - Oil/Petrol	No odour – oil/petrol detected in all samples
pH	All samples results fell within the acceptable range of 6.5-8.5.
Temperature	Temperature results mostly fell within the 15-35 °C range throughout 2013. A temperature of 14 °C was recorded for all pits in July due to a cold winter.
Specific Gravity	Specific gravity was recorded as 1.00 for all samples during 2013.
Dissolved Oxygen	All sample results were above acceptable minimal limit of 6.5mg/L.
Suspended Solids	Pit 2 and Pit 3 sample results were well above the maximum level of 50 mg/L. Reason for high suspended solids is due to excess water flowed off from offsite slope from the retaining wall. These samples still passed based on the fact that there is no trace Chemical contamination in the water samples.
Turbidity	Pit 2 & 3 sample results indicated above 50 NTU due to excess water flow from offsite slope off from the retaining water.
Pass/Fail	All samples passed internal stormwater analysis during 2013 despite being higher than the max values for suspended solids and turbidity. The pass was based on the fact that no traces of chemicals were found in any of the samples.

5.3.2 External Stormwater Analysis

Each Sample is received in two sets of containers: natural for turbidity and suspended solids, and sulphuric acid preserved for nutrients. All sample containers received in an esky cooled by icepacks. Analysed “as received”.

Date	Sample	Total suspended solids	Turbidity	Total Kjeldahl Nitrogen (TKN)	NOx-N	Total nitrogen	Total phosphorus
		mg/L	NTU	mg/L	mg/L	mg/L	mg/L
1/3/2013	PIT 1	12	19	<0.5	0.2	0.7	0.14
	PIT 2	600	445	<0.5	0.2	0.7	0.30
	PIT 3	186	186	<0.5	0.3	0.8	0.22
25/6/2013	PIT 1	25	26.4	<0.5	<0.1	<0.6	0.009
	PIT 2	213	238	<0.5	0.1	<0.6	0.18
	PIT 3	125	151	<0.5	0.1	<0.6	0.12
Method	-	APHA 2540 D	APHA 2130 B	APHA 4500-N	APHA 4500-N _{ORG} -B	Sum of TKN & NOx-N	APHA 4500 P B/D

One stormwater sample, “Sample draining from Western Retaining Wall” dated 1/3/2013. Sample received in two containers: natural for turbidity & suspended solids, and sulphuric acid preserved for nutrients. Sample container received in an esky cooled by icepacks. Analysed “as received”

Test	Western Retaining Wall	Methods
Total Suspended solids	1,550	APHA 2540 D
Turbidity (Units: NTU)	2,200	APHA 2130 B
Total Kjeldahl Nitrogen (TKN)	1.0	APHA 4500 N _{ORG} -B
NOx- N (Nitrate-N & Nitrite-N)	0.2	APHA 4500NO ₃ -E
Total Nitrogen	1.2	Sum of TKN & NOx-N
Total phosphorus	0.28	Apha 4500 P B/D

5.3.3 External Stormwater Analysis (Chemical Spill)

N/A



5.4 Waste Management

Table 5.4: WasteLog 2013 – NSW

No hazardous and/or industrial and/or Group A substances listed under 4.32 of Condition were disposed during 2013.

QP	Product Code	Product Name	DG Class	Form	Waste Code	Tracking	Qty	DISPOSAL COMPANY	CAN	TC No.	SPO	Despatch Date	Disposal Method
	NIL												



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5.5 Independent Environmental Auditing

No environmental auditing was required during this reporting period.



6 Environmental Performance

Table 6.0 presents a list of all occasions in the preceding 12-month period when environmental performance goals for the development have not been achieved, indicating the reasons for failure to meet the goals, and the actions taken to prevent recurrence of that type of incident.

Table 6.0: Environmental Performance – Quality Problem Record

QP	Performance goal not achieved	Reason	Action	Status
Transport Management				
Nil				
Noise Monitoring & Auditing				
Nil				
Stormwater & Dust Management				
Nil				
Landscape Management				
Nil				
Waste Management				
Nil				
Environmental Reporting				
Nil				

2014 Annual Environmental Management Report



Redox Pty Ltd



**2 Swettenham Road
Minto NSW 2566**

Prepared by: Redox Pty Ltd

Trami Tran (Regulatory Affairs Coordinator)
Authorised by Malcolm Perrins (Director)

December 2014



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Executive Summary

This Annual Environmental Management Report (AEMR) has been prepared by Redox Pty Ltd (Redox) to review the performance of the development at 2 Swettenham Road, Minto NSW against the Operational Environmental Management Plan (OEMP) and Construction Environmental Management Plan (CEMP), the conditions of consent, Environmental Protection Licence 12041 and Environmental Legislation pertaining to the site, during the period January to December 2014.

The AEMR is intended to meet the requirements of the NSW Department of Planning, under development consent condition 8.3 – Annual Performance Reporting.

Site environmental management procedures and monitoring systems are in place for noise, transport, stormwater, waste, landscape, dust and odour control, community communication and incident reporting, as per the Operational Environmental Management Plans.

Ultimate responsibility for site environmental performance rests with the Managing Director. Day-to-day environmental management is the combined responsibility of the Regulatory Affairs Coordinator and the Store Manager.

No community, environmental or pollution complaints were received during 2014 related to the Minto facility operations.



1 Introduction

This Annual Environmental Management Report (AEMR) has been prepared by Redox Pty Ltd (Redox) to review the performance of the development at 2 Swettenham Road, Minto NSW against the Operational Environmental Management Plan (OEMP), the conditions of consent, Environmental Protection Licence 12041 and Environmental Legislation pertaining to the site, during the period January to December 2014.

The AEMR is intended to meet the requirements of the NSW Department of Planning, under development consent condition 8.3 – Annual Performance Reporting.

Condition 8.3 requires that Redox, throughout the life of the development, prepare and submit for the approval of the Director-General, and Annual Environmental Management Report (AEMR). The AEMR shall review the performance of the development against the Operational Environmental Management Plan, the conditions of consent and other licences and approvals relating to the development. The AEMR shall include, but not necessarily be limited to:

- (a) Details of compliance with the conditions of consent;
- (b) A copy of the Complaints Register for the preceding twelve-month period, and details of how these complaints were addressed and resolved;
- (c) A comparison of the environmental impacts and performance of the development against the environmental impacts and performance predicted in those documents listed under Condition 1.2 of consent;
- (d) Results of all environmental monitoring required under this consent and other approvals, including interpretations and discussion by a suitably qualified person; and
- (e) A list of all occasions in the preceding twelve-month period when environmental performance goals for the development have not been achieved, indicating the reason for failure to meet the goals and the action taken to prevent recurrence of that type of incident.

Redox shall submit a copy of the AEMR to the Director-General every year.

The Director-General may require Redox to address certain matters in relation to the environmental performance of the development in response to review of the Annual Environmental Management Report. Any action required to be undertaken shall be completed within such period as the Director-General may require.

1.1 Site & Operational Overview

Redox is an importer and distributor of close to 1,000 different organic and inorganic chemicals and raw materials. Used in more than 140 different industries, including Agriculture, Detergent, Food & Beverage, Mining & Metal, Surface Coating and Chemical Manufacture, these products are supplied to all areas of industry throughout Australia and New Zealand.

Redox operates five sites in Australia and three in New Zealand. The Head Office site in Minto (this site) is the base for the company's Marketing and Administration functions for its Australian and New Zealand operations. This site consists of two office/Administration buildings and five warehouses for the storage of both dangerous and non-dangerous goods.

The 5.984ha Redox owned site is located within the Minto Industrial Estate and is surrounded predominantly by light industrial and commercial operations to the west, north and south. Bow Bowing Canal forms the eastern boundary to the site. The nearest sensitive land use is the New Generation Child Care Centre, situated on the site's northern boundary. The nearest residential properties are situated on the opposite side of Campbelltown Road.



Figure 1.1: Aerial view, Redox Minto Facility.



The Minto facility, operational since 5 December 2005, was officially opened on 26 April 2006. The construction of Stage 3 of the development, a 2935m² non-dangerous goods store, commenced August 2008 and was completed February 2009. The new store was occupied from 27 February 2009.

Operational and construction site environmental management procedures are in place for noise, transport, stormwater, waste, landscape, dust and odour control, community communication and incident reporting. Ultimate responsibility for site environmental performance rests with the Managing Director; day-to-day environmental management is the combined responsibility of the Regulatory Affairs Coordinator and the Store Manager.

1.2 Operational Environmental Management Plan

Prior to commencement of operations on the site, an Operational Environmental Management Plan (OEMP) was prepared by Redox, and approved by the Director-General of the Department of Infrastructure, Planning and Natural Resources (DIPNR). This OEMP details the environmental management framework, practices and procedures to be followed during the operation of the development. The OEMP includes:

- (a) Identification of all statutory and other obligations that Redox is required to fulfil in relation to operation of the development, including all consents, licences, approvals and consultations;
- (b) A description of the roles and responsibilities for all relevant employees involved in the operation of the development;
- (c) Overall environmental policies and principles to be applied to the operation of the development;
- (d) Standards and performance measures to be applied to the development, and a means by which environmental performance can be periodically reviewed and improved;
- (e) Management policies to ensure that environmental performance goals are met and to comply with the conditions of consent;
- (f) The listed Management Plans:
 - (i) Noise Management Plan;
 - (ii) Transport Management Plan;
 - (iii) Stormwater Management Plan;
 - (iv) Waste Management Plan;
 - (v) Landscape Management Plan; and
- (g) The environmental monitoring requirements outlined in the conditions of consent.



1.3 Development Consent Conditions

The Minister for Infrastructure and Planning, the Hon Craig Knowles MP, determined to approve the Chemical Storage and Distribution Facility, Lot 171 Swettenham Road, Minto, Campbelltown LGA (DA No: 367-11-2002-i) on 16 September 2003, subject to Development Consent Conditions.

The reason for the imposition of conditions is to:

- (a) Minimise any adverse environmental impacts associated with the development;
- (b) Ensure effective on-going environmental and safety management and monitoring;
- (c) Minimise potential safety impacts associated with the development; and
- (d) Implement the recommendations of the Commission of Inquiry into all environmental aspects of the development.

1.4 Environmental Protection Licence

Environmental Protection Licence 12041 authorises Redox to carry out Chemical Storage and Waste Activities at 2 Swettenham Road, Minto.

General obligations of the licensee under this licence, and as set out in the *Protection of the Environment Operations Act 1997* and the Regulations made under the Act, include to:

- (a) Ensure persons associated with Redox comply with this Licence,
- (b) Control the pollution of waters and the pollution of air, and
- (c) Report incidents causing or threatening material environmental harm.



2 Details of Compliance

On 4 November 2013, ENVIRON Australia Ltd (ENVIRON) and Moore Management were engaged by Redox Pty Ltd (Redox) to conduct an Independent Environmental Audit and Hazard Audit of the Redox Chemical Storage and Distribution Centre at 2 Swettenham Road, Minto, New South Wales (NSW) 2566.

The Audits are required to be undertaken every three years pursuant to Conditions 5.12 and 5.13 of the Project Consent, issued by the (now) NSW Department of Planning and Industry (DP&I).

2.1 Compliance with Development Consent Conditions

Table 2.1: Compliance with Development Consent Conditions

Table 2.1 is intended to address the findings and the recommendations issued by the abovementioned independent Hazard and Environmental Auditors.

Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
1	GENERAL					
Obligation to Minimise Harm to the Environment						
1.1	Redox shall implement all practicable measures to prevent or minimise any harm to the environment that may result from the construction, commissioning, operation ... of the development.	✓			Compliant	ENVIRON observations and interviews with site representatives demonstrated that the existing environmental management system and processes are considered to address the consent condition requirements. Procedures for managing environmental issues have been prepared as noted in Redox's list of site procedures. During ENVIRON's site walk over evidence of the implementation of some of the procedures was observed. The environmental management of the facility is considered appropriate to minimise potential impacts on the environment.



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
Scope of Development						
1.2	The Applicant shall carry out the development generally in accordance with requirements a) to s). Note, due to the large number of requirements these have not been replicated here. Refer to Appendix A for the full list of requirements.	✓			Compliant	So noted. Facility personnel advised that facility operations are conducted in accordance with the consent conditions and the requirements of this condition. ENVIRON reviewed a selection of the documents listed in this condition and notes that these documents provide additional information in response to regulatory agency enquiries of the EIS or associated studies. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audits undertaken in 2006 and 2010.
1.3	In the event of any inconsistency between the conditions of consent and/or any scope document(s), the conditions of consent and/or the most recent document shall prevail to the extent of the inconsistency.	✓			Noted	N/A
Provision of Documents						
1.4	Where practicable, the Applicant shall provide all documents and reports required to be submitted to the Director-General under this consent in an appropriate electronic format. Provision of documents and reports to other parties, as required under this consent, shall be in a format acceptable to those parties and shall	✓			Compliant	Noted.
1.5	Nothing in this consent prevents Redox from combining reporting requirements under this consent with reporting requirements for submission to another relevant party.	✓			Compliant	Noted.
Statutory Requirements						



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
1.6	The Applicant shall ensure all licences, permits & approvals are obtained and kept up-to-date as required throughout the life of the development. No condition of this consent removes the obligation for the Applicant to obtain, renew or comply with such licences, permits or approvals.	✓			Compliant	Facility personnel reported that a list of all environmental licences, permits and approvals required to be kept by the site, amongst other matters and tasks, is maintained by the Regulatory Affairs Coordinator. This list is reviewed on a monthly basis by the Regulatory Affairs Coordinator to ensure licences/ permits are renewed prior to their expiry date. Redox is a member of the Plastics and Chemicals Industries Association (PACIA) and receives industry bulletins on regulatory matters relevant to their business, as well as attending PACIA meetings to keep up to date on industry matters. Redox also has a subscription to WorkCover NSW to receive news bulletins on dangerous goods. It should be noted that at the time of the audit, the Notification of Dangerous Goods on Premises with NSW WorkCover had expired and was in the process of being renewed by NSW WorkCover.
1.7	In the event that a dispute arises between the Applicant and Council or a public authority, other than the Department, in relation to a specification or requirement under this consent, the matter shall be referred by either party to the Director-General, or if not resolved to the Minister, whose determination shall be final and binding on all parties.	✓			Noted	Noted. Facility personnel advised that there have not been any prior disputes in relation to the consent that have required referral to the Director-General.
2	COMPLIANCE					
2.1	Redox shall ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.	✓			Compliant	Redox has prepared a number of procedures to assist with complying with the conditions of the consent. Personnel are provided with either formal or on-the-job training in these



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
						procedures and other environmental management matters and have access to all Redox procedures through the company's intranet system. Internal audits are undertaken at the facility, mostly on an annual basis, that cover off various processes, procedures and departmental activities. In particular, internal audit of the Warehouse, Transport and Distribution operations and procedures related to environmental management was completed in February 2013. A number of non-compliances were noted in relation to document management and display of traffic signage which have reportedly been corrected and closed out. Training of contractors and subcontractors, to ensure compliance and awareness of relevant Redox procedures, is undertaken either by Redox personnel during contractor induction or the recruitment agency (e.g. Redox provides the agency with a contractors induction pack for delivery to contract staff). Specific training is provided to employees and/or contractors on hazard identification, environmental awareness, and dangerous goods. Records are kept for employee and contractor/ sub-contractor training. It is noted that Redox is currently updating their training matrix to include detail on job specific training including refresher training requirements. It is recommended that the



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
						training procedure include a system to notify when refresher training is required for employees and contractors.
2.2	Redox shall be responsible for environmental impacts resulting from the actions of all persons on site, including contractors, subcontractors and visitors.	✓			Compliant	Noted.
2.3	Prior to each of the events listed below, Redox shall certify in writing to the satisfaction of the Director-General that it has complied with all conditions of this consent applicable prior to that event.				Compliant	Facility personnel advised that the Director-General was notified in writing of the site's compliance with the relevant consent conditions prior to each of the events a) to c) for Stages 1, 2 and 3. No further enquiries were made as this condition is not applicable to this audit. Note: Stage 4 has not yet been constructed.
	(a) commencement of any physical works on the land subject to this consent; (b) commencement of construction of stages 1, 2, 3 and 4 of the development; and (c) commencement of operation of stages 1, 2, 3, and 4 of the development.		✓ ✓	✓		
2.4	Notwithstanding condition 2.3 of this consent, the Director-General may require an update report on compliance with all, or any part of the conditions of this consent.	✓			N/A	Noted.
2.5	The Applicant shall meet the requirements of the Director-General in respect of the implementation of any measure necessary to ensure compliance with the conditions of this consent, and general consistency with the documents listed in Condition 1.2. The Director-General may direct that such a measure be implemented in response to the information contained within any report, plan, correspondence or other document submitted in accordance with the conditions of this consent, within such time as the Director-General may require.	✓			N/A	Noted. Facility personnel advised that to date there has been no additional Director-General requirements as outlined in condition 2.5.



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
3.1	In relation to the construction and occupation of the development, Redox shall provide the Director-General and Council with the following: (a) written notification of a Principal Certifying Authority; (b) copies of all construction certificates issued; (c) written notification of the intention to commence construction; (d) copies of all occupation certificates; (e) written notification of the intention to occupy.		✓ ✓ ✓	✓ ✓	Noted	The last stage of construction occurred in 2008 and it is assumed compliance with this condition was confirmed by the previous Independent Environmental Audits undertaken in 2006 and 2010.
3.2	Prior to the commencement of any construction associated with the development, Redox shall erect at least one sign at the construction site. The sign shall be maintained for the duration of construction works, and shall be removed as soon as practicable after the conclusion of construction works.		✓		N/A	The last stage of construction occurred in 2008 and it is assumed compliance with this condition was confirmed by the previous Independent Environmental Audits undertaken in 2006 and 2010.
4	ENVIRONMENTAL PERFORMANCE					
Hazards and Risk Impacts						
4.1	For each of the dangerous goods classes and materials listed in the table below, the Applicant shall not permit the materials listed as “prohibited” to be received, stored, or handled on the site. To avoid any doubt the Applicant shall only permit the materials listed as “permitted” to be received, stored or handled on the site. This condition does not apply to those materials that may be associated with office, laboratory, construction, maintenance or vehicular/ equipment components (including forklifts) of the development, and are not purchased and sold as part of the principal commercial operations of the development.			✓	Non-compliant, however error has been corrected. Refer to Action table 2.3.	Facility personnel advised that the company’s Redebiz business operating system is used to track the types and quantities of dangerous goods and non-dangerous goods stored at the site. The Redebiz system has the capability to restrict particular types of materials from being ordered and limit the quantities of materials ordered. Redebiz has been programmed to prevent those dangerous goods listed in condition 4.1 as prohibited from being present. ENVIRON was provided a copy of the Stock Manifest of dangerous and non-dangerous goods for 1 November 2013. A review of the



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Consent Condition	Compliance Requirements	Requirement			Status	Findings																																
		General	Construction	Operation																																		
	<table><tr><th>DG Class</th><th>Prohibited</th><th>Permitted</th></tr><tr><td>Class 1</td><td>All</td><td>None</td></tr><tr><td>Class 2</td><td>All</td><td>None</td></tr><tr><td>Class 3</td><td>PG I Subclass 6.1</td><td>PG II & III (unless otherwise prohibited)</td></tr><tr><td>Class 4</td><td>All</td><td>None</td></tr><tr><td>Class 5</td><td>All except those listed as permitted</td><td>Solids of Class 5.1, PG III</td></tr><tr><td>Class 6</td><td>Subclass 3 All Class 6.2</td><td>All Class 6.1 (unless other, but not Class 6.1 with subclass 3)</td></tr><tr><td>Class 7</td><td>All</td><td>None</td></tr><tr><td>Class 8</td><td>None</td><td>All</td></tr><tr><td>Class 9</td><td>None</td><td>All</td></tr><tr><td>Non-DG</td><td>None</td><td>All</td></tr></table>	DG Class	Prohibited	Permitted	Class 1	All	None	Class 2	All	None	Class 3	PG I Subclass 6.1	PG II & III (unless otherwise prohibited)	Class 4	All	None	Class 5	All except those listed as permitted	Solids of Class 5.1, PG III	Class 6	Subclass 3 All Class 6.2	All Class 6.1 (unless other, but not Class 6.1 with subclass 3)	Class 7	All	None	Class 8	None	All	Class 9	None	All	Non-DG	None	All				list noted that for that particular day, the following non-compliances to this condition were identified: - Class 3 Packaging Group I ("Diethyl Ether, Traded") was stored in Building B1; - A variety of Class 4.1 and Class 5.1 materials were stored either in the laboratory or office. These materials were all noted to be laboratory samples and therefore are not considered non-compliances under this condition. Facility personnel noted that a computer programming error allowed the prohibited Class 3 PGI material to be ordered. This program error has now been resolved and should not occur again. The prohibited material has since been transferred off-site. Whilst this is noted as a non-compliance, Redox has already corrected the non-compliance. It is recommended that Redox include a review of the materials tracking system as part of the internal audit program to ensure that compliance with this condition is maintained.
DG Class	Prohibited	Permitted																																				
Class 1	All	None																																				
Class 2	All	None																																				
Class 3	PG I Subclass 6.1	PG II & III (unless otherwise prohibited)																																				
Class 4	All	None																																				
Class 5	All except those listed as permitted	Solids of Class 5.1, PG III																																				
Class 6	Subclass 3 All Class 6.2	All Class 6.1 (unless other, but not Class 6.1 with subclass 3)																																				
Class 7	All	None																																				
Class 8	None	All																																				
Class 9	None	All																																				
Non-DG	None	All																																				
4.2	Redox shall only permit non-dangerous goods, and dangerous goods of class 8 to be stored or handled in bulk on the site.			✓	Compliant	Facility personnel advised that this condition is noted and that currently no bulk non-dangerous goods or dangerous goods of Class 8 are stored at the site. ENVIRON reviewed the Stock Manifest for 1 November 2013 and did not identify any materials stored in bulk on the site, and no																																



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
						evidence of bulk storage was observed during the site walk over.
4.3	Prior to any dangerous goods being brought to the site, Redox shall demonstrate to the satisfaction of the Director-General that it has a system in place to track the quantities and locations of dangerous goods on the site at all times.			✓	N/A	ENVIRON sighted the company's Redebiz business operating system which is used to track the types, quantities and locations of dangerous goods and non-dangerous goods stored at the site. Facility personnel advised that the Redebiz system was demonstrated to NSW DP&I representatives during their visit on 15 August 2013 (as part of their follow-up after receipt of independent audit reports) and that they were satisfied with its capabilities. However, Redox does not have documented evidence to confirm this. In addition, ENVIRON was provided with correspondence, dated 7 September 2005, sent to the then Department of Infrastructure, Planning and Natural Resources advising them of the process used to track quantities and locations of dangerous goods at the site. This process was a paper based and computer based system used prior to the current Redebiz system. It is recommended that Redox obtain written confirmation from the Director-General that the department is satisfied with the current Redebiz system.
Bunding and Spill Management						
4.4	Redox shall ensure that all bunding installed at the development site is constructed strictly in accordance with:				Compliant	ENVIRON was advised that bunding was constructed per design requirements, developed in accordance with the



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		General	Construction	Operation		
	(a) all relevant Australian Standards; (b) a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; (c) the EPA's Environmental Protection Manual Technical Bulletin Bunding and Spill Management.		✓ ✓ ✓			requirements of this condition. During ENVIRON's site walk over, it was observed that warehouse areas were bunded to contain spills within the building and blind sumps/ drains were present within and at the entrance to the warehouse areas. The site perimeter was also bunded.
4.5	At least one month prior to the commencement of construction of the development ... Redox shall prepare and submit for the approval of the Director-General the studies set out below. (a) A Fire Safety Study (b) A Final Hazard Analysis (c) A Construction Safety Study		✓ ✓ ✓		N/A	The last stage of construction occurred in 2008 with the nature of operations remaining the same since that time. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010.
Pre-Commissioning Studies						
4.6	No later than two months prior to the commencement of commissioning of the development, Redox shall prepare and submit for the approval of the Director-General the studies set out below: (a) A Transport of Hazardous Materials Study for the development. (b) An Emergency Plan for the development. (c) A Safety management System.			✓ ✓ ✓	Compliant	Facility personnel advised that approval was received from the Director-General for all three study reports. ENVIRON was provided a copy of correspondence from the Department approving the study reports with the exception of the Safety Management System (SMS). The correspondence from the Department noted that comments on the SMS had been provided to Redox in August 2005. Further correspondence on whether these comments had been actioned and the SMS subsequently approved were not available to ENVIRON. However, ENVIRON considers that Redox would have addressed the Departments comments given Redox has previously demonstrated appropriate responses to agency requests. ENVIRON was provided a copy of: · The Transport of Hazardous Materials



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
						study by Dick Benbow & Associates, 29 June 2005, Revision 3; - The Emergency Management Plan by Redox, 3 July 2012, Version 4; - The Safety Management System, Procedure 3880, 4 December 2009, Version 3. ENVIRON's review of each of these studies/plans indicate that have been prepared to substantially address the requirements of a) to c).
4.7	Prior to the commencement of construction, Redox shall submit to the Director-General a Security Management Plan for the development.		✓		N/A	The last stage of construction occurred in 2008 with the nature of operations remaining the same since that time. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010.
Traffic and Transport						
Community Enhancement Program						
4.8	Prior to the commencement of operation, or within such time as agreed by the Director-General, the Applicant shall negotiate an agreed outcome with Council for an appropriate level of contribution (financial or in-kind) and as applicable, towards mitigating any cumulative social and/or community impacts as a result of the proposed development.			✓	Compliant	Facility personnel advised that the only contribution Redox has made to Council associated with the development is for the construction of an off- or on-ramp to the M5 motorway. It is understood the contribution was negotiated between Department of Infrastructure, Planning and Natural Resources (now Department of Planning and Infrastructure) and Redox. There have been no other contributions made to Council in relation to this condition.
Site Access, Internal Roads and Parking						



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		General	Construction	Operation		
4.9	The Applicant shall ensure all heavy vehicles access the site in a forward direction via the Holmes Road entrance and not via Swettenham Rd entrance. Not applicable during emergencies or as directed by relevant authority (including the police and emergency services).			✓	Compliant	Redox has implemented a Transport Management Plan to minimise amenity impacts on the locality from heavy vehicle accessing and leaving the site. The Plan has been prepared to meet the requirements of condition 7.5(b) and to ensure heavy vehicles access the site in a forward direction via the Holmes Road entrance and not Swettenham Road. Redox monitors the movement of heavy vehicles on a 4 audits per month schedule to confirm that vehicle movements follow the designated routes when transporting materials to and / or from Redox as outlined in their procedure for NSW Heavy Vehicle Requirements and as specified in the transporter agreement with the transport company. ENVIRON sighted a number of the vehicle movement audit forms for year 2013, and noted that of nine forms viewed, three were not compliant (i.e. had not followed the designated route) and thus were not entering the site via Holmes Road on the first attempt. Facility personnel advised that where vehicles are noncompliant with this requirement, a Problem Record is raised in the Redebiz system and a corrective action request issued to the driver/ transport company. ENVIRON viewed a non-compliance Problem Record in Redebiz to confirm the process. ENVIRON also observed during the site walk over that a one-way internal road system operates at the site so that all vehicles are only allowed to move in one direction. This is



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
						reinforced with painted arrows on the roads indicating the traffic direction.
4.10	The Applicant shall develop and implement, in consultation with Council, a road hierarchy for heavy vehicles travelling to and from the site, with the Holmes Rd, Ben Lomond Rd, Airds Rd, Rose Payten Drive, Campbelltown Rd, and M5 Motorway forming the principal route to and from the site. The Applicant shall submit details of the road hierarchy for the approval of the Director-General prior to commencement of operations on the site.			✓	Compliant	Facility personnel advised that a road hierarchy for heavy vehicles using the roads specified is in place and has been communicated to the transport companies. Redox provided to ENVIRON a copy of the Road Hierarchy for Heavy Vehicles (dated 9 February 2009, Revision 2) and correspondence from Department of Planning (dated 21 May 2009) confirming approval of the road hierarchy from the Director-General and Campbelltown City Council.
4.11	Prior to the commencement of operations, Redox shall submit for the Director-General's approval a Transport Code of Conduct for the development.			✓	N/A	The last stage of construction occurred in 2008 with the nature of operations remaining the same since that time. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010.
4.12	Prior to the commencement of any B-double transport to the site, Redox shall demonstrate to the satisfaction of the Director-General that the B-double reclassification of Holmes Road has been approved by the RTA in association with Council.			✓	N/A	The last stage of construction occurred in 2008 with the nature of operations remaining the same since that time. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audits undertaken in 2006 and/or 2010.
4.13	The use of landscaping shall not affect driver sight distance for vehicles entering and exiting the site.		✓		Compliant	During the site walk over, ENVIRON observed that landscaping did not affect driver sight distance during entry and exit of the site.
4.14	Redox shall design and construct all internal road works, including assoc. parking facilities and loading bays:				Compliant	Facility personnel advised that internal road works and parking infrastructure complies with RTA (now RMS) and Council standards



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		General	Construction	Operation		
	(a) In accordance with the relevant RTA and Council standards & codes, and Australian Standards including AS2890.1-1993 and AS2890.2-1989; (b) With clearly marked visitor, disabled, ambulance and service vehicle parking areas; and		✓			and codes. A copy of the design engineers, Algorry Zappia & Associates Pty Ltd, Certificate was provided to confirm the internal driveway and parking area gradients and levels comply with AS2890.1 and AS2890.2.
	(c) With signage to demarcate all vehicle movements within the site.		✓			
Road Works						
4.15	The Applicant shall ensure that the deceleration lane at Swettenham Rd entrance is designed in accordance with Council's <i>Specification for Construction of Subdivisional Road and Drainage Works</i> and that the land is constructed to the satisfaction of Council. The Applicant shall submit detailed engineering plans of the deceleration lane for the approval of Council prior to the commencement of any construction activities associated with Stage 1 of the development.		✓		Compliant	Facility personnel indicated that the deceleration lane at the Swettenham Road entrance and the land was constructed to Council's satisfaction. The Certificate of Compliance issued by Algorry Zappia & Associates is understood to also apply to this condition. Correspondence from Council approving the deceleration lane was not available,
4.16	The Applicant shall ensure that a compensatory pedestrian footpath is designed and constructed to the satisfaction of Council. The footpath shall be within the site boundaries along the length of Swettenham Rd deceleration lane. This footpath shall be dedicated to Council as a Public Road prior to commencement of operations.		✓		N/A	The last stage of construction occurred in 2008. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audits undertaken in 2006 and/or 2010.
Noise Impacts						
Construction Noise						



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
4.17	The Applicant shall ensure that all site preparation and construction activities associated with the development do not exceed the criteria at the nominated locations specified in Table 1. For the purpose of this condition, construction noise shall be determined at the locations under the conditions specified for operational noise, as provided in conditions 4.21 and 4.22 of this consent.		✓		Compliant	The last construction works undertaken at the site (for Stage 3) were completed at the end of 2008. Facility personnel advised that there were no non-compliance issues associated with construction noise limits during this time. ENVIRON reviewed the noise assessment report undertaken during Stage 3 construction works (Minto Storage and Distribution Centre, Stage 3 Construction Noise Audit, 29 September 2008 by Acoustic Dynamics Pty Ltd) which reported that predicted noise emission levels at nearby residential receivers were below the relevant noise criteria. In addition, ENVIRON was provided a copy of correspondence from the Department of Planning, dated 24 October 2008, that confirmed the Stage 3 Construction Noise Audit met the requirements of the consent condition 5.4 and construction noise was
4.18	The Applicant shall ensure that site preparation and construction activities associated with the development do not exceed 62 dB(A) _{(LAeq(15 minute))} at the New Generation Childcare Centre, 30 Swettenham Road, St Andrews, during normal operating hours and/or occupation of the Childcare Centre.		✓		Compliant	As previously mentioned, the last construction works undertaken at the site were for Stage 3 which was completed at the end of 2008. ENVIRON reviewed the noise assessment report undertaken during Stage 3 construction works (Minto Storage and Distribution Centre, Stage 3 Construction Noise Audit, 29 September 2008 by Acoustic Dynamics Pty Ltd) which reported that predicted noise emission levels at the New Generation Childcare Centre was below the relevant noise criteria. In addition, ENVIRON was provided a copy of correspondence from the Department of



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
						Planning, dated 24 October 2008, that confirmed the Stage 3 Construction Noise Audit met the requirements of the consent condition 5.4 and construction noise was below the required criteria.
4.19	The Applicant shall only undertake noisy site preparation works and noisy construction activities (including transportation of fill and spoil) associated with the development, between the following hours: a) 7:00 am to 6:00 pm Mondays to Fridays, inclusive; b) 8:00 am to 1:00 pm on Saturdays; and c) At no time on Sundays or public holidays.		✓		Compliant	Facility personnel advised that preparation and construction activities were only undertaken during the hours specified in this condition.
4.20	The hours of site preparation works and construction activities specified under condition 4.17 of this consent may be varied with the prior written approval of the Director-General. Any request to alter the hours of site preparation works or construction activities specified under condition 4.17 shall be: a) considered on a case-by-case basis; b) accompanied by details of the nature and need for activities to be conducted during the varied site preparation and construction hours; c) details of how potentially affected members of the community will be consulted and informed of the proposed varied site preparation and construction hours; and d) accompanied by written evidence of the EPA's agreement with the proposed variation in construction times, after providing any information necessary for the EPA to reasonably determine that activities undertaken during the varied construction hours will not adversely impact on the acoustic amenity of receptors in the vicinity of the site.		✓		N/A	So noted. However, there are currently no site preparation or construction works being undertaken, the last construction works being undertaken during 2008.
Operational Noise						



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
4.21	The Applicant shall design, construct, operate and maintain the development to ensure that the noise contributions from the development to the background acoustic environment do not exceed the maximum allowable noise contributions specified in Table 2, at those locations and during those periods indicated. The maximum allowable noise contributions apply under: a) Wind speeds up to 3ms ⁻¹ (measured at 10 metres above ground level); or b) Temperature inversion conditions up to 3°C per 100 metres and wind speeds up to 2 ms ⁻¹ (measured at 10 metres above ground level).	✓			Compliant	Facility personnel advised that the site has been constructed to design plans as approved by DP&I. ENVIRON was provided with the most recent noise assessment undertaken in May 2009 by Acoustic Dynamics (Minto Storage and Distribution Centre, Stage 3 Operational Noise Audit, 10 June 2009 by Acoustic Dynamics). The noise assessment was conducted after the construction of Stage 3, during normal operational times. The noise contributions from the development were measured to be below the maximum allowable noise contributions specified in Table 2.
Measurement of Noise Impacts						
4.22	Noise from the development shall be: a) Measured at the most affected point on or within the residential boundary to determine compliance with LAeq(15minute) noise limits; or b) Measured at 1 metre from the dwelling façade to determine compliance with LA1(1 minute) noise limits.	✓			Compliant	ENVIRON noted from the Stage 3 Operational Noise Report by Acoustic Dynamics, 10 June 2009, that noise contribution readings were taken at the locations specified by this condition.
Soil and Water Impacts						
4.23	Redox shall comply with section 120 of the <i>Protection of the Environment Operations Act 1997</i> , which prohibits the pollution of waters.	✓			Compliant	Facility personnel advised that stormwater isolation valves are used at the three oil and silt arrestor pits on site, which are located near the chemical storage warehouses. These isolation valves are in a permanently closed position to prevent potentially contaminated stormwater being released to Bow Bowing Canal. Testing of stormwater samples is undertaken prior to discharge to the canal to ensure stormwater quality meets acceptable criteria. ENVIRON was provided copies of some laboratory reports for the analysis of



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
						stormwater samples taken during 2012 and 2013 to confirm that testing had occurred.
Soil, Contamination and Geotechnics						
4.24	The Applicant shall ensure that all materials displaced during site preparation and construction works are stabilised or relocated and made secure so that these materials will not detrimentally affect any watercourse or riparian area.		✓		N/A	So noted. ENVIRON notes this condition is not applicable to the current operations and has been excluded from ENVIRON's scope of work.
4.25	Prior to the commencement of any site preparation or construction work, Redox shall submit for the approval of the Director-General, a geo-technical assessment of the site.		✓		N/A	So noted. ENVIRON notes this condition is not applicable to the current operations and has been excluded from ENVIRON's scope of work.
4.26	Prior to the commencement of any site preparation of construction work on the site, the Applicant shall submit for the approval of the Director-General, a contamination review of the site to confirm the presence, or otherwise of any contamination on the site, and to demonstrate that any contamination on the site is not inconsistent with the development. The contamination review shall be prepared by a suitably qualified person(s) and shall detail any additional measures that shall be implemented to address contamination, if identified, and if required.		✓		N/A	So noted. ENVIRON notes this condition is not applicable to the current operations and has been excluded from ENVIRON's scope of work.
4.27	Depending on the outcome of the investigations required by Condition 4.26, the Director-General may require Redox to prepare and implement a Soil Contamination Protocol.		✓		N/A	So noted. ENVIRON notes this condition is not applicable to the current operations and has been excluded from ENVIRON's scope of work.
Bow Bowing Canal and Riparian Zone						
4.28	The Applicant shall establish and maintain a riparian zone, consisting of local native plant species, in the area between the development and the watercourse within the property boundary. The zone shall be designed to ensure bed and bank stability of this		✓		Compliant	Facility personnel advised the riparian zone was established in early 2006 and planted with local native species. Maintenance of this area and other site landscaped areas is undertaken by Redox's Maintenance Officer



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	area, and to prevent any sedimentation and water quality impacts on Bow Bowling Canal resulting from the development. The riparian zone shall be designed and constructed to meet the requirements of the Department and shall be addressed as part of the Vegetation Construction Environmental Management Plan (condition 7.2(d) – should be 7.2(c)(v)).					under a landscape maintenance program which outlines the schedule for maintaining the landscaped areas in a tidy and healthy state.
4.29	The Applicant shall maintain the riparian zone, as required by condition 4.28, for a period of at least two years after final planting. Every six months during that period the Applicant shall submit to the satisfaction of the Department, a status detailing the progress of implementation of the Vegetation Construction Environmental Management Plan (condition 7.2d).			✓	Compliant	Facility personnel advised that a progress report was submitted to the Department every six months during the two year period after final planting of the riparian zone. ENVIRON was provided copies of the Vegetation Management Report – Progress/ Status Reports for two of the four reporting periods (August 2006 and February 2007) during the two year period and copies of correspondence from the Department of Planning confirming receipt of reports for three of the four reporting periods (including the final progress report). The Department of Planning correspondence indicated the progress reports were approved as satisfying the requirements of this condition.
4.30	The Applicant shall design and construct any stormwater outlet structure located within 40 metres of Bow Bowling Canal to ensure that the structure does not compromise the stability or function of the riparian zone. The design of any outlet structure within the riparian zone, including pipelines and spillways, shall be in accordance with the Departments guideline <i>Stormwater Outlet Structures to Streams</i> and shall be approved by the Director-General prior to the commencement of any construction works within the riparian zone. Amendment - The Applicant shall design and construct any stormwater outlet associated with the development for Bow Bowling Canal in accordance		✓		Compliant	Stormwater outlets from the site discharge directly into Bow Bowling Canal. There are no outlet structures discharging into the riparian zone. The Redox Operational Environmental Management Plan dated November 2011 (Revision 3) notes that there are two stormwater outlets draining to Bow Bowling Canal and that these were designed in accordance with Council's Standard Design Requirements SD88.



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	with Council's guideline Standard Design Requirements SD88 – Standard Main Channel Outlet Design.					
Waste Generation and Management						
4.31	The Applicant shall not receive waste at the site for storage, treatment, processing or reprocessing, and shall not dispose of waste generated by the development on the site, except as may be expressly permitted by an EP Licence for the development under the <i>Protection of the Environment Operations Act 1997</i> .			✓	Compliant	Facility personnel advised that wastes from off-site sources are not received, stored, treated, or processed at the site and any wastes generated by site activities are disposed of by waste contractors to off-site facilities. This was confirmed during ENVIRON's site walk around and through a review of selected waste disposal documentation.
4.32	Except as provided by any EP Licences issued for the development, the Applicant shall ensure that only the following hazardous &/or industrial and/or Group A waste listed below are generated &/or stored at the site: i) Acidic solutions or acids in solid form; ii) Basic solution or bases in solid form; iii) Non-toxic salts; iv) Zinc compounds; v) Waste oil/water, hydrocarbons/water mixtures or emulsions; vi) Containers that are contaminated with residues of substances referred to in the National Environment Protection (Movement of Controlled Wastes between States and Territories) Measure list of hazardous, industrial and liquid waste codes; vii) Surface active agents (surfactants), containing principally organic constituents and which may contain metals and inorganic materials; viii) Boron compounds; ix) Cadmium, cadmium compounds;			✓	Compliant	ENVIRON reviewed the waste log for 2011 and 2012 and noted that waste materials with waste codes E100, F110 and Z500 were generated and stored at the site during 2011. These waste types are not one of the permitted wastes specified in this condition. However, the condition does make reference to permitted waste types under the Environment Protection Licence. A review of the Environment Protection Licence confirmed that the site is licensed as a chemical storage waste generation activity permitting hazardous waste, restricted solid waste, liquid waste and combinations of these to be generated or stored in quantities between 5 to 100 tonnes a year. ENVIRON considers that the site is therefore in compliance with this condition. In addition, ENVIRON contacted the EPA to



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	x) Chromium compounds (hexavalent and trivalent); xi) Cobalt compounds; xii) Copper compounds; xiii) Ethers; xiv) Phenols, phenol compounds including chlorophenols; xv) Phosphorus compounds excluding mineral phosphates; xvi) Selenium, selenium compounds; xvii) Waste chemical substances arising from research and development or teaching activities including those which are not identified and/or new and whose effects on human health and/or the environment are not known; xviii) Fire debris and fire washwaters; xix) Halogenated organic solvents; xx) Inorganic fluorine compounds excluding calcium fluoride; xxi) Inorganic sulphides; xxii) Isocyanate compounds; xxiii) Lead, lead compounds; xxiv) Nickel compounds; xxv) Organic phosphorous compounds;					confirm the waste description for Z500 is no longer used and should not be used to describe wastes. Redox should consider reclassifying wastes to codes other than Z500.
4.33	The quantity of hazardous and/or Industrial and/or Group A waste generated at the site per year shall not exceed 100 tonnes.			✓	Compliant	ENVIRON reviewed the waste log for 2011 and 2012 that is maintained by the Regulatory Affairs Coordinator. The waste logs reported the total waste generated (excluding general waste) for each of these years was less than 100 tonnes.
4.34	The quantity of hazardous and/or Industrial and/or Group A waste stored at the sit shall not exceed 50 tonnes at any one time.			✓	Compliant	ENVIRON reviewed the waste log for 2011 and 2012 and noted that the total waste stored (excluding general waste) at any one time did not exceed the 50 tonnes condition requirement.



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4.34A	Amendment – Prior to the commencement of construction of the truck wash facility at the site, the Applicant shall consult with Sydney Water with respect to the design of the facility to ensure that discharges to the sewer from the development can meet any relevant standards set by Sydney Water. Prior to the operational use of the truck wash facility, the Applicant shall demonstrate to the Director-General that a Trade Waste Agreement has been entered into with Sydney Water for the discharge of wastewater generated by that facility.				Compliant	Facility personnel advised that Sydney Water was consulted during the design of the truck wash facility. ENVIRON was provided a copy of correspondence from the Department acknowledging that Sydney Water had approved in-principle the truck wash facility. Compliance with this condition is also supported by the issue of a Consent to Discharge Industrial Trade Wastewater (Consent No. 29981) issued by Sydney Water, dated 25 August 2010.
Air Quality Impacts						
Odour						
4.35	Redox shall design, construct, operate and maintain the development to prevent the emission of any offensive odour from the site that is attributable to the operation of the development.	✓			Compliant	It is assumed the development has been designed and constructed so as to prevent the emission of offensive odours as it has been audited previously following completion of the earlier stages. There are understood to have been no changes to the facility since Stage 3 was completed in 2008. Redox has in place procedures that specify that if any materials delivered to site from a supplier, has a discernible odour or cannot be appropriately stacked (which may lead to packaging damage and release of odours) then this material is returned to the supplier at the earliest possible time, or if this is not possible is transported to another facility (i.e. a subcontract warehouse).
Acetic Acid Scrubber						



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4.36	The Applicant shall design, construct, commission and operate the acetic acid scrubber to ensure that the emissions from the scrubber meet the requirements specified in the Environment Protection Licence.	✓			N/A	Facility personnel advised that the acetic acid scrubber (part of Stage 4) has not been constructed and there are no foreseeable plans to undertake these activities or construct Stage 4 at the site.
4.37	Prior to the commencement of decanting activities involving acetic acid on the site, the Applicant shall submit to the Director-General and the EPA the manufacturer's performance guarantee and the detailed final design of the acetic acid scrubber.			✓	N/A	Not applicable. Decanting activities associated with Stage 4 of the development have not been undertaken at this stage and there are no foreseeable plans to undertake these activities at the site.
Dust Emissions						
4.38	Redox shall design, construct, commission, operate and maintain the development in a manner that minimises dust emissions.	✓			Compliant	The site has developed and implemented a Dust Control Management procedure to minimise dust emissions from site activities. Measures that are in place include immediate clean-up of any spilled materials such as from damaged packages, daily sweeping and vacuuming of warehouse floors, keeping the garage doors to each vacuuming of other hardstand areas such as driveways and external paved areas. In addition, the Store Manager undertakes weekly inspections of the warehouses to ensure that these areas are kept clean and tidy, amongst other criteria. During ENVIRON's site walk over, the site was observed to be in a clean and tidy state with no significant dust emissions being generated.
Visual Amenity Impacts						



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4.39	Redox shall prepare an external design panel indicating the proposed external design finishes, materials and configuration, in consultation with Council. The Applicant shall submit the design panel to the Director-General for approval prior to the commencement of the construction.		✓		N/A	Not applicable to this reporting period. ENVIRON notes this condition is not applicable to the current operations and has been excluded from ENVIRON's scope of work.
4.40	The Applicant shall ensure that all external lighting associated with the development is mounted, screened and directed in such a manner so as not to create a nuisance to surrounding properties or roadways. The lighting must be the minimum level of illumination necessary and shall comply with AS4282 (INT) 1995 Control of Obtrusive Effects of Outdoor Lighting.	✓			Compliant	External lighting present on the site is used primarily for security purposes rather than for operational activities. Facility personnel noted that external lighting complies with AS4282 and that to date there have been no complaints made in relation to the lighting at the site.
4.41	This consent does not permit the display of any advertisement, or the erection of any advertising structure on the site. This does not apply to any advertisement or structure that cannot be seen from the nearest public space, nor any signage specified elsewhere in this consent (refer condition 3.2).	✓				Facility personnel advised that a sign is located at the Swettenham Road entrance that advertises vacant positions at the facility. This sign has approximate dimensions of 1.5 m x 1.5 m. There are no other advertisements or advertisement structures erected on the site.
4.4	Redox shall ensure that all external lighting associated with the development is mounted, screened and directed in such a manner so as not to create a nuisance to surrounding properties or roadways.		✓		Compliant	Not applicable to this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
4.41	This consent does not permit the display of any advertisement, or the erection of any advertising structure, on the site.	✓			Noted	
5	ENVIRONMENTAL MONITORING AND AUDITING					
5.1	Redox shall undertake all monitoring, including recording and reporting of monitoring results, as required under this consent, and as may be specified	✓			Compliant	Redox currently undertakes monitoring and reporting of the following: · Stormwater quality prior to discharge to Bow Bowing Canal, as required by this



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	under an Environmental Protection Licence.					consent (refer condition 5.8). Copies of laboratory reports for the analysis of stormwater samples were provided to ENVIRON. The consent also specifies the following to be monitored, as relevant: • Transport Auditing (refer condition 5.2); • Noise monitoring (construction and operational) (refer condition 5.4 to 5.7); and • Air quality (refer condition 5.9 to 5.11). There are no requirements specified in the EP Licence for monitoring of air, noise or water emissions for the current activities at the site. In addition, the site monitors and reports on their trade wastewater discharge as required by the Consent to Discharge Industrial Trade Wastewater issued by Sydney Water Corporation.
Transport Auditing						
5.2	Within 90 days of commissioning each stage of the development, and then as may be required by the Director-General, the Applicant shall commission an independent Transport Audit of the development. This Audit shall: a) Be undertaken by a suitably qualified and experienced person, approved by the Director General prior to the commencement of the Audit; b) Assess whether the heavy vehicles associated with the development are complying with the measures detailed in Traffic Management Plan (condition 7.5(b)) and as required by this consent; and c) If any non-compliance is detected, identify what additional measures will be implemented to ensure			✓	Compliant	Redox provided a copy of the correspondence from the Department of Planning approving the consultant to be used for the Transport Audit for Stage 3. The Transport Audit report identified one non-conformance related to a 'No Entry' sign not meeting Australian Standard requirements. The report included a recommended corrective action which facility management has noted as being closed out. A copy of internal documentation requesting action on the Audit report recommendation and subsequent implementation of the recommendation was provided to ENVIRON to demonstrate this matter had been addressed.



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	compliance.					
5.3	Within 28 days of conducting the Audit (for 5.2), the Applicant shall provide the Director-General and Council with a copy of the audit report. If the Audit identifies any non-compliance with the Transport Management Plan or any Consent conditions, the Applicant shall detail what additional measures would be implemented to ensure compliance, indicating who would implement these measures, when by and how effectiveness of the measures would be measured & reported to the Director-General.			✓	Compliant	The Transport Audit report for Stage 3 was submitted to the Department of Planning within the required timeframe. Further communication from the Department requested Redox provide an action plan detailing the response to the Auditor's recommendation and facility personnel advised this was undertaken and that the recommendation has been implemented. Refer to condition 5.2 for further details.
Noise Monitoring and Auditing						
Construction Noise						
5.4	Within one month of commencement of construction activities associated with each stage development, the Applicant shall submit to the Director-General and the EPA a Construction Noise Audit to demonstrate compliance with the construction noise limits specified in conditions 4.17 & 4.18. The Audit shall be completed by a suitably qualified acoustic consultant, approved by the Director-General prior to commencement of the Audit. Should the Audit indicate that construction activities are above the set noise criteria, the report shall identify additional measures to be implemented to ensure compliance, indicating who would implement the measures, when by, and how the effectiveness of		✓		Compliant	Redox provided a copy of the last construction noise audit (for Stage 3) and correspondence from the Department of Planning approving the consultant to be used, Acoustic Dynamics Pty Ltd, for the Construction Noise Audit for Stage 3. The Construction Noise Audit report (Minto Storage and Distribution Centre, Stage 3 Construction Noise Audit, 29 September 2008 by Acoustic Dynamics) noted that noise emission levels at the nearby receivers were below the relevant criteria and that no special noise mitigation measures were required for the Stage 3 construction works.
5.5	Redox may seek the Director-General's approval, in consultation with the EPA, to dispense with the requirement to undertake a Construction Noise Audit for stage 2, 3 and/or 4 of the development.		✓		N/A	Stage 4 has not yet been constructed and the facility has not sought Director-General approval for dispensation of this condition.



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Operational Noise						
5.6	Within 90 days of the commencement of operation of each stage of the development, Redox shall conduct an Operational Noise Audit of its operations.			✓	Compliant	Not applicable to this reporting period. Stage 3 (of 4) is the latest stage to have been constructed and is operational. An operational noise audit was undertaken in May 2009 (Redox Pty Ltd – Minto Storage and Distribution Centre, Stage 3 Operational Noise Audit, 10 June 2009, by Acoustic Dynamics). ENVIRON reviewed the audit report which concluded that the site operations complied with the relevant noise criteria and that no additional noise mitigation measures were required for the operation of Stage 3. Correspondence from the Department approving the consultant to be used for the operational noise audit was not available. However, as the consultant, Acoustic Dynamics Pty Ltd, was previously approved for the construction noise audit in 2008, ENVIRON has assumed approval would have been granted as a suitably qualified and experienced person.
5.7	Within 28 days of conducting the Audit, Redox shall provide the Director-General and EPA with a copy of the Noise Audit report.			✓	Compliant	Not applicable to this reporting period. ENVIRON was provided a copy of correspondence from the Department approving the Operational Noise Audit undertaken in early 2007. Facility personnel provided a copy of the subsequent Audit report for the operation of Stage 3, prepared in June 2009. ENVIRON was informed the 2009 Audit report was submitted to the Department, although no record was available to confirm this.



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Stormwater Quality Monitoring						
5.8	Prior to commencement of operations, the Applicant shall submit for the approval of the Director-General, in consultation with Council, a Stormwater Quality Monitoring Program. The Program shall form part of the Stormwater Operational Environmental Management Plan (per condition 7.5(c)). The Program shall include, but not limited to: a) Identification of contaminants to be tested, including those required under the Clean Water Regulation (Class R classification) b) Monitoring frequencies c) Methodologies for stormwater quality monitoring The Stormwater Quality Monitoring Program shall be submitted to Director-General for approval prior to commencement of operations.			✓	Compliant	Facility personnel advised that the Stormwater Quality Monitoring Program forms part of the Stormwater Management Plan which is contained within the Operational Environmental Management Plan (OEMP). The Stormwater Quality Monitoring Program was approved by the Director-General. ENVIRON was provided a copy of correspondence from the Department approving the OEMP (of which the Stormwater Management Plan is part of). ENVIRON notes that the Stormwater Quality Monitoring Program and the related Water Release from Retention Basin procedure (No. 3405) includes consideration of monitoring frequencies, methodologies and parameters to be tested including for Class R classification.
Air Quality Monitoring and Auditing						
Acetic Acid Scrubber						
5.9	Redox shall periodically determine the pollutant concentrations discharged from the acetic acid scrubber.			✓	N/A	Not applicable. Facility personnel advised that the acetic acid scrubber (part of Stage 4) has not been constructed and there are no foreseeable plans to undertake these activities or construct Stage 4 at the site.
5.10	Within 90 days of commencing acetic acid decanting activities at the site ... Redox shall conduct an Air Quality Audit of its operations to confirm the air emission performance of the acetic acid scrubber.			✓	N/A	Not applicable. Decanting activities are associated with Stage 4 of the development which has not been undertaken. There are no foreseeable plans to undertake these activities.
5.11	Within 28 days of conducting the Audit referred to under condition 5.10 of this consent, Redox shall provide the Director-General and EPA with a copy of the Air Quality Audit report.			✓	N/A	Not applicable. Refer to condition 5.10.



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Independent Hazard Auditing						
5.12	Twelve months after the commencement of operation of Stage 1 of the development ... Redox shall commission an independent, qualified person or team to undertake a Hazard Audit of the development. Further Hazard Audits shall be undertaken every three years or within 12 months of commissioning Stages 2, 3 and 4 of the development.			✓	Compliant	Facility personnel advised that Independent Hazard Audits were undertaken for the facility in 2006 and 2010. ENVIRON was provided with copies of Department of Planning correspondence for the Audit Report to confirm these had been undertaken. Redox has commissioned another Independent Hazard Audit to be completed by Moore Management by the end of December 2013. ENVIRON sighted documentation to confirm that the Moore Management consultant undertaking the audit has been approved by the Director-General.
Independent Environmental Auditing						
5.13	Twelve months after the commencement of operation of each stage of the development, and every three years thereafter, Redox shall commission an independent, qualified person or team to undertake an Environmental Audit of the development.			✓	Compliant	Facility personnel advised that Independent Environmental Audits were undertaken for the facility in 2006 and 2010. ENVIRON was provided with copies of Department of Planning correspondence for the Audit Report to confirm these had been undertaken. Redox has commissioned another Independent Environmental Audit to be completed by ENVIRON Australia Pty Ltd by the end of December 2013. ENVIRON has been approved by the Director-General to undertake the audit.
5	ENVIRONMENTAL MONITORING AND AUDITING					
6.1	Subject to confidentiality, Redox shall make all documents required under this consent available for public inspection on request.	✓			Compliant	Redox has a Community Right to Know Policy that commits to providing information on its activities and listening and responding to community concerns. Redox has committed to making the following information



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						available to interested parties: inputs, outputs, processes and storage; future plans; compliance with the Responsible Care Program; emergency response information, safety data sheets for products; environmental information on emissions, waste and reportable incidents; and licences and risk assessments undertaken. The website also provides some of this information.
Complaints Procedure						
6.2	Prior to the commencement of construction of the development, Redox shall ensure that the following are available: (a) a 24-hour, toll-free telephone number on which complaints about the development may be registered; (b) a postal address to which written complaints may be sent; and (c) an email address to which complaints may be transmitted. The telephone number, postal address and email address shall be advertised on at least one occasion prior to the commencement of construction of each stage of the development, through a medium approved by the Director-General.		✓ ✓ ✓ ✓		Compliant	Facility personnel advised that during construction of the development, a 24-hour toll free telephone number, a postal address and email address were available for registering complaints. ENVIRON notes that the current Redox website provides the postal and street address, a toll-free number and an email address to make contact with the site.
6.3	Redox shall record details of all complaints received ... in an up-to-date Complaints Register. The Complaints Register shall be made available upon request.	✓			Compliant	Redox documents complaints in its Redebiz system. A screenshot of the complaints register (recorded as a Problem in Redebiz) was provided to ENVIRON indicating that the system can record the condition requirements a) to f). ENVIRON understands that the complaints register on Redebiz would be made available for inspection by the Director-General upon request.



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Community Communication Strategy						
6.4	Prior to the commencement of operations at the site, Redox shall prepare and implement a Community Communication Strategy for the development. The Strategy shall be approved by the Director-General prior to the commencement of any operations on the site.			✓	Compliant	Redox has implemented a Community Communication Strategy to address community concerns and outline mechanisms for providing information. Facility personnel provided ENVIRON with documentation confirming the Director-General's approval of the Community Communication Strategy.
7	ENVIRONMENTAL MANAGEMENT					
Environmental Representative						
7.1	Prior to the commencement of construction of the development, Redox shall notify the Director-General of the name and contact details of a suitably qualified and experienced Environmental Representative, and any changes to that appointment that may occur from time to time.	✓			Compliant	Facility personnel advised that during construction, commissioning and operation of the development, an Environmental Representative was and continues to be employed on a full-time basis. The current Environmental Representative has confirmed to ENVIRON that their duties and responsibilities encompassed the requirements outlined in this condition. Facility personnel noted that the Environmental Representative has changed a number of times since the development obtained consent. The Director-General has previously been notified of these changes in personnel and the company has recently informed the Director-General of the latest Representative.
Construction Environmental Management Plan						



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7.2	Redox shall prepare and implement a Construction Environmental Management Plan to outline environmental management practices to be followed during site preparation and construction activities during each stage of the development.		✓		N/A	Not applicable to this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
	✓		Not applicable to this reporting period			
	Preparation and construction works associated with any stage of the development shall not commence until written approval has been received from the Director-General.		✓		Noted	
7.3	As part of the Construction Environmental Management Plan for the development, Redox shall prepare and implement the following Management Plans: (a) Noise Management Plan (b) Transport Management Plan (c) Erosion and Sediment Management Plan (d) Vegetation Management Plan		✓ ✓ ✓ ✓		N/A	Not applicable to this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development. It should be noted that the Vegetation Management Plan (referred to as the Landscape Management Plan in Redox's Operational Environmental Management Plan) continues to be used during the operation of the site.
Operation Environmental Management Plan						
7.4	The Applicant shall prepare and implement an Operational Environmental Management Plan to detail an environmental management framework, practices and procedures to be followed during the operation of the development. The Plan shall include, but not necessarily limited to:			✓	Non –Compliant, Refer to Action Plan table 2.3	Redox has prepared and implemented an Operational Environmental Management Plan (OEMP) taking into account the requirements i) to vii) of this condition. ENVIRON's review of the current Plan (dated November 2011, Revision 3)



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	i) Identification of all statutory & other obligations required to fulfil in relation to operation of phase 1 of the development, including all consents, licences, approvals and consultations ii) A description of the roles and responsibilities for all relevant employees involved in the operation of the development iii) Overall environmental policies and principles to be applied to be applied to the operation of the development iv) Standards and performance measures to be applied to the development, and a means by which environmental performance can be periodically reviewed and improved, where appropriate v) Management policies to ensure that environmental performance goals are met and to comply with the conditions of this consent vi) The Management Plans listed under Condition 7.5 of this consent vii) The environmental monitoring requirements under conditions 5.8 (stormwater quality monitoring) and 5.9 (pollutant concentrations at acetic acid scrubber) of this consent, inclusive. The Plan shall be submitted for the approval of the Director-General no later than one month prior to commencement of operation of stage 1, or such period agreed by the Director-General. Operation shall not commence until written approval received					indicated that the requirements of condition 7.4 have been considered and included in the Plan, as required, although it should be noted that: - For requirement i), obligations in relation to consent conditions and the Environment Protection Licence only are included. The Plan should be improved by including consideration of obligations under other Environmentally related approvals that apply to the site including the Consent to Discharge Industrial Trade Wastewater issued by Sydney Water Corporation and the Notification of Dangerous Goods on Premise issued by NSW WorkCover. - For requirement vii), environmental monitoring under condition 5.8 (i.e. stormwater quality) only applies. As the acetic acid scrubber has not been yet been constructed, there is no current requirement to undertake air quality monitoring of this activity. Facility personnel advised that the Director-General's approval of the OEMP was obtained. ENVIRON was provided a copy of correspondence from the Department approving the OEMP. Based on ENVIRON's site walk over and a review of a sample of documentation, it is considered that the OEMP is being implemented by the facility, in particular in the areas of waste management, stormwater management, incident reporting and storage of dangerous goods.



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7.5	As part of the Operation Environmental Management Plan for the development, Redox shall prepare and implement the following Management Plans: (a) Noise Management Plan (b) Transport Management Plan (c) Stormwater Management Plan (d) Waste Management Plan (e) Landscape Management Plan			✓ ✓ ✓ ✓ ✓	Compliant	ENVIRON has sighted each of specified management plans required under this condition and confirm the plans have been prepared and are implemented as required. ENVIRON was provided a copy of correspondence from the Department approving the OEMP (which contains each of these plans) and acknowledging that Campbelltown City Council and the (then) Department of Environment and Conservation (i.e. EPA) had been consulted with respect to the OEMP. Based on ENVIRON's site walk over and a review of a sample of documentation, it is considered that the Management Plans specified in requirements a) to e) of this condition are being implemented by the facility. For example, the following observations were made: • Excessive levels of noise were not noted, particularly when forklifts and transport vehicles were in use; • The storage areas and yard areas were clean and tidy, and waste materials were stored in dedicated areas. Waste logs were maintained to monitor the quantities generated on site; • Traffic flow requirements at the site were signposted and the traffic movement was in compliance with site requirements. Traffic route inspection forms were provided to ENVIRON to confirm checks on compliance with transport procedures were undertaken as required;



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
						Laboratory reports for the analysis of stormwater quality was provided to ENVIRON to demonstrate that monitoring is undertaken. The stormwater isolation valves at the stormwater pits were sighted by ENVIRON.
7.6	At least one month prior to the operation of Stage 2, Stage 3 and Stage 4 of the development, Redox shall update and submit for the approval of the Director-General, the Operation Environmental Management Plan. Operation of Stage 2, Stage 3 and Stage 4 shall not commence until the Director-General has approved the updated Plans.			✓	Compliant	Not applicable to this reporting period. Prepared as pre-operation requirement for Stages 1 & 2 of the development.
8	ENVIRONMENTAL REPORTING					
Incident Reporting						
8.1	Redox shall notify the EPA and the Director-General of any incident with actual or potential significant off-site impacts on people or the biophysical environment as soon as practicable after the occurrence of the incident. The Applicant shall provide written details of the incident to the EPA and the Director-General within seven days of the date on which the incident occurred.	✓			Compliant	Facility personnel advised there have been no incidents with actual or potentially significant off-site impacts requiring notification to the EPA or Department of Planning and Infrastructure. A review of the incident register by ENVIRON notes that in the past few years (2010 to 2013) there have been between 6 to 9 incidents each year, of which approximately half related to injuries. There were no significant environmental issues reported.
8.2	Redox shall meet the requirements of the Director-General to address the cause or impact of any incident, as it relates to this consent, reported in accordance with 8.1, within such period as the Director-General may require.	✓			N/A	Noted. Facility personnel advised that there have been no requirements by the Director-General for this condition as no incidents have been notified to the EPA or the Director-General.
Annual Performance Reporting						



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
8.3	The Applicant shall, throughout the life of the development, prepare & submit for the approval of the Director-General, an Annual Environmental Management Report (AEMR). The AEMR shall review the performance of the development against the Operation Environmental Management Plan (refer to condition 7.4 of this consent), the conditions of this consent and other licences and approvals relating to this development. The AEMR shall include, but not necessarily be limited to: a) Details of compliance with the conditions of this consent; b) A copy of the Complaints Register (refer to condition 6.3 of this consent) for the preceding twelve-month period (exclusive of personal details), and details of how these complaints were addressed and resolved; c) A comparison of the environmental impacts and performance of the development against the environmental impacts and performance predicted in those documents listed under condition 1.2 of this consent; d) Results of all environmental monitoring required under this consent and other approvals, including interpretations and discussion by a suitably qualified person; and e) A list of all occasions in the preceding twelve month period when environmental performance goals for the development have not been achieved, indicating the reason for failure to meet the goals and the action taken to prevent recurrence of that type of incident. The Applicant shall submit a copy of the AEMR to the Director-General every year, with the first AEMR to be submitted no later than twelve months after the commencement of operation. The Director-General	✓			Compliant	Facility personnel advised that an AEMR has been submitted to the Director-General each year since operations commenced. The latest AEMR for 2012 was submitted in early 2013. ENVIRON was provided a copy of the 2012 AEMR and notes that the requirements a) to e) of this condition have been addressed in the AEMR. In the AEMR, Redox noted that there was one environmental performance goal that had not been achieved at the time of report preparation (per requirement e)) and the associated action was reported as "pending." Facility personnel noted that there has been no acknowledgement of receipt of this AEMR by the Department of Planning and Infrastructure to date.



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
	may require the Applicant to address certain matters in relation the environmental performance of the development in response to review of the Annual Environmental Report. Any action required shall be completed within such period as the Director-General may require.					

2.2 Compliance with Environmental Protection Licence 12041

Table 2.2: Compliance with EPL 12041

Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
1	ADMINISTRATIVE CONDITIONS						
A1	What the licence authorises and regulates						
A1.1	N/A					N/A	
A1.2	This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation. Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition. Fee Based Activity: Scale General chemicals storage: 0–5000 kL of active storage capacity.			✓	Procedure 3801 – Warehouse Limitations.	Compliant	ENVIRON's review of the stock manifest dated 1 November 2012 notes that quantities of dangerous held at that time were below the maximum limit.



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Item	Licence Condition		Development Stage			Redox Procedure	Compliance	Evidence
			Gen.	Con.	Op.			
	Chemical storage waste generation: >5–100 T.				✓	Procedure 3402 – Waste Management & Disposal.		
A2	Premises to which this licence applies							
A2.1	Premises details.		✓				Noted	
A3	Other activities							
A3.1	N/A						N/A	
A4	Information supplied to the EPA							
2	DISCHARGES TO AIR & WATER & APPLICATIONS TO LAND							
P1	Location of Monitoring/Discharge Points and Areas							
P1.1	Air							
	EPA ID.	Type of Monitoring Point	Type of Discharge Point	Location				
	1	Discharge to air Air emissions monitoring	Discharge to air Air emissions monitoring	Acetic Acid Scrubber "Area A"	✓		Compliant	Not applicable to this reporting period. The Acetic Acid Scrubber will be part of Stage 4 of the development. The facility has not constructed the tank farm/ decanting area or the acetic acid scrubber, which are part of Stage 4, so this requirement is not applicable at this stage.
P1.2	N/A						N/A	
P1.3	N/A						N/A	
3	LIMIT CONDITIONS							
L1	Pollution of Waters							
L1.1	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.		✓			OEMP; Procedure 3405 – Water Release from Retention Basin.	Compliant	Facility personnel advised that stormwater isolation valves are used at the three oil and silt arrestor pits on site, which are located near the chemical storage warehouses. These isolation valves are in a permanently closed position to prevent potentially contaminated stormwater being released to



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
							Bow Bowling Canal. Testing of stormwater samples is undertaken prior to discharge to the canal to ensure stormwater quality meets acceptable criteria. Trade waste water generated at the site is licensed under a Consent to Discharge Industrial Trade WasteWater issued by Sydney Water Corporation. Trade wastewater is discharged to sewer and no other discharges were observed by ENVIRON during the site walk over.
L2	Load Limits						
L2.1	N/A					N/A	
L2.2	N/A					N/A	
L3	Concentration Limits						
L3.1	N/A					N/A	R1.2
L3.2	N/A					N/A	
L3.3	N/A					N/A	
L4	Volume and Mass Limits						
L4.1	N/A					N/A	
L5	Waste						
L5	Waste – The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled “Waste” and meeting the definition, if any, in the column titled “Description” in the table below. Note: Refer to Appendix B for the full conditions.			✓	Waste Management Plan (OEMP); Procedure 3402 – Waste Management & Disposal.	Compliant	Waste from off – site sources are not received at the facility. The only wastes present at the site are those that have been generated by site activities.
L6	Noise Limits						



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
L6.1	Noise from the premises must not exceed the sound pressure level (noise) limits at the nominated receiver locations.			✓	Noise Management Plan (OEMP); Procedure 3116 – Noise Management.	Compliant	ENVIRON was provided with the most recent noise assessment undertaken in May 2009 by Acoustic Dynamics (Minto Storage and Distribution Centre, Stage 3 Operational Noise Audit, 10 June 2009 by Acoustic Dynamics). The noise assessment was conducted after the construction of Stage 3, during normal operational times. The noise contributions from the development were measured to be below the maximum allowable noise contributions specified under this condition.
L7	Polychlorinated Biphenyls (PCBs)						
	Polychlorinated Biphenyls (PCBs) – the licensee must or where no specific conditions are outlined in this licence, the licensee must comply with the “Chemical Control Order in Relation to Materials and Waste Containing Polychlorinated Biphenyl, 1997.”	✓				N/A	The first stage of the site was constructed in 2005 and given its age ENVIRON considers that it is unlikely that PCBs would be present on-site.
L8	Asbestos						
	The licensee must comply with the Protection of the Environment Operations (Waste) Regulation 2005.	✓				N/A	The first stage of the site was constructed in 2005 and given its age ENVIRON considers it is unlikely that asbestos containing materials would be present onsite.
L9	Odour						
L9	No condition of this licence identifies a potentially offensive odour for the purpose of section 129 of the POEO Act 1997. Section 129 of the POEO Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises, ... except if the emission is identified [in L9.1].	✓			Significant Environmental Aspects & Potential Impacts: Odour Emissions (OEMP); Procedure 3117 – Odour Control Management.	Compliant	Redox has in place procedures to prevent the release of offensive odours. These procedures specify that if any materials delivered to site from a supplier, has a discernible odour or cannot be appropriately stacked (which may lead to packaging damage and release of odours) then this material is returned to the supplier at the earliest possible time, or if this is not possible is transported to another facility (i.e. a subcontract warehouse).
4	Operating Conditions						
O1	Activities must be carried out in a competent manner						



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
O1.1	Licensed activities must be carried out in a competent manner. This includes: (a) the processing, handling, movement & storage of materials and substances; and (b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.			✓ ✓	Procedure 3009 – Handling, Storage, Packing, Pres. & Del. Procedure 3402 – Waste Management & Disposal.	Compliant	The facility has implemented a number of procedures to manage the handling, storage and transport of materials and waste within the facility. During ENVIRON's site walk over, the implementation of some of these procedures was observed and it was considered that the environmental management of the facility was appropriate to minimise potential impacts on the environment.
O2	Maintenance of Plant and Equipment						
O2.1	All plant and equipment installed at the premises or used in connection with the licensed activity: (a) must be maintained in a proper and efficient condition; & (b) must be operated in a proper and efficient manner.			✓ ✓	Procedure 3901 – Equipment Service. Equipment Procedures: 3902, 3903, 3904, 3906, 3917, 3918, 3919.	Compliant	ENVIRON observed during the site walk over that plant and equipment was maintained in proper condition and that a maintenance schedule is in place to ensure regular inspections and maintenance are undertaken. ENVIRON did not audit the maintenance program.
O3	Emergency Response						
O3.1	The licensee must maintain, and implement as necessary, a current emergency response plan for the premises. The licensee must keep the emergency response plan on the premises at all times. The emergency response plan must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment. If a current emergency response plan does not exist at the date on which this condition is attached to the licence, the licensee must develop an emergency response plan within three months of that date.	✓			Procedure 3403 – Emergency Procedure.	Non-Compliant, refer to Action Plan table 2.3 below.	The facility has in place an Emergency Management Plan and related procedures (e.g. emergency procedure, spill procedure) that address the requirements of this condition. Changes to the POEO Act 1997 required licensed facilities to prepare and implement a Pollution Incident Response Management Plan (PIRMP) by 1 September 2012. A review of Redox's existing Emergency Management Plan by ENVIRON notes that this plan addresses many of the requirements of a PIRMP, however, some information was observed to be missing or the level of detail could be improved. These included, for example: • A description of the hazards to human health or the environment associated with the site activities; • The maximum quantity likely to be stored or held for any pollutants; • The contact details for all relevant authorities (e.g. EPA, local Council); • A detailed map showing the location of stormwater drains;



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
							- The dates on which the PIRMP has been tested and the name of the person who carried out the test; - The dates on which the plan as updated; - The manner in which the plan is to be tested and maintained; - The PIRMP is to be made publicly available. Redox should review the Emergency Management Plan to ensure all information required for a PIRMP, as required under the POEO Act and associated Regulations are included in the plan. Further information can be found at http://www.epa.nsw.gov.au/legislation/poelegisamend2011.htm
O4	Process and management						
O4.1	The licensee must ensure that any liquid and/or non liquid waste generated and/or stored at the premises is assessed and classified in accordance with the DECC Waste Classification Guidelines as in force from time to time.	✓			Waste Management Plan (CEMP & OEMP); Procedure 3402 – Waste Management & Disposal.	Compliant	The facility tracks waste generated at the site through the use of a waste log that records the waste name, waste code, quantity, waste disposal company, hazard and/or dangerous goods classification amongst other information. Wastes that are to be recycled are segregated from other waste types and stored in separate waste bins. Refer to previous comment made for condition 4.32 of the Project Consent (Table 1) regarding waste classifications (i.e. Z500).
O4.2	The licensee must ensure that waste identified for recycling is stored separately from other waste.			✓	Waste Management Plan (CEMP & OEMP); Procedure 3404 – Recycling.	Compliant	Refer to O4.1
O5	Dust						
O5.1	All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.	✓			Significant Environmental Aspects & Potential Impacts: Dust Emissions (OEMP);	Compliant	As previously mentioned for Development Consent condition 4.38, the site has developed and implemented a Dust Control Management procedure to minimise dust emissions from site activities. Measures that are in place include immediate clean-up of any spilled materials such as from damaged packages,



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence								
		Gen.	Con.	Op.											
					Procedure 3110 – Dust Control Management.		daily sweeping and vacuuming of warehouse floors, keeping the garage doors to each warehouse area closed when access is not required, and regular sweeping and vacuuming of other hardstand areas such as driveways and external paved areas. In addition, the Store Manager undertakes weekly inspections of the warehouses to ensure that these areas are kept clean and tidy, amongst other criteria. During ENVIRON's site walk over, the site was observed to be in a clean and tidy state with no significant dust emissions being generated.								
5	MONITORING & RECORDING CONDITIONS														
M1	Monitoring Records														
M1.1 M2.1 M2.2	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition. For each monitoring/ discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample a the frequency, specified opposite in the other columns: Point 1 <table><tr><th>Pollutan t</th><th>Units of Measure</th><th>Frequenc y</th><th>Sampling Method</th></tr><tr><td>Acetic Acid</td><td>mg/m³</td><td>Quarterly</td><td>Method approved in writing by the Authority</td></tr></table> Monitoring for acetic acid is not required until the	Pollutan t	Units of Measure	Frequenc y	Sampling Method	Acetic Acid	mg/m ³	Quarterly	Method approved in writing by the Authority	✓				N/A	Stage 4 of the facility has not yet been constructed and acetic acid is not currently being stored or decanted at the site and thus this condition is not currently applicable.
Pollutan t	Units of Measure	Frequenc y	Sampling Method												
Acetic Acid	mg/m ³	Quarterly	Method approved in writing by the Authority												



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
	completion of stage 4, approximately 31 July 2009.						
M4	Recording of Pollution Complaints						
M4.1	The licensee must keep a legible record of all complaints made to the licensee, employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.	✓			Procedure 3022 – Problems & complaints.	Compliant	No complaints received. The facility documents complaints in its Redebiz system. A review of the summary of complaints recorded in Redebiz by ENVIRON confirmed that condition requirements a) to f) are required to be entered into the system.
M4.2	The record must include details of the following: (a) the date and time of the complaint; (b) the method by which the complaint was made; (c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; (d) the nature of the complaint; € the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; (f) if no action was taken by the licensee, the reasons why no action was taken.	✓			Procedure 3022 – Problems & Complaints.	Noted	No complaints received, however Procedure 3022 details requirements for recording pollution complaints.
M4.3	The record of a complaint must be kept for at least four years after the complaint was made.	✓			Procedure 3022 – Problems & Complaints.	Noted	
M4.4	The record must be produced to any authorised officer of the EPA who asks to see them.	✓			Procedure 3022 – Problems & Complaints.	Noted	
M5	Telephone complaints line						



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
M5.1	The licensee must operate a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises, unless otherwise specified in the licence.	✓			Procedure 3022 – Problems Complaints &	Compliant	ENVIRON notes that the Redox website provides a telephone number and a toll-free number and an email address to make contact with the site.
M5.2	The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.	✓			Procedure 3022 – Problems Complaints &	Compliant	The telephone number is listed at http://www.redox.com/Community/
M5.3	Conditions M5.1 and M5.2 do not apply until three months after: (a) the date of issue of the licence or (b) if this licence is a replacement licence within the meaning of the POEO (Savings and Transitional) Regulation 1998, the date on which a copy of the licence was served on the licensee under clause 10 of that regulation.	✓				N/A	Noted
6	REPORTING CONDITIONS						
R1	Annual return documents						
R1.1	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: (a) a Statement of Compliance; and (b) a Monitoring and Complaints Summary. A copy of the form in which the Annual Return must be supplied to the EPA accompanies this licence. Before the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.	✓			Procedure 3118 – Environmental Management System.	Compliant	The facility completes an Annual Return each year. A copy of the latest Annual Return (for 2012) was provided to ENVIRON to confirm this had been prepared and submitted. ENVIRON's review of the NSW EPA website noted that Redox has submitted an Annual Return since January 2005.



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence								
		Gen.	Con.	Op.											
R2	The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.	✓				Compliant	Facility personnel advised there have been no incidents with actual or potential significant off-site impacts requiring notification to the EPA or Department of Planning and Infrastructure. A review of the incident register by ENVIRON notes that in the past few years (2010 to 2013) there have been between 6 to 9 incidents each year. There were no significant environmental issues reported or requiring reporting to the EPA.								
Special Conditions															
E1	Construction Activities														
E1.1 E1.2	Noise from the construction of the plant must not exceed the sound pressure level (noise) limits presented in the table below. <table border="1"><thead><tr><th>Locations</th><th>Day L_{Aeq}(15min) (dB(A))</th></tr></thead><tbody><tr><td>St Andrews Residences</td><td>46</td></tr><tr><td>Minto Residences</td><td>46</td></tr><tr><td>Childcare Centre (30 Swettenham Rd)</td><td>62</td></tr></tbody></table> All construction activities, including transportation of fill and spoil, must be restricted to the hours of 7am to 6pm Monday to Friday, 8am to 1pm Saturday and at no time on Sundays and public holidays.	Locations	Day L _{Aeq} (15min) (dB(A))	St Andrews Residences	46	Minto Residences	46	Childcare Centre (30 Swettenham Rd)	62		✓		Construction Noise Management Plan (CEMP).	N/A	There have been no construction activities undertaken since 2008 and it is assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010.
Locations	Day L _{Aeq} (15min) (dB(A))														
St Andrews Residences	46														
Minto Residences	46														
Childcare Centre (30 Swettenham Rd)	62														
E2	Noise compliance monitoring														
E2.2	After the commencement of all operations at the premises, the licensee must submit a noise compliance assessment report to the DEC’s Manager Metro Illawarra, to demonstrate compliance with the limits specified in condition L6.1. The assessment must be prepared by a suitably qualified acoustical consultant.			✓	Noise Management Plan (OEMP); Procedure 3116 - Noise Management.	N/A	The last stage of construction occurred in 2008 with the nature of operations remaining the same since that time. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010.								
E3	Acetic Acid Scrubber														



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
E3.1	The objective of this condition is to develop emission concentration limits to ensure that the premises can comply with Section 129 of the POEO Act 1997.	✓				N/A	Not applicable to this reporting period. The Acetic Acid Scrubber will be part of Stage 4 of the development.
E3.2	Prior to the commencement of construction of the plant, the licensee must submit a report to the EPA's Manager Illawarra, on the development of a site specific emission concentration limit for the acetic acid scrubber.		✓			N/A	Not applicable to this reporting period. The Acetic Acid Scrubber will be part of Stage 4 of the development, construction date TBA.
E3.3	Prior to the commencement of construction of the plant, the licensee must provide to the EPA's Manager Illawarra, the manufacturer's performance guarantees for the acetic acid scrubber, demonstrating that emissions will comply with the ground level concentration specified in the EPA's <i>Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW, August 2001</i> .		✓			N/A	Not applicable to this reporting period. The Acetic Acid Scrubber will be part of Stage 4 of the development, construction date TBA.

Action Plan

Table 2.3. Action Plan

Item No.	Reference	Recommendation	Time-Frame	Responsible Person	Action Taken	Completed Date
4.1	For each of the dangerous goods classes and materials listed in the table below, the Applicant shall not permit the materials listed as "prohibited" to be received, stored, or handled on the site. To avoid any doubt the Applicant shall only permit the materials listed as "permitted" to be received, stored or handled on the site. This condition does not apply to those materials that may be associated with office,	A review of the Stock Manifest at 1 November 2013 noted that for that particular day, following non-compliances to this condition were identified: • Class 3 Packaging	N/A	IT	Facility personnel noted that a computer programming error allowed the prohibited Class 3 PGI material to be ordered. ENVIRON has been informed that this program error has	6 November 2013



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	laboratory, construction, maintenance or vehicular/ equipment components (including forklifts) of the development, and are not purchased and sold as part of the principal commercial operations of the development. <table><tr><th>DG Class</th><th>Prohibited</th><th>Permitted</th></tr><tr><td>Class 1</td><td>All</td><td>None</td></tr><tr><td>Class 2</td><td>All</td><td>None</td></tr><tr><td>Class 3</td><td>PG I Subclass 6.1</td><td>PG II & III (unless otherwise prohibited)</td></tr><tr><td>Class 4</td><td>All</td><td>None</td></tr><tr><td>Class 5</td><td>All except those listed as permitted</td><td>Solids of Class 5.1, PG III</td></tr><tr><td>Class 6</td><td>Subclass 3 All Class 6.2</td><td>All Class 6.1 (unless other, but not Class 6.1 with subclass 3)</td></tr><tr><td>Class 7</td><td>All</td><td>None</td></tr><tr><td>Class 8</td><td>None</td><td>All</td></tr><tr><td>Class 9</td><td>None</td><td>All</td></tr><tr><td>Non-DG</td><td>None</td><td>All</td></tr></table>	DG Class	Prohibited	Permitted	Class 1	All	None	Class 2	All	None	Class 3	PG I Subclass 6.1	PG II & III (unless otherwise prohibited)	Class 4	All	None	Class 5	All except those listed as permitted	Solids of Class 5.1, PG III	Class 6	Subclass 3 All Class 6.2	All Class 6.1 (unless other, but not Class 6.1 with subclass 3)	Class 7	All	None	Class 8	None	All	Class 9	None	All	Non-DG	None	All	Group I (“Diethyl Ether Traded”) was stored in Building B1; Redox should investigate the reason for the presence of this prohibited material and implement appropriate measures to ensure future incidents do not occur. Whilst this is noted as a non-compliance, Redox has already corrected the non-compliance. It is recommended that Redox include a review of the materials tracking system as part of the internal audit program to ensure that compliance with this condition is maintained.			now been resolved and should not occur again. The prohibited material has since been transferred off-site.	
DG Class	Prohibited	Permitted																																					
Class 1	All	None																																					
Class 2	All	None																																					
Class 3	PG I Subclass 6.1	PG II & III (unless otherwise prohibited)																																					
Class 4	All	None																																					
Class 5	All except those listed as permitted	Solids of Class 5.1, PG III																																					
Class 6	Subclass 3 All Class 6.2	All Class 6.1 (unless other, but not Class 6.1 with subclass 3)																																					
Class 7	All	None																																					
Class 8	None	All																																					
Class 9	None	All																																					
Non-DG	None	All																																					
4.3	Prior to any dangerous goods being brought to the site, the Applicant shall demonstrate to the satisfaction of the Director-General that it has a system in place to track the quantities and locations of dangerous goods on the site at all times.	It is recommended that Redox obtain written confirmation from the Director-General that the department is satisfied with the current Redebiz system that used to track quantities and locations of dangerous goods.	N/A	IT	Facility personnel stated that: The DG approved the Pick system upon inspection in 2010. Redebiz is the upgraded version of the Pick system. On 15/08/2013, Redox demonstrated the use of Redebiz to track quantities and locations																																		



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					of the dangerous goods to the NSW DPI auditors and Redox informed ENVIRON that they were satisfied with the current intranet system. Redox continues to improve the Redebiz systems to meet the changing demands and any future Regulatory requirements.	
7.4	The Applicant shall prepare and implement an Operational Environmental Management Plan to detail an environmental management framework,	ENVIRON's review of the current Plan (dated November 2011, Revision	N/A	Trami Tran Michael Sims	Noted	
EP Licence O4.1	The licensee must maintain, and implement as necessary, a current emergency response plan for the premises. The licensee must keep the emergency response plan on the premises at all times. The emergency response plan must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment. If a current emergency response plan does not exist at the date on which this condition is attached to the licence, the licensee must develop an emergency response plan within three months of that date.	Changes to the POEO Act 1997 required licensed facilities to prepare and implement a Pollution Incident Response Management Plan (PIRMP) by 1 September 2012. A review of Redox's existing Emergency Management Plan by ENVIRON notes that this plan addresses many of the requirements of a PIRMP, however, some information was observed to be missing or the level of detail could be improved. These included, for example: • A description of the hazards to human health or the environment associated with the site activities; • The maximum quantity likely to be stored or held for any pollutants;	N/A	Trami Tran	Redox have stated that they shall review the Emergency Management Plan to ensure all information required for a PIRMP, as required under the POEO Act and associated Regulations are included in the plan.	5/05/2015



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		• The contact details for all relevant authorities (e.g. EPA, local Council); • A detailed map showing the location of stormwater drains; • The dates on which the PIRMP has been tested and the name of the person who carried out the test; • The dates on which the plan as updated; • The manner in which the plan is to be tested and maintained; • The PIRMP is to be made publicly available. Redox should review the Emergency Management Plan to ensure all information required for a PIRMP, as required under the POEO Act and associated Regulations, are included in the plan. Further information can be found at http://www.epa.nsw.gov.au/legislation/poelegisamend2011.htm.				

Compliance with Consent to Discharge Industrial Trade Wastewater

Table 3. Compliance with Consent to Discharge Industrial Trade Wastewater (No. 29981)

Item No.	Requirement and Reference	Compliant?	Findings
1	The customer may discharge trade wastewater into the sewer in a manner whereby the substance characteristics of the trade wastewater are of a type and discharged at a rate, level or concentration equal to or less than that described in this schedule.	yes	The facility holds a consent from Sydney Water to discharge trade wastewater to the sewer. ENVIRON has not reviewed compliance with all the conditions of the consent, however, the facility has maintained the consent, reports on trade wastewater quality to Sydney Water and facility personnel have advised that there have been no notices or penalties issued by Sydney Water for noncompliance with the consent. A selection of trade wastewater sample analysis reports for 2012 and 2013 were provided to ENVIRON for



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review and it is noted that the parameters to be monitored, as specified in the consent, are being monitored.

Compliance with Notification of Dangerous Goods on Premises

Table 4. Compliance with Notification of Dangerous Goods on Premises (No. NDG037356)

Item No.	Requirement and Reference	Compliant?	Findings
-	The Notification details maximum storage capacities for each storage facility	yes	A review of the stock manifest at 1 November 2013 indicates the quantities stored at each storage facility (i.e. depot), are below the specified maximum storage quantities notified to WorkCover. It should be noted that at the time of the audit, the Notification had expired and was in the process of being renewed by NSW WorkCover. ENVIRON was provided with copies of correspondence from WorkCover indicating that due to the WorkCover's delayed invitation to renotify, Redox were granted an extension on their Notification. The extended expiry date for their Notification was to 28 September 2013. A copy of a tax invoice from WorkCover, dated 2 October 2013, for receipt of payment for the renewal of the Notification indicates that Redox's renewal is in progress.



3 Community & Environmental Complaints

No community, environmental or pollution complaints were received during 2014 relating to the operation of the Minto facility.

Procedure 3022 – Problems & Complaints describes the method by which all problems, non-conformances, customer and community complaints would be recorded and actioned, including recording of pollution complaints in accordance with EPL 12041 Condition M4.

4 Environmental Impacts & Performance

Table 5.0: Environmental Impacts & Performance

Environmental Aspect (Operational Pathway)	Potential Environmental Impacts	Potential Risk of Impact	Duration of Potential Impact	Operational Procedure to prevent & control Impacts	Environmental Performance 2012
1. Transportation - Transport of goods to the site; - Delivery of goods to customers; and - Unloading/loading of trucks and shipping containers into transit storage areas.	Noise Emissions	Low	Intermittent	3109, 3116, 3412, 3715	Noise emissions effectively prevented and controlled. No complaints received regarding noise emissions.
	Air Emissions	Low	Intermittent	3109, 3412, 3715	Air emissions not required to be monitored. No complaints received regarding air emissions.
	Spillage of product(s) causing contamination of stormwater, soil or groundwater.	Low-Moderate	Infrequent	3022, 3109, 3114, 3412, 3702	No spillages of product during transportation causing contamination of stormwater, soil or groundwater.
	Operational Traffic Impacts	Moderate	Regular	3109, 3412, 3715	The system put in place to monitor that the routes utilised by heavy vehicles is working effectively and is substantially as it was when approved, its ongoing use is recommended". No complaints received regarding operational traffic impacts.
	Community Health	Low	Infrequent	3109, 3412	Community Health not required to be monitored. No Community Complaints received.
	Use of resources	Low-Moderate	Intermittent	3109	Use of resources not monitored with regards to the Transportation Pathway.
2. Storage & Handling - Movement of goods in and out of storage; and - Repackaging of	Spillage of goods	Low-Moderate	Infrequent	3022, 3109, 3401, 3402	No spillages of product during storage & handling causing contamination of stormwater.
	Spillage of goods causing contamination of soil/groundwater.	Low-Moderate	Infrequent	3022, 3109, 3401	No spillages of product during storage & handling causing contamination of soil or groundwater.



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Environmental Aspect (Operational Pathway)	Potential Environmental Impacts	Potential Risk of Impact	Duration of Potential Impact	Operational Procedure to prevent & control Impacts	Environmental Performance 2012
damaged goods and returned product.	Air Emissions – dust and particulate matter.	Low	Intermittent	3109, 3110	Air emissions of dust and particulate matter not required to be monitored. No complaints received regarding air emissions.
	Air Emissions - chemical reactions.	Moderate	Infrequent	3109	Air emissions caused by chemical reactions not monitored.
	Air Emissions from LPG forklifts.	Low	Constant	3109	Air emissions from LPG forklifts not monitored.
	Air Emissions from Greenhouse Gases.	Low- Moderate	Constant	3109	Greenhouse Gas emissions not required to be monitored.
	Operational Noise emissions.	Moderate	Intermittent	3022, 3109, 3116	Noise emissions effectively prevented and controlled. No complaints received regarding operational noise emissions.
	Waste – packaging (recyclable and non- recyclable).	Low	Intermittent	3109, 3401, 3402	Waste packaging not monitored with regards to storage and handling operations.
	Hazardous Waste – spillage and rejected products.	Moderate	Infrequent	3109, 3401, 3402	Refer 5.4 – In compliance with EPL (L5) waste conditions.
	Community Health	Low	Infrequent	3109, 3412	No community complaints received regarding community health impacts of storage & handling operations.
	Use of resources	Low- Moderate	Constant	3109	General use of resources not monitored for storage and handling operations.
3. Management & Administration	Waste – recyclable office waste	Low	Intermittent	3109, 3402	Paper/cardboard recycling only.
	Waste – non recyclable	Low	Intermittent	3109, 3402	Non-recyclable office waste not monitored.
	Waste – hazardous (samples)	Low	Infrequent	3109, 3402	As per hazardous waste – storage & handling above.
	Land & water pollution	Low- moderate	Intermittent	CEMP – Hazardous Materials Management Plan	No spillages of materials reported with potential for contamination of soil/ groundwater.
	Construction waste management	Low	Intermittent	CEMP – Construction Waste Management Plan	Not applicable to this report.



5 Environmental Monitoring

Aspect	Frequency	Process	Documentation	Procedure References	Responsibility
Noise Emissions	Within one month of commencement of construction activities associated with each stage of the development.	Construction Noise Audit	Construction Noise Audit report.	Procedure 3116.	Independent auditor
	Within 90 days of commencement of operation of each stage of development.	Operational Noise Audit	Operational Noise Audit Report	Procedure 3116	Independent auditor
Traffic Impacts	Monthly, four vehicles per period.	Random spot checks on routes taken.	Form 21085; QP records & Corrective Action Requests.	Procedure 3022 and 3715.	Redox Transport Coordinator
	Within 90 days of commissioning each stage of the development.	Independent Transport Audit	Independent Transport Audit report	Procedure 3715.	Independent auditor
Storm water Quality	Weekly & prior to discharge.	Visual and parameter analysis.	Form 2190 – Water Quality Inspection Form	Procedure 3405.	Redox Chemist
	Quarterly and following chemical contamination.	Parameter analysis	Parameter Analysis Report	Procedure 3405.	NATA Approved Laboratory
Waste	Continual	Continual log of waste generation.	Form 21152, 21157 and WasteLog.	Procedure 3402.	Redox Regulatory Affairs Coordinator
Incident/Near Miss Reporting	Continual	Record details of all incidents/near misses.	Form 21139 & 21140.	Procedure 3114 and 3401.	Redox Site Environmental Officer
Air emissions – dust and particulate matter	Daily	Regular sweeping. Weekly Inspection.	Form 21110 – Sydney Warehouse Inspection.	Procedure 3110 and 3521.	Redox Store Manager
Community Complaints	Continual.	Record details of all complaints received.	Complaints Register.	Procedure 3022 and 3412.	Redox Regulatory Affairs Coordinator
Environmental Management System	Annual reporting & triennial independent auditing.	Independent environmental audit.	Environmental Audit Report.	Procedure 2718.	Independent auditor
		Environmental performance review.	AEMR – Annual Environmental Management Report.	Procedure 2718.	Redox Regulatory Affairs Coordinator



5.1 Transport Monitoring & Auditing

5.1.1 Independent Transport Auditing

No independent transport auditing was conducted during 2014.

5.1.2 Monitoring Heavy Vehicle Routes/Requirements

Table 5.1.2: Heavy Vehicle Routes/Requirements: Non-Conformance Details

Date	Time	Carrier/ Customer Name	Vehicle Rego #	Route Travelled	Non- Conformance Details	QP Ref.	Corrective Action Summary
NIL							

Discussion of Results:

37 Heavy vehicles were randomly audited during 2014 for compliance with Redox Procedure 3715 - NSW Heavy Vehicle Routes/Requirements. All thirty 37 vehicles monitored were found to travel by the correct route.

5.2 Noise Monitoring & Auditing

N/A - No operational noise auditing was required during this reporting period.

5.2.1 Construction Noise Auditing

No construction noise auditing was required during this reporting period.

5.2.2 Operational Noise Auditing

No operational noise auditing was required during this reporting period.



5.3 Stormwater Quality Monitoring

A three tiered monitoring program tests stormwater quality prior to release from the retention pits on site, including weekly internal analysis prior to discharge, quarterly external analysis, and external analysis in the event of a chemical spill.

Acceptable values for each parameter are taken to be those of:

- the *Clean Waters Regulations 1972*, Section 8 – Class R: Restricted Water;
- Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000* – “Default trigger values for physical and chemical stressors for south-east Australia”, for slightly disturbed ecosystems; and
- Baseline Contamination Assessment for Redox Chemicals Facility Swettenham Road, Minto* (Environmental Audits of Australia, January 2003).

5.3.1 Internal Stormwater Analysis

Redox personnel did not conduct any internal stormwater analysis and also did not send off stormwater samples to independent laboratory during the year 2014, reason being, we identified the *Clean Waters Act & Regulations* have been repealed for a number of many years before the construction of Minto’s facility. We have notified the Department of Planning & Environment (the Department) regarding the repealed laws. We also advised the Department that we would cease all testings until we received further instructions from them.

Table 5.3.1: Results of Internal Stormwater Analysis

Nil results recorded in the table below.

Date	Sample	Colour	Clarity			Odour		pH	Temp.	Specific Gravity	Dissolved oxygen	Suspended Solids	Turbidity	Pass/Fail	Tested by:
			SS visible?	Foam?	Visible Film?	Smell?	Oil/Petrol Smell?								
	LIMIT	Clear	No	No	No	No	No	6.5-8.5	15-35°C	0.99-1.01	Min. 6.5 mg/L	Max. 50 mg/L	Max. 50 NTU	Pass	Name
January	Blank														



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	PIT 1														
	PIT 2														
	PIT3														
February	PIT 1														
	PIT 2														
	PIT 3														
March	BLANK														
	PIT 1														
	PIT 2														
	PIT 3														



Discussion of Results for Internal Stormwater Analysis

As mentioned under 5.3.1 – we did not conduct any internal stormwater analysis.

<u>Analyte</u>	<u>Results</u>
Colour	
Clarity	
Suspended Solids	
Foam	
Visible Film	
Odour - Smell	
Odour - Oil/Petrol	
pH	
Temperature	
Specific Gravity	
Dissolved Oxygen	
Suspended Solids	
Turbidity	
Pass/Fail	



5.3.2 External Stormwater Analysis

As mentioned under 5.3.1 – we did not send samples to external laboratory to analyse the stormwater during the year 2014.

Date	Sample	Total suspended solids	Turbidity	Total Kjeldahl Nitrogen (TKN)	NOx-N	Total nitrogen	Total phosphorus
		mg/L	NTU	mg/L	mg/L	mg/L	mg/L
Nil							

Test	Western Retaining Wall	Methods
Nil		

5.3.3 External Stormwater Analysis (Chemical Spill)

N/A



5.4 Waste Management

Table 5.4: WasteLog 2014 – NSW

No hazardous and/or industrial and/or Group A substances listed under 4.32 of Condition were disposed during 2014.

QP	Product Code	Product Name	DG Class	Form	Waste Code	Tracking	Qty	DISPOSAL COMPANY	CAN	TC No.	SPO	Dispatch Date	Disposal Method
	NIL												



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5.5 Independent Environmental Auditing

No environmental auditing was required during this reporting period.



6 Environmental Performance

Table 6.0 presents a list of all occasions in the preceding 12-month period when environmental performance goals for the development have not been achieved, indicating the reasons for failure to meet the goals, and the actions taken to prevent recurrence of that type of incident.

Table 6.0: Environmental Performance – Quality Problem Record

QP	Performance goal not achieved	Reason	Action	Status
Transport Management				
Nil				
Noise Monitoring & Auditing				
Nil				
Stormwater & Dust Management				
Nil				
Landscape Management				
Nil				
Waste Management				
Nil				
Environmental Reporting				
Nil				

2015 Annual Environmental Management Report



Redox Pty Ltd



**2 Swettenham Road
Minto NSW 2566**

Prepared by: Redox Pty Ltd

Trami Tran (Regulatory Affairs Coordinator)
Authorised by Malcolm Perrins (Director)

December 2015



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Executive Summary

This Annual Environmental Management Report (AEMR) has been prepared by Redox Pty Ltd (Redox) to review the performance of the development at 2 Swettenham Road, Minto NSW against the Operational Environmental Management Plan (OEMP) and Construction Environmental Management Plan (CEMP), the conditions of consent, Environmental Protection Licence 12041 and Environmental Legislation pertaining to the site, during the period January to December 2015.

The AEMR is intended to meet the requirements of the NSW Department of Planning, under development consent condition 8.3 – Annual Performance Reporting.

Site environmental management procedures and monitoring systems are in place for noise, transport, stormwater, waste, landscape, dust and odour control, community communication and incident reporting, as per the Operational Environmental Management Plans.

Ultimate responsibility for site environmental performance rests with the Managing Director. Day-to-day environmental management is the combined responsibility of the Regulatory Affairs Coordinator and the Store Manager.

No community, environmental or pollution complaints were received during 2015 related to the Minto facility operations.



1 Introduction

This Annual Environmental Management Report (AEMR) has been prepared by Redox Pty Ltd (Redox) to review the performance of the development at 2 Swettenham Road, Minto NSW against the Operational Environmental Management Plan (OEMP), the conditions of consent, Environmental Protection Licence 12041 and Environmental Legislation pertaining to the site, during the period January to December 2015.

The AEMR is intended to meet the requirements of the NSW Department of Planning, under development consent condition 8.3 – Annual Performance Reporting.

Condition 8.3 requires that Redox, throughout the life of the development, prepare and submit for the approval of the Director-General, and Annual Environmental Management Report (AEMR). The AEMR shall review the performance of the development against the Operational Environmental Management Plan, the conditions of consent and other licences and approvals relating to the development. The AEMR shall include, but not necessarily be limited to:

- (a) Details of compliance with the conditions of consent;
- (b) A copy of the Complaints Register for the preceding twelve-month period, and details of how these complaints were addressed and resolved;
- (c) A comparison of the environmental impacts and performance of the development against the environmental impacts and performance predicted in those documents listed under Condition 1.2 of consent;
- (d) Results of all environmental monitoring required under this consent and other approvals, including interpretations and discussion by a suitably qualified person; and
- (e) A list of all occasions in the preceding twelve-month period when environmental performance goals for the development have not been achieved, indicating the reason for failure to meet the goals and the action taken to prevent recurrence of that type of incident.

Redox shall submit a copy of the AEMR to the Director-General every year.

The Director-General may require Redox to address certain matters in relation to the environmental performance of the development in response to review of the Annual Environmental Management Report. Any action required to be undertaken shall be completed within such period as the Director-General may require.

1.1 Site & Operational Overview

Redox is an importer and distributor of close to 1,000 different organic and inorganic chemicals and raw materials. Used in more than 140 different industries, including Agriculture, Detergent, Food & Beverage, Mining & Metal, Surface Coating and Chemical Manufacture, these products are supplied to all areas of industry throughout Australia and New Zealand.

Redox operates five sites in Australia and three in New Zealand. The Head Office site in Minto (this site) is the base for the company's Marketing and Administration functions for its Australian and New Zealand operations. This site consists of two office/Administration buildings and five warehouses for the storage of both dangerous and non-dangerous goods.

The 5.984ha Redox owned site is located within the Minto Industrial Estate and is surrounded predominantly by light industrial and commercial operations to the west, north and south. Bow Bowing Canal forms the eastern boundary to the site. The nearest sensitive land use is the New Generation Child Care Centre, situated on the site's northern boundary. The nearest residential properties are situated on the opposite side of Campbelltown Road.



Figure 1.1: Aerial view, Redox Minto Facility.



The Minto facility, operational since 5 December 2005, was officially opened on 26 April 2006. The construction of Stage 3 of the development, a 2935m² non-dangerous goods store, commenced August 2008 and was completed February 2009. The new store was occupied from 27 February 2009.

Operational and construction site environmental management procedures are in place for noise, transport, stormwater, waste, landscape, dust and odour control, community communication and incident reporting. Ultimate responsibility for site environmental performance rests with the Managing Director; day-to-day environmental management is the combined responsibility of the Regulatory Affairs Coordinator and the Store Manager.

1.2 Operational Environmental Management Plan

Prior to commencement of operations on the site, an Operational Environmental Management Plan (OEMP) was prepared by Redox, and approved by the Director-General of the Department of Infrastructure, Planning and Natural Resources (DIPNR). This OEMP details the environmental management framework, practices and procedures to be followed during the operation of the development. The OEMP includes:

- (a) Identification of all statutory and other obligations that Redox is required to fulfil in relation to operation of the development, including all consents, licences, approvals and consultations;
- (b) A description of the roles and responsibilities for all relevant employees involved in the operation of the development;
- (c) Overall environmental policies and principles to be applied to the operation of the development;
- (d) Standards and performance measures to be applied to the development, and a means by which environmental performance can be periodically reviewed and improved;
- (e) Management policies to ensure that environmental performance goals are met and to comply with the conditions of consent;
- (f) The listed Management Plans:
 - (i) Noise Management Plan;
 - (ii) Transport Management Plan;
 - (iii) Stormwater Management Plan;
 - (iv) Waste Management Plan;
 - (v) Landscape Management Plan; and
- (g) The environmental monitoring requirements outlined in the conditions of consent.



1.3 Development Consent Conditions

The Minister for Infrastructure and Planning, the Hon Craig Knowles MP, determined to approve the Chemical Storage and Distribution Facility, Lot 171 Swettenham Road, Minto, Campbelltown LGA (DA No: 367-11-2002-i) on 16 September 2003, subject to Development Consent Conditions.

The reason for the imposition of conditions is to:

- (a) Minimise any adverse environmental impacts associated with the development;
- (b) Ensure effective on-going environmental and safety management and monitoring;
- (c) Minimise potential safety impacts associated with the development; and
- (d) Implement the recommendations of the Commission of Inquiry into all environmental aspects of the development.

1.4 Environmental Protection Licence

Environmental Protection Licence 12041 authorises Redox to carry out Chemical Storage and Waste Activities at 2 Swettenham Road, Minto.

General obligations of the licensee under this licence, and as set out in the *Protection of the Environment Operations Act 1997* and the Regulations made under the Act, include to:

- (a) Ensure persons associated with Redox comply with this Licence,
- (b) Control the pollution of waters and the pollution of air, and
- (c) Report incidents causing or threatening material environmental harm.



2 Details of Compliance

On 4 November 2013, ENVIRON Australia Ltd (ENVIRON) and Moore Management were engaged by Redox Pty Ltd (Redox) to conduct an Independent Environmental Audit and Hazard Audit of the Redox Chemical Storage and Distribution Centre at 2 Swettenham Road, Minto, New South Wales (NSW) 2566.

The Audits are required to be undertaken every three years pursuant to Conditions 5.12 and 5.13 of the Project Consent, issued by the (now) NSW Department of Planning and Industry (DP&I).

2.1 Compliance with Development Consent Conditions

Table 2.1: Compliance with Development Consent Conditions

Table 2.1 is intended to address the findings and the recommendations issued by the abovementioned independent Hazard and Environmental Auditors.

Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
1	GENERAL					
Obligation to Minimise Harm to the Environment						
1.1	Redox shall implement all practicable measures to prevent or minimise any harm to the environment that may result from the construction, commissioning, operation ... of the development.	✓			Compliant	ENVIRON observations and interviews with site representatives demonstrated that the existing environmental management system and processes are considered to address the consent condition requirements. Procedures for managing environmental issues have been prepared as noted in Redox's list of site procedures. During ENVIRON's site walk over evidence of the implementation of some of the procedures was observed. The environmental management of the facility is considered appropriate to minimise potential impacts on the environment.



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
Scope of Development						
1.2	The Applicant shall carry out the development generally in accordance with requirements a) to s). Note, due to the large number of requirements these have not been replicated here. Refer to Appendix A for the full list of requirements.	✓			Compliant	So noted. Facility personnel advised that facility operations are conducted in accordance with the consent conditions and the requirements of this condition. ENVIRON reviewed a selection of the documents listed in this condition and notes that these documents provide additional information in response to regulatory agency enquiries of the EIS or associated studies. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audits undertaken in 2006 and 2010.
1.3	In the event of any inconsistency between the conditions of consent and/or any scope document(s), the conditions of consent and/or the most recent document shall prevail to the extent of the inconsistency.	✓			Noted	N/A
Provision of Documents						
1.4	Where practicable, the Applicant shall provide all documents and reports required to be submitted to the Director-General under this consent in an appropriate electronic format. Provision of documents and reports to other parties, as required under this consent, shall be in a format acceptable to those parties and shall	✓			Compliant	Noted.
1.5	Nothing in this consent prevents Redox from combining reporting requirements under this consent with reporting requirements for submission to another relevant party.	✓			Compliant	Noted.
Statutory Requirements						



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
1.6	The Applicant shall ensure all licences, permits & approvals are obtained and kept up-to-date as required throughout the life of the development. No condition of this consent removes the obligation for the Applicant to obtain, renew or comply with such licences, permits or approvals.	✓			Compliant	Facility personnel reported that a list of all environmental licences, permits and approvals required to be kept by the site, amongst other matters and tasks, is maintained by the Regulatory Affairs Coordinator. This list is reviewed on a monthly basis by the Regulatory Affairs Coordinator to ensure licences/ permits are renewed prior to their expiry date. Redox is a member of the Plastics and Chemicals Industries Association (PACIA) and receives industry bulletins on regulatory matters relevant to their business, as well as attending PACIA meetings to keep up to date on industry matters. Redox also has a subscription to WorkCover NSW to receive news bulletins on dangerous goods. It should be noted that at the time of the audit, the Notification of Dangerous Goods on Premises with NSW WorkCover had expired and was in the process of being renewed by NSW WorkCover.
1.7	In the event that a dispute arises between the Applicant and Council or a public authority, other than the Department, in relation to a specification or requirement under this consent, the matter shall be referred by either party to the Director-General, or if not resolved to the Minister, whose determination shall be final and binding on all parties.	✓			Noted	Noted. Facility personnel advised that there have not been any prior disputes in relation to the consent that have required referral to the Director-General.
2	COMPLIANCE					
2.1	Redox shall ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.	✓			Compliant	Redox has prepared a number of procedures to assist with complying with the conditions of the consent. Personnel are provided with either formal or on-the-job training in these



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
						procedures and other environmental management matters and have access to all Redox procedures through the company's intranet system. Internal audits are undertaken at the facility, mostly on an annual basis, that cover off various processes, procedures and departmental activities. In particular, internal audit of the Warehouse, Transport and Distribution operations and procedures related to environmental management was completed in February 2013. A number of non-compliances were noted in relation to document management and display of traffic signage which have reportedly been corrected and closed out. Training of contractors and subcontractors, to ensure compliance and awareness of relevant Redox procedures, is undertaken either by Redox personnel during contractor induction or the recruitment agency (e.g. Redox provides the agency with a contractors induction pack for delivery to contract staff). Specific training is provided to employees and/or contractors on hazard identification, environmental awareness, and dangerous goods. Records are kept for employee and contractor/ sub-contractor training. It is noted that Redox is currently updating their training matrix to include detail on job specific training including refresher training requirements. It is recommended that the



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
						training procedure include a system to notify when refresher training is required for employees and contractors.
2.2	Redox shall be responsible for environmental impacts resulting from the actions of all persons on site, including contractors, subcontractors and visitors.	✓			Compliant	Noted.
2.3	Prior to each of the events listed below, Redox shall certify in writing to the satisfaction of the Director-General that it has complied with all conditions of this consent applicable prior to that event.				Compliant	Facility personnel advised that the Director-General was notified in writing of the site's compliance with the relevant consent conditions prior to each of the events a) to c) for Stages 1, 2 and 3. No further enquiries were made as this condition is not applicable to this audit. Note: Stage 4 has not yet been constructed.
	(a) commencement of any physical works on the land subject to this consent;		✓			
	(b) commencement of construction of stages 1, 2, 3 and 4 of the development; and (c) commencement of operation of stages 1, 2, 3, and 4 of the development.		✓	✓		
2.4	Notwithstanding condition 2.3 of this consent, the Director-General may require an update report on compliance with all, or any part of the conditions of this consent.	✓			N/A	Noted.
2.5	The Applicant shall meet the requirements of the Director-General in respect of the implementation of any measure necessary to ensure compliance with the conditions of this consent, and general consistency with the documents listed in Condition 1.2. The Director-General may direct that such a measure be implemented in response to the information contained within any report, plan, correspondence or other document submitted in accordance with the conditions of this consent, within such time as the Director-General may require.	✓			N/A	Noted. Facility personnel advised that to date there has been no additional Director-General requirements as outlined in condition 2.5.



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		General	Construction	Operation		
3.1	In relation to the construction and occupation of the development, Redox shall provide the Director-General and Council with the following: (a) written notification of a Principal Certifying Authority; (b) copies of all construction certificates issued; (c) written notification of the intention to commence construction; (d) copies of all occupation certificates; (e) written notification of the intention to occupy.		✓ ✓ ✓	✓ ✓	Noted	The last stage of construction occurred in 2008 and it is assumed compliance with this condition was confirmed by the previous Independent Environmental Audits undertaken in 2006 and 2010.
3.2	Prior to the commencement of any construction associated with the development, Redox shall erect at least one sign at the construction site. The sign shall be maintained for the duration of construction works, and shall be removed as soon as practicable after the conclusion of construction works.		✓		N/A	The last stage of construction occurred in 2008 and it is assumed compliance with this condition was confirmed by the previous Independent Environmental Audits undertaken in 2006 and 2010.
4	ENVIRONMENTAL PERFORMANCE					
Hazards and Risk Impacts						
4.1	For each of the dangerous goods classes and materials listed in the table below, the Applicant shall not permit the materials listed as “prohibited” to be received, stored, or handled on the site. To avoid any doubt the Applicant shall only permit the materials listed as “permitted” to be received, stored or handled on the site. This condition does not apply to those materials that may be associated with office, laboratory, construction, maintenance or vehicular/ equipment components (including forklifts) of the development, and are not purchased and sold as part of the principal commercial operations of the development.			✓	Non-compliant, however error has been corrected. Refer to Action table 2.3.	Facility personnel advised that the company’s Redebiz business operating system is used to track the types and quantities of dangerous goods and non-dangerous goods stored at the site. The Redebiz system has the capability to restrict particular types of materials from being ordered and limit the quantities of materials ordered. Redebiz has been programmed to prevent those dangerous goods listed in condition 4.1 as prohibited from being present. ENVIRON was provided a copy of the Stock Manifest of dangerous and non-dangerous goods for 1 November 2013. A review of the



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Consent Condition	Compliance Requirements	Requirement			Status	Findings																																
		General	Construction	Operation																																		
	<table><tr><th>DG Class</th><th>Prohibited</th><th>Permitted</th></tr><tr><td>Class 1</td><td>All</td><td>None</td></tr><tr><td>Class 2</td><td>All</td><td>None</td></tr><tr><td>Class 3</td><td>PG I Subclass 6.1</td><td>PG II & III (unless otherwise prohibited)</td></tr><tr><td>Class 4</td><td>All</td><td>None</td></tr><tr><td>Class 5</td><td>All except those listed as permitted</td><td>Solids of Class 5.1, PG III</td></tr><tr><td>Class 6</td><td>Subclass 3 All Class 6.2</td><td>All Class 6.1 (unless other, but not Class 6.1 with subclass 3)</td></tr><tr><td>Class 7</td><td>All</td><td>None</td></tr><tr><td>Class 8</td><td>None</td><td>All</td></tr><tr><td>Class 9</td><td>None</td><td>All</td></tr><tr><td>Non-DG</td><td>None</td><td>All</td></tr></table>	DG Class	Prohibited	Permitted	Class 1	All	None	Class 2	All	None	Class 3	PG I Subclass 6.1	PG II & III (unless otherwise prohibited)	Class 4	All	None	Class 5	All except those listed as permitted	Solids of Class 5.1, PG III	Class 6	Subclass 3 All Class 6.2	All Class 6.1 (unless other, but not Class 6.1 with subclass 3)	Class 7	All	None	Class 8	None	All	Class 9	None	All	Non-DG	None	All				list noted that for that particular day, the following non-compliances to this condition were identified: - Class 3 Packaging Group I ("Diethyl Ether, Traded") was stored in Building B1; - A variety of Class 4.1 and Class 5.1 materials were stored either in the laboratory or office. These materials were all noted to be laboratory samples and therefore are not considered non-compliances under this condition. Facility personnel noted that a computer programming error allowed the prohibited Class 3 PGI material to be ordered. This program error has now been resolved and should not occur again. The prohibited material has since been transferred off-site. Whilst this is noted as a non-compliance, Redox has already corrected the non-compliance. It is recommended that Redox include a review of the materials tracking system as part of the internal audit program to ensure that compliance with this condition is maintained.
DG Class	Prohibited	Permitted																																				
Class 1	All	None																																				
Class 2	All	None																																				
Class 3	PG I Subclass 6.1	PG II & III (unless otherwise prohibited)																																				
Class 4	All	None																																				
Class 5	All except those listed as permitted	Solids of Class 5.1, PG III																																				
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Class 7	All	None																																				
Class 8	None	All																																				
Class 9	None	All																																				
Non-DG	None	All																																				
4.2	Redox shall only permit non-dangerous goods, and dangerous goods of class 8 to be stored or handled in bulk on the site.			✓	Compliant	Facility personnel advised that this condition is noted and that currently no bulk non-dangerous goods or dangerous goods of Class 8 are stored at the site. ENVIRON reviewed the Stock Manifest for 1 November 2013 and did not identify any materials stored in bulk on the site, and no																																



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		General	Construction	Operation		
						evidence of bulk storage was observed during the site walk over.
4.3	Prior to any dangerous goods being brought to the site, Redox shall demonstrate to the satisfaction of the Director-General that it has a system in place to track the quantities and locations of dangerous goods on the site at all times.			✓	N/A	ENVIRON sighted the company's Redebiz business operating system which is used to track the types, quantities and locations of dangerous goods and non-dangerous goods stored at the site. Facility personnel advised that the Redebiz system was demonstrated to NSW DP&I representatives during their visit on 15 August 2013 (as part of their follow-up after receipt of independent audit reports) and that they were satisfied with its capabilities. However, Redox does not have documented evidence to confirm this. In addition, ENVIRON was provided with correspondence, dated 7 September 2005, sent to the then Department of Infrastructure, Planning and Natural Resources advising them of the process used to track quantities and locations of dangerous goods at the site. This process was a paper based and computer based system used prior to the current Redebiz system. It is recommended that Redox obtain written confirmation from the Director-General that the department is satisfied with the current Redebiz system.
Bunding and Spill Management						
4.4	Redox shall ensure that all bunding installed at the development site is constructed strictly in accordance with:				Compliant	ENVIRON was advised that bunding was constructed per design requirements, developed in accordance with the



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		General	Construction	Operation		
	(a) all relevant Australian Standards; (b) a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; (c) the EPA's Environmental Protection Manual Technical Bulletin Bunding and Spill Management.		✓ ✓ ✓			requirements of this condition. During ENVIRON's site walk over, it was observed that warehouse areas were bunded to contain spills within the building and blind sumps/ drains were present within and at the entrance to the warehouse areas. The site perimeter was also bunded.
4.5	At least one month prior to the commencement of construction of the development ... Redox shall prepare and submit for the approval of the Director-General the studies set out below. (a) A Fire Safety Study (b) A Final Hazard Analysis (c) A Construction Safety Study		✓ ✓ ✓		N/A	The last stage of construction occurred in 2008 with the nature of operations remaining the same since that time. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010.
Pre-Commissioning Studies						
4.6	No later than two months prior to the commencement of commissioning of the development, Redox shall prepare and submit for the approval of the Director-General the studies set out below: (a) A Transport of Hazardous Materials Study for the development. (b) An Emergency Plan for the development. (c) A Safety management System.			✓ ✓ ✓	Compliant	Facility personnel advised that approval was received from the Director-General for all three study reports. ENVIRON was provided a copy of correspondence from the Department approving the study reports with the exception of the Safety Management System (SMS). The correspondence from the Department noted that comments on the SMS had been provided to Redox in August 2005. Further correspondence on whether these comments had been actioned and the SMS subsequently approved were not available to ENVIRON. However, ENVIRON considers that Redox would have addressed the Departments comments given Redox has previously demonstrated appropriate responses to agency requests. ENVIRON was provided a copy of: · The Transport of Hazardous Materials



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		General	Construction	Operation		
						study by Dick Benbow & Associates, 29 June 2005, Revision 3; · The Emergency Management Plan by Redox, 3 July 2012, Version 4; · The Safety Management System, Procedure 3880, 4 December 2009, Version 3. ENVIRON's review of each of these studies/plans indicate that have been prepared to substantially address the requirements of a) to c).
4.7	Prior to the commencement of construction, Redox shall submit to the Director-General a Security Management Plan for the development.		✓		N/A	The last stage of construction occurred in 2008 with the nature of operations remaining the same since that time. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010.
Traffic and Transport						
Community Enhancement Program						
4.8	Prior to the commencement of operation, or within such time as agreed by the Director-General, the Applicant shall negotiate an agreed outcome with Council for an appropriate level of contribution (financial or in-kind) and as applicable, towards mitigating any cumulative social and/or community impacts as a result of the proposed development.			✓	Compliant	Facility personnel advised that the only contribution Redox has made to Council associated with the development is for the construction of an off- or on-ramp to the M5 motorway. It is understood the contribution was negotiated between Department of Infrastructure, Planning and Natural Resources (now Department of Planning and Infrastructure) and Redox. There have been no other contributions made to Council in relation to this condition.
Site Access, Internal Roads and Parking						



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		General	Construction	Operation		
4.9	The Applicant shall ensure all heavy vehicles access the site in a forward direction via the Holmes Road entrance and not via Swettenham Rd entrance. Not applicable during emergencies or as directed by relevant authority (including the police and emergency services).			✓	Compliant	Redox has implemented a Transport Management Plan to minimise amenity impacts on the locality from heavy vehicle accessing and leaving the site. The Plan has been prepared to meet the requirements of condition 7.5(b) and to ensure heavy vehicles access the site in a forward direction via the Holmes Road entrance and not Swettenham Road. Redox monitors the movement of heavy vehicles on a 4 audits per month schedule to confirm that vehicle movements follow the designated routes when transporting materials to and / or from Redox as outlined in their procedure for NSW Heavy Vehicle Requirements and as specified in the transporter agreement with the transport company. ENVIRON sighted a number of the vehicle movement audit forms for year 2013, and noted that of nine forms viewed, three were not compliant (i.e. had not followed the designated route) and thus were not entering the site via Holmes Road on the first attempt. Facility personnel advised that where vehicles are noncompliant with this requirement, a Problem Record is raised in the Redebiz system and a corrective action request issued to the driver/ transport company. ENVIRON viewed a non-compliance Problem Record in Redebiz to confirm the process. ENVIRON also observed during the site walk over that a one-way internal road system operates at the site so that all vehicles are only allowed to move in one direction. This is



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		General	Construction	Operation		
						reinforced with painted arrows on the roads indicating the traffic direction.
4.10	The Applicant shall develop and implement, in consultation with Council, a road hierarchy for heavy vehicles travelling to and from the site, with the Holmes Rd, Ben Lomond Rd, Airds Rd, Rose Payten Drive, Campbelltown Rd, and M5 Motorway forming the principal route to and from the site. The Applicant shall submit details of the road hierarchy for the approval of the Director-General prior to commencement of operations on the site.			✓	Compliant	Facility personnel advised that a road hierarchy for heavy vehicles using the roads specified is in place and has been communicated to the transport companies. Redox provided to ENVIRON a copy of the Road Hierarchy for Heavy Vehicles (dated 9 February 2009, Revision 2) and correspondence from Department of Planning (dated 21 May 2009) confirming approval of the road hierarchy from the Director-General and Campbelltown City Council.
4.11	Prior to the commencement of operations, Redox shall submit for the Director-General's approval a Transport Code of Conduct for the development.			✓	N/A	The last stage of construction occurred in 2008 with the nature of operations remaining the same since that time. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010.
4.12	Prior to the commencement of any B-double transport to the site, Redox shall demonstrate to the satisfaction of the Director-General that the B-double reclassification of Holmes Road has been approved by the RTA in association with Council.			✓	N/A	The last stage of construction occurred in 2008 with the nature of operations remaining the same since that time. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audits undertaken in 2006 and/or 2010.
4.13	The use of landscaping shall not affect driver sight distance for vehicles entering and exiting the site.		✓		Compliant	During the site walk over, ENVIRON observed that landscaping did not affect driver sight distance during entry and exit of the site.
4.14	Redox shall design and construct all internal road works, including assoc. parking facilities and loading bays:				Compliant	Facility personnel advised that internal road works and parking infrastructure complies with RTA (now RMS) and Council standards



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		General	Construction	Operation		
	(a) In accordance with the relevant RTA and Council standards & codes, and Australian Standards including AS2890.1-1993 and AS2890.2-1989; (b) With clearly marked visitor, disabled, ambulance and service vehicle parking areas; and		✓			and codes. A copy of the design engineers, Algorry Zappia & Associates Pty Ltd, Certificate was provided to confirm the internal driveway and parking area gradients and levels comply with AS2890.1 and AS2890.2.
	(c) With signage to demarcate all vehicle movements within the site.		✓			
Road Works						
4.15	The Applicant shall ensure that the deceleration lane at Swettenham Rd entrance is designed in accordance with Council's <i>Specification for Construction of Subdivisional Road and Drainage Works</i> and that the land is constructed to the satisfaction of Council. The Applicant shall submit detailed engineering plans of the deceleration lane for the approval of Council prior to the commencement of any construction activities associated with Stage 1 of the development.		✓		Compliant	Facility personnel indicated that the deceleration lane at the Swettenham Road entrance and the land was constructed to Council's satisfaction. The Certificate of Compliance issued by Algorry Zappia & Associates is understood to also apply to this condition. Correspondence from Council approving the deceleration lane was not available,
4.16	The Applicant shall ensure that a compensatory pedestrian footpath is designed and constructed to the satisfaction of Council. The footpath shall be within the site boundaries along the length of Swettenham Rd deceleration lane. This footpath shall be dedicated to Council as a Public Road prior to commencement of operations.		✓		N/A	The last stage of construction occurred in 2008. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audits undertaken in 2006 and/or 2010.
Noise Impacts						
Construction Noise						



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		General	Construction	Operation		
4.17	The Applicant shall ensure that all site preparation and construction activities associated with the development do not exceed the criteria at the nominated locations specified in Table 1. For the purpose of this condition, construction noise shall be determined at the locations under the conditions specified for operational noise, as provided in conditions 4.21 and 4.22 of this consent.		✓		Compliant	The last construction works undertaken at the site (for Stage 3) were completed at the end of 2008. Facility personnel advised that there were no non-compliance issues associated with construction noise limits during this time. ENVIRON reviewed the noise assessment report undertaken during Stage 3 construction works (Minto Storage and Distribution Centre, Stage 3 Construction Noise Audit, 29 September 2008 by Acoustic Dynamics Pty Ltd) which reported that predicted noise emission levels at nearby residential receivers were below the relevant noise criteria. In addition, ENVIRON was provided a copy of correspondence from the Department of Planning, dated 24 October 2008, that confirmed the Stage 3 Construction Noise Audit met the requirements of the consent condition 5.4 and construction noise was
4.18	The Applicant shall ensure that site preparation and construction activities associated with the development do not exceed 62 dB(A) _{(LAeq(15 minute))} at the New Generation Childcare Centre, 30 Swettenham Road, St Andrews, during normal operating hours and/or occupation of the Childcare Centre.		✓		Compliant	As previously mentioned, the last construction works undertaken at the site were for Stage 3 which was completed at the end of 2008. ENVIRON reviewed the noise assessment report undertaken during Stage 3 construction works (Minto Storage and Distribution Centre, Stage 3 Construction Noise Audit, 29 September 2008 by Acoustic Dynamics Pty Ltd) which reported that predicted noise emission levels at the New Generation Childcare Centre was below the relevant noise criteria. In addition, ENVIRON was provided a copy of correspondence from the Department of



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		General	Construction	Operation		
						Planning, dated 24 October 2008, that confirmed the Stage 3 Construction Noise Audit met the requirements of the consent condition 5.4 and construction noise was below the required criteria.
4.19	The Applicant shall only undertake noisy site preparation works and noisy construction activities (including transportation of fill and spoil) associated with the development, between the following hours: a) 7:00 am to 6:00 pm Mondays to Fridays, inclusive; b) 8:00 am to 1:00 pm on Saturdays; and c) At no time on Sundays or public holidays.		✓		Compliant	Facility personnel advised that preparation and construction activities were only undertaken during the hours specified in this condition.
4.20	The hours of site preparation works and construction activities specified under condition 4.17 of this consent may be varied with the prior written approval of the Director-General. Any request to alter the hours of site preparation works or construction activities specified under condition 4.17 shall be: a) considered on a case-by-case basis; b) accompanied by details of the nature and need for activities to be conducted during the varied site preparation and construction hours; c) details of how potentially affected members of the community will be consulted and informed of the proposed varied site preparation and construction hours; and d) accompanied by written evidence of the EPA's agreement with the proposed variation in construction times, after providing any information necessary for the EPA to reasonably determine that activities undertaken during the varied construction hours will not adversely impact on the acoustic amenity of receptors in the vicinity of the site.		✓		N/A	So noted. However, there are currently no site preparation or construction works being undertaken, the last construction works being undertaken during 2008.
Operational Noise						



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		General	Construction	Operation		
4.21	The Applicant shall design, construct, operate and maintain the development to ensure that the noise contributions from the development to the background acoustic environment do not exceed the maximum allowable noise contributions specified in Table 2, at those locations and during those periods indicated. The maximum allowable noise contributions apply under: a) Wind speeds up to 3ms ⁻¹ (measured at 10 metres above ground level); or b) Temperature inversion conditions up to 3°C per 100 metres and wind speeds up to 2 ms ⁻¹ (measured at 10 metres above ground level).	✓			Compliant	Facility personnel advised that the site has been constructed to design plans as approved by DP&I. ENVIRON was provided with the most recent noise assessment undertaken in May 2009 by Acoustic Dynamics (Minto Storage and Distribution Centre, Stage 3 Operational Noise Audit, 10 June 2009 by Acoustic Dynamics). The noise assessment was conducted after the construction of Stage 3, during normal operational times. The noise contributions from the development were measured to be below the maximum allowable noise contributions specified in Table 2.
Measurement of Noise Impacts						
4.22	Noise from the development shall be: a) Measured at the most affected point on or within the residential boundary to determine compliance with LAeq(15minute) noise limits; or b) Measured at 1 metre from the dwelling façade to determine compliance with LA1(1 minute) noise limits.	✓			Compliant	ENVIRON noted from the Stage 3 Operational Noise Report by Acoustic Dynamics, 10 June 2009, that noise contribution readings were taken at the locations specified by this condition.
Soil and Water Impacts						
4.23	Redox shall comply with section 120 of the <i>Protection of the Environment Operations Act 1997</i> , which prohibits the pollution of waters.	✓			Compliant	Facility personnel advised that stormwater isolation valves are used at the three oil and silt arrestor pits on site, which are located near the chemical storage warehouses. These isolation valves are in a permanently closed position to prevent potentially contaminated stormwater being released to Bow Bowing Canal. Testing of stormwater samples is undertaken prior to discharge to the canal to ensure stormwater quality meets acceptable criteria. ENVIRON was provided copies of some laboratory reports for the analysis of



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						stormwater samples taken during 2012 and 2013 to confirm that testing had occurred.
Soil, Contamination and Geotechnics						
4.24	The Applicant shall ensure that all materials displaced during site preparation and construction works are stabilised or relocated and made secure so that these materials will not detrimentally affect any watercourse or riparian area.		✓		N/A	So noted. ENVIRON notes this condition is not applicable to the current operations and has been excluded from ENVIRON's scope of work.
4.25	Prior to the commencement of any site preparation or construction work, Redox shall submit for the approval of the Director-General, a geo-technical assessment of the site.		✓		N/A	So noted. ENVIRON notes this condition is not applicable to the current operations and has been excluded from ENVIRON's scope of work.
4.26	Prior to the commencement of any site preparation of construction work on the site, the Applicant shall submit for the approval of the Director-General, a contamination review of the site to confirm the presence, or otherwise of any contamination on the site, and to demonstrate that any contamination on the site is not inconsistent with the development. The contamination review shall be prepared by a suitably qualified person(s) and shall detail any additional measures that shall be implemented to address contamination, if identified, and if required.		✓		N/A	So noted. ENVIRON notes this condition is not applicable to the current operations and has been excluded from ENVIRON's scope of work.
4.27	Depending on the outcome of the investigations required by Condition 4.26, the Director-General may require Redox to prepare and implement a Soil Contamination Protocol.		✓		N/A	So noted. ENVIRON notes this condition is not applicable to the current operations and has been excluded from ENVIRON's scope of work.
Bow Bowing Canal and Riparian Zone						
4.28	The Applicant shall establish and maintain a riparian zone, consisting of local native plant species, in the area between the development and the watercourse within the property boundary. The zone shall be designed to ensure bed and bank stability of this		✓		Compliant	Facility personnel advised the riparian zone was established in early 2006 and planted with local native species. Maintenance of this area and other site landscaped areas is undertaken by Redox's Maintenance Officer



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	area, and to prevent any sedimentation and water quality impacts on Bow Bowling Canal resulting from the development. The riparian zone shall be designed and constructed to meet the requirements of the Department and shall be addressed as part of the Vegetation Construction Environmental Management Plan (condition 7.2(d) – should be 7.2(c)(v)).					under a landscape maintenance program which outlines the schedule for maintaining the landscaped areas in a tidy and healthy state.
4.29	The Applicant shall maintain the riparian zone, as required by condition 4.28, for a period of at least two years after final planting. Every six months during that period the Applicant shall submit to the satisfaction of the Department, a status detailing the progress of implementation of the Vegetation Construction Environmental Management Plan (condition 7.2d).			✓	Compliant	Facility personnel advised that a progress report was submitted to the Department every six months during the two year period after final planting of the riparian zone. ENVIRON was provided copies of the Vegetation Management Report – Progress/ Status Reports for two of the four reporting periods (August 2006 and February 2007) during the two year period and copies of correspondence from the Department of Planning confirming receipt of reports for three of the four reporting periods (including the final progress report). The Department of Planning correspondence indicated the progress reports were approved as satisfying the requirements of this condition.
4.30	The Applicant shall design and construct any stormwater outlet structure located within 40 metres of Bow Bowling Canal to ensure that the structure does not compromise the stability or function of the riparian zone. The design of any outlet structure within the riparian zone, including pipelines and spillways, shall be in accordance with the Departments guideline <i>Stormwater Outlet Structures to Streams</i> and shall be approved by the Director-General prior to the commencement of any construction works within the riparian zone. Amendment - The Applicant shall design and construct any stormwater outlet associated with the development for Bow Bowling Canal in accordance		✓		Compliant	Stormwater outlets from the site discharge directly into Bow Bowling Canal. There are no outlet structures discharging into the riparian zone. The Redox Operational Environmental Management Plan dated November 2011 (Revision 3) notes that there are two stormwater outlets draining to Bow Bowling Canal and that these were designed in accordance with Council's Standard Design Requirements SD88.



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		General	Construction	Operation		
	with Council's guideline Standard Design Requirements SD88 – Standard Main Channel Outlet Design.					
Waste Generation and Management						
4.31	The Applicant shall not receive waste at the site for storage, treatment, processing or reprocessing, and shall not dispose of waste generated by the development on the site, except as may be expressly permitted by an EP Licence for the development under the <i>Protection of the Environment Operations Act 1997</i> .			✓	Compliant	Facility personnel advised that wastes from off-site sources are not received, stored, treated, or processed at the site and any wastes generated by site activities are disposed of by waste contractors to off-site facilities. This was confirmed during ENVIRON's site walk around and through a review of selected waste disposal documentation.
4.32	Except as provided by any EP Licences issued for the development, the Applicant shall ensure that only the following hazardous &/or industrial and/or Group A waste listed below are generated &/or stored at the site: i) Acidic solutions or acids in solid form; ii) Basic solution or bases in solid form; iii) Non-toxic salts; iv) Zinc compounds; v) Waste oil/water, hydrocarbons/water mixtures or emulsions; vi) Containers that are contaminated with residues of substances referred to in the National Environment Protection (Movement of Controlled Wastes between States and Territories) Measure list of hazardous, industrial and liquid waste codes; vii) Surface active agents (surfactants), containing principally organic constituents and which may contain metals and inorganic materials; viii) Boron compounds; ix) Cadmium, cadmium compounds;			✓	Compliant	ENVIRON reviewed the waste log for 2011 and 2012 and noted that waste materials with waste codes E100, F110 and Z500 were generated and stored at the site during 2011. These waste types are not one of the permitted wastes specified in this condition. However, the condition does make reference to permitted waste types under the Environment Protection Licence. A review of the Environment Protection Licence confirmed that the site is licensed as a chemical storage waste generation activity permitting hazardous waste, restricted solid waste, liquid waste and combinations of these to be generated or stored in quantities between 5 to 100 tonnes a year. ENVIRON considers that the site is therefore in compliance with this condition. In addition, ENVIRON contacted the EPA to



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	x) Chromium compounds (hexavalent and trivalent); xi) Cobalt compounds; xii) Copper compounds; xiii) Ethers; xiv) Phenols, phenol compounds including chlorophenols; xv) Phosphorus compounds excluding mineral phosphates; xvi) Selenium, selenium compounds; xvii) Waste chemical substances arising from research and development or teaching activities including those which are not identified and/or new and whose effects on human health and/or the environment are not known; xviii) Fire debris and fire washwaters; xix) Halogenated organic solvents; xx) Inorganic fluorine compounds excluding calcium fluoride; xxi) Inorganic sulphides; xxii) Isocyanate compounds; xxiii) Lead, lead compounds; xxiv) Nickel compounds; xxv) Organic phosphorous compounds;					confirm the waste description for Z500 is no longer used and should not be used to describe wastes. Redox should consider reclassifying wastes to codes other than Z500.
4.33	The quantity of hazardous and/or Industrial and/or Group A waste generated at the site per year shall not exceed 100 tonnes.			✓	Compliant	ENVIRON reviewed the waste log for 2011 and 2012 that is maintained by the Regulatory Affairs Coordinator. The waste logs reported the total waste generated (excluding general waste) for each of these years was less than 100 tonnes.
4.34	The quantity of hazardous and/or Industrial and/or Group A waste stored at the sit shall not exceed 50 tonnes at any one time.			✓	Compliant	ENVIRON reviewed the waste log for 2011 and 2012 and noted that the total waste stored (excluding general waste) at any one time did not exceed the 50 tonnes condition requirement.



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
4.34A	Amendment – Prior to the commencement of construction of the truck wash facility at the site, the Applicant shall consult with Sydney Water with respect to the design of the facility to ensure that discharges to the sewer from the development can meet any relevant standards set by Sydney Water. Prior to the operational use of the truck wash facility, the Applicant shall demonstrate to the Director-General that a Trade Waste Agreement has been entered into with Sydney Water for the discharge of wastewater generated by that facility.				Compliant	Facility personnel advised that Sydney Water was consulted during the design of the truck wash facility. ENVIRON was provided a copy of correspondence from the Department acknowledging that Sydney Water had approved in-principle the truck wash facility. Compliance with this condition is also supported by the issue of a Consent to Discharge Industrial Trade Wastewater (Consent No. 29981) issued by Sydney Water, dated 25 August 2010.
Air Quality Impacts						
Odour						
4.35	Redox shall design, construct, operate and maintain the development to prevent the emission of any offensive odour from the site that is attributable to the operation of the development.	✓			Compliant	It is assumed the development has been designed and constructed so as to prevent the emission of offensive odours as it has been audited previously following completion of the earlier stages. There are understood to have been no changes to the facility since Stage 3 was completed in 2008. Redox has in place procedures that specify that if any materials delivered to site from a supplier, has a discernible odour or cannot be appropriately stacked (which may lead to packaging damage and release of odours) then this material is returned to the supplier at the earliest possible time, or if this is not possible is transported to another facility (i.e. a subcontract warehouse).
Acetic Acid Scrubber						



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
4.36	The Applicant shall design, construct, commission and operate the acetic acid scrubber to ensure that the emissions from the scrubber meet the requirements specified in the Environment Protection Licence.	✓			N/A	Facility personnel advised that the acetic acid scrubber (part of Stage 4) has not been constructed and there are no foreseeable plans to undertake these activities or construct Stage 4 at the site.
4.37	Prior to the commencement of decanting activities involving acetic acid on the site, the Applicant shall submit to the Director-General and the EPA the manufacturer's performance guarantee and the detailed final design of the acetic acid scrubber.			✓	N/A	Not applicable. Decanting activities associated with Stage 4 of the development have not been undertaken at this stage and there are no foreseeable plans to undertake these activities at the site.
Dust Emissions						
4.38	Redox shall design, construct, commission, operate and maintain the development in a manner that minimises dust emissions.	✓			Compliant	The site has developed and implemented a Dust Control Management procedure to minimise dust emissions from site activities. Measures that are in place include immediate clean-up of any spilled materials such as from damaged packages, daily sweeping and vacuuming of warehouse floors, keeping the garage doors to each vacuuming of other hardstand areas such as driveways and external paved areas. In addition, the Store Manager undertakes weekly inspections of the warehouses to ensure that these areas are kept clean and tidy, amongst other criteria. During ENVIRON's site walk over, the site was observed to be in a clean and tidy state with no significant dust emissions being generated.
Visual Amenity Impacts						



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
4.39	Redox shall prepare an external design panel indicating the proposed external design finishes, materials and configuration, in consultation with Council. The Applicant shall submit the design panel to the Director-General for approval prior to the commencement of the construction.		✓		N/A	Not applicable to this reporting period. ENVIRON notes this condition is not applicable to the current operations and has been excluded from ENVIRON's scope of work.
4.40	The Applicant shall ensure that all external lighting associated with the development is mounted, screened and directed in such a manner so as not to create a nuisance to surrounding properties or roadways. The lighting must be the minimum level of illumination necessary and shall comply with AS4282 (INT) 1995 Control of Obtrusive Effects of Outdoor Lighting.	✓			Compliant	External lighting present on the site is used primarily for security purposes rather than for operational activities. Facility personnel noted that external lighting complies with AS4282 and that to date there have been no complaints made in relation to the lighting at the site.
4.41	This consent does not permit the display of any advertisement, or the erection of any advertising structure on the site. This does not apply to any advertisement or structure that cannot be seen from the nearest public space, nor any signage specified elsewhere in this consent (refer condition 3.2).	✓				Facility personnel advised that a sign is located at the Swettenham Road entrance that advertises vacant positions at the facility. This sign has approximate dimensions of 1.5 m x 1.5 m. There are no other advertisements or advertisement structures erected on the site.
4.4	Redox shall ensure that all external lighting associated with the development is mounted, screened and directed in such a manner so as not to create a nuisance to surrounding properties or roadways.		✓		Compliant	Not applicable to this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
4.41	This consent does not permit the display of any advertisement, or the erection of any advertising structure, on the site.	✓			Noted	
5	ENVIRONMENTAL MONITORING AND AUDITING					
5.1	Redox shall undertake all monitoring, including recording and reporting of monitoring results, as required under this consent, and as may be specified	✓			Compliant	Redox currently undertakes monitoring and reporting of the following: · Stormwater quality prior to discharge to Bow Bowing Canal, as required by this



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
	under an Environmental Protection Licence.					consent (refer condition 5.8). Copies of laboratory reports for the analysis of stormwater samples were provided to ENVIRON. The consent also specifies the following to be monitored, as relevant: · Transport Auditing (refer condition 5.2); · Noise monitoring (construction and operational) (refer condition 5.4 to 5.7); and · Air quality (refer condition 5.9 to 5.11). There are no requirements specified in the EP Licence for monitoring of air, noise or water emissions for the current activities at the site. In addition, the site monitors and reports on their trade wastewater discharge as required by the Consent to Discharge Industrial Trade Wastewater issued by Sydney Water Corporation.
Transport Auditing						
5.2	Within 90 days of commissioning each stage of the development, and then as may be required by the Director-General, the Applicant shall commission an independent Transport Audit of the development. This Audit shall: a) Be undertaken by a suitably qualified and experienced person, approved by the Director General prior to the commencement of the Audit; b) Assess whether the heavy vehicles associated with the development are complying with the measures detailed in Traffic Management Plan (condition 7.5(b)) and as required by this consent; and c) If any non-compliance is detected, identify what additional measures will be implemented to ensure			✓	Compliant	Redox provided a copy of the correspondence from the Department of Planning approving the consultant to be used for the Transport Audit for Stage 3. The Transport Audit report identified one non-conformance related to a 'No Entry' sign not meeting Australian Standard requirements. The report included a recommended corrective action which facility management has noted as being closed out. A copy of internal documentation requesting action on the Audit report recommendation and subsequent implementation of the recommendation was provided to ENVIRON to demonstrate this matter had been addressed.



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
	compliance.					
5.3	Within 28 days of conducting the Audit (for 5.2), the Applicant shall provide the Director-General and Council with a copy of the audit report. If the Audit identifies any non-compliance with the Transport Management Plan or any Consent conditions, the Applicant shall detail what additional measures would be implemented to ensure compliance, indicating who would implement these measures, when by and how effectiveness of the measures would be measured & reported to the Director-General.			✓	Compliant	The Transport Audit report for Stage 3 was submitted to the Department of Planning within the required timeframe. Further communication from the Department requested Redox provide an action plan detailing the response to the Auditor's recommendation and facility personnel advised this was undertaken and that the recommendation has been implemented. Refer to condition 5.2 for further details.
Noise Monitoring and Auditing						
Construction Noise						
5.4	Within one month of commencement of construction activities associated with each stage development, the Applicant shall submit to the Director-General and the EPA a Construction Noise Audit to demonstrate compliance with the construction noise limits specified in conditions 4.17 & 4.18. The Audit shall be completed by a suitably qualified acoustic consultant, approved by the Director-General prior to commencement of the Audit. Should the Audit indicate that construction activities are above the set noise criteria, the report shall identify additional measures to be implemented to ensure compliance, indicating who would implement the measures, when by, and how the effectiveness of		✓		Compliant	Redox provided a copy of the last construction noise audit (for Stage 3) and correspondence from the Department of Planning approving the consultant to be used, Acoustic Dynamics Pty Ltd, for the Construction Noise Audit for Stage 3. The Construction Noise Audit report (Minto Storage and Distribution Centre, Stage 3 Construction Noise Audit, 29 September 2008 by Acoustic Dynamics) noted that noise emission levels at the nearby receivers were below the relevant criteria and that no special noise mitigation measures were required for the Stage 3 construction works.
5.5	Redox may seek the Director-General's approval, in consultation with the EPA, to dispense with the requirement to undertake a Construction Noise Audit for stage 2, 3 and/or 4 of the development.		✓		N/A	Stage 4 has not yet been constructed and the facility has not sought Director-General approval for dispensation of this condition.



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
Operational Noise						
5.6	Within 90 days of the commencement of operation of each stage of the development, Redox shall conduct an Operational Noise Audit of its operations.			✓	Compliant	Not applicable to this reporting period. Stage 3 (of 4) is the latest stage to have been constructed and is operational. An operational noise audit was undertaken in May 2009 (Redox Pty Ltd – Minto Storage and Distribution Centre, Stage 3 Operational Noise Audit, 10 June 2009, by Acoustic Dynamics). ENVIRON reviewed the audit report which concluded that the site operations complied with the relevant noise criteria and that no additional noise mitigation measures were required for the operation of Stage 3. Correspondence from the Department approving the consultant to be used for the operational noise audit was not available. However, as the consultant, Acoustic Dynamics Pty Ltd, was previously approved for the construction noise audit in 2008, ENVIRON has assumed approval would have been granted as a suitably qualified and experienced person.
5.7	Within 28 days of conducting the Audit, Redox shall provide the Director-General and EPA with a copy of the Noise Audit report.			✓	Compliant	Not applicable to this reporting period. ENVIRON was provided a copy of correspondence from the Department approving the Operational Noise Audit undertaken in early 2007. Facility personnel provided a copy of the subsequent Audit report for the operation of Stage 3, prepared in June 2009. ENVIRON was informed the 2009 Audit report was submitted to the Department, although no record was available to confirm this.



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
Stormwater Quality Monitoring						
5.8	Prior to commencement of operations, the Applicant shall submit for the approval of the Director-General, in consultation with Council, a Stormwater Quality Monitoring Program. The Program shall form part of the Stormwater Operational Environmental Management Plan (per condition 7.5(c)). The Program shall include, but not limited to: a) Identification of contaminants to be tested, including those required under the Clean Water Regulation (Class R classification) b) Monitoring frequencies c) Methodologies for stormwater quality monitoring The Stormwater Quality Monitoring Program shall be submitted to Director-General for approval prior to commencement of operations.			✓	Compliant	Facility personnel advised that the Stormwater Quality Monitoring Program forms part of the Stormwater Management Plan which is contained within the Operational Environmental Management Plan (OEMP). The Stormwater Quality Monitoring Program was approved by the Director-General. ENVIRON was provided a copy of correspondence from the Department approving the OEMP (of which the Stormwater Management Plan is part of). ENVIRON notes that the Stormwater Quality Monitoring Program and the related Water Release from Retention Basin procedure (No. 3405) includes consideration of monitoring frequencies, methodologies and parameters to be tested including for Class R classification.
Air Quality Monitoring and Auditing						
Acetic Acid Scrubber						
5.9	Redox shall periodically determine the pollutant concentrations discharged from the acetic acid scrubber.			✓	N/A	Not applicable. Facility personnel advised that the acetic acid scrubber (part of Stage 4) has not been constructed and there are no foreseeable plans to undertake these activities or construct Stage 4 at the site.
5.10	Within 90 days of commencing acetic acid decanting activities at the site ... Redox shall conduct an Air Quality Audit of its operations to confirm the air emission performance of the acetic acid scrubber.			✓	N/A	Not applicable. Decanting activities are associated with Stage 4 of the development which has not been undertaken. There are no foreseeable plans to undertake these activities.
5.11	Within 28 days of conducting the Audit referred to under condition 5.10 of this consent, Redox shall provide the Director-General and EPA with a copy of the Air Quality Audit report.			✓	N/A	Not applicable. Refer to condition 5.10.



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
Independent Hazard Auditing						
5.12	Twelve months after the commencement of operation of Stage 1 of the development ... Redox shall commission an independent, qualified person or team to undertake a Hazard Audit of the development. Further Hazard Audits shall be undertaken every three years or within 12 months of commissioning Stages 2, 3 and 4 of the development.			✓	Compliant	Facility personnel advised that Independent Hazard Audits were undertaken for the facility in 2006 and 2010. ENVIRON was provided with copies of Department of Planning correspondence for the Audit Report to confirm these had been undertaken. Redox has commissioned another Independent Hazard Audit to be completed by Moore Management by the end of December 2013. ENVIRON sighted documentation to confirm that the Moore Management consultant undertaking the audit has been approved by the Director-General.
Independent Environmental Auditing						
5.13	Twelve months after the commencement of operation of each stage of the development, and every three years thereafter, Redox shall commission an independent, qualified person or team to undertake an Environmental Audit of the development.			✓	Compliant	Facility personnel advised that Independent Environmental Audits were undertaken for the facility in 2006 and 2010. ENVIRON was provided with copies of Department of Planning correspondence for the Audit Report to confirm these had been undertaken. Redox has commissioned another Independent Environmental Audit to be completed by ENVIRON Australia Pty Ltd by the end of December 2013. ENVIRON has been approved by the Director-General to undertake the audit.
5	ENVIRONMENTAL MONITORING AND AUDITING					
6.1	Subject to confidentiality, Redox shall make all documents required under this consent available for public inspection on request.	✓			Compliant	Redox has a Community Right to Know Policy that commits to providing information on its activities and listening and responding to community concerns. Redox has committed to making the following information



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		General	Construction	Operation		
						available to interested parties: inputs, outputs, processes and storage; future plans; compliance with the Responsible Care Program; emergency response information, safety data sheets for products; environmental information on emissions, waste and reportable incidents; and licences and risk assessments undertaken. The website also provides some of this information.
Complaints Procedure						
6.2	Prior to the commencement of construction of the development, Redox shall ensure that the following are available: (a) a 24-hour, toll-free telephone number on which complaints about the development may be registered; (b) a postal address to which written complaints may be sent; and (c) an email address to which complaints may be transmitted. The telephone number, postal address and email address shall be advertised on at least one occasion prior to the commencement of construction of each stage of the development, through a medium approved by the Director-General.		✓ ✓ ✓ ✓		Compliant	Facility personnel advised that during construction of the development, a 24-hour toll free telephone number, a postal address and email address were available for registering complaints. ENVIRON notes that the current Redox website provides the postal and street address, a toll-free number and an email address to make contact with the site.
6.3	Redox shall record details of all complaints received ... in an up-to-date Complaints Register. The Complaints Register shall be made available upon request.	✓			Compliant	Redox documents complaints in its Redebiz system. A screenshot of the complaints register (recorded as a Problem in Redebiz) was provided to ENVIRON indicating that the system can record the condition requirements a) to f). ENVIRON understands that the complaints register on Redebiz would be made available for inspection by the Director-General upon request.



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
Community Communication Strategy						
6.4	Prior to the commencement of operations at the site, Redox shall prepare and implement a Community Communication Strategy for the development. The Strategy shall be approved by the Director-General prior to the commencement of any operations on the site.			✓	Compliant	Redox has implemented a Community Communication Strategy to address community concerns and outline mechanisms for providing information. Facility personnel provided ENVIRON with documentation confirming the Director-General's approval of the Community Communication Strategy.
7	ENVIRONMENTAL MANAGEMENT					
Environmental Representative						
7.1	Prior to the commencement of construction of the development, Redox shall notify the Director-General of the name and contact details of a suitably qualified and experienced Environmental Representative, and any changes to that appointment that may occur from time to time.	✓			Compliant	Facility personnel advised that during construction, commissioning and operation of the development, an Environmental Representative was and continues to be employed on a full-time basis. The current Environmental Representative has confirmed to ENVIRON that their duties and responsibilities encompassed the requirements outlined in this condition. Facility personnel noted that the Environmental Representative has changed a number of times since the development obtained consent. The Director-General has previously been notified of these changes in personnel and the company has recently informed the Director-General of the latest Representative.
Construction Environmental Management Plan						



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
7.2	Redox shall prepare and implement a Construction Environmental Management Plan to outline environmental management practices to be followed during site preparation and construction activities during each stage of the development.		✓		N/A	Not applicable to this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
	✓		Not applicable to this reporting period			
	The plan shall be submitted for the approval of the Director-General no later than one month prior to the commencement of any site preparation and construction works associated with the development.		✓			
	Preparation and construction works associated with any stage of the development shall not commence until written approval has been received from the Director-General.		✓		Noted	
7.3	As part of the Construction Environmental Management Plan for the development, Redox shall prepare and implement the following Management Plans:				N/A	Not applicable to this reporting period. Addressed as pre-construction requirement for Stages 1 & 2 of the development.
	(a) Noise Management Plan		✓			It should be noted that the Vegetation Management Plan (referred to as the Landscape Management Plan in Redox's Operational Environmental Management Plan) continues to be used during the operation of the site.
	(b) Transport Management Plan		✓			
	(c) Erosion and Sediment Management Plan		✓			
	(d) Vegetation Management Plan		✓			
Operation Environmental Management Plan						
7.4	The Applicant shall prepare and implement an Operational Environmental Management Plan to detail an environmental management framework, practices and procedures to be followed during the operation of the development. The Plan shall include, but not necessarily limited to:			✓	Non –Compliant, Refer to Action Plan table 2.3	Redox has prepared and implemented an Operational Environmental Management Plan (OEMP) taking into account the requirements i) to vii) of this condition. ENVIRON's review of the current Plan (dated November 2011, Revision 3)



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		General	Construction	Operation		
	i) Identification of all statutory & other obligations required to fulfil in relation to operation of phase 1 of the development, including all consents, licences, approvals and consultations ii) A description of the roles and responsibilities for all relevant employees involved in the operation of the development iii) Overall environmental policies and principles to be applied to be applied to the operation of the development iv) Standards and performance measures to be applied to the development, and a means by which environmental performance can be periodically reviewed and improved, where appropriate v) Management policies to ensure that environmental performance goals are met and to comply with the conditions of this consent vi) The Management Plans listed under Condition 7.5 of this consent vii) The environmental monitoring requirements under conditions 5.8 (stormwater quality monitoring) and 5.9 (pollutant concentrations at acetic acid scrubber) of this consent, inclusive. The Plan shall be submitted for the approval of the Director-General no later than one month prior to commencement of operation of stage 1, or such period agreed by the Director-General. Operation shall not commence until written approval received					indicated that the requirements of condition 7.4 have been considered and included in the Plan, as required, although it should be noted that: - For requirement i), obligations in relation to consent conditions and the Environment Protection Licence only are included. The Plan should be improved by including consideration of obligations under other Environmentally related approvals that apply to the site including the Consent to Discharge Industrial Trade Wastewater issued by Sydney Water Corporation and the Notification of Dangerous Goods on Premise issued by NSW WorkCover. - For requirement vii), environmental monitoring under condition 5.8 (i.e. stormwater quality) only applies. As the acetic acid scrubber has not been yet been constructed, there is no current requirement to undertake air quality monitoring of this activity. Facility personnel advised that the Director-General's approval of the OEMP was obtained. ENVIRON was provided a copy of correspondence from the Department approving the OEMP. Based on ENVIRON's site walk over and a review of a sample of documentation, it is considered that the OEMP is being implemented by the facility, in particular in the areas of waste management, stormwater management, incident reporting and storage of dangerous goods.



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
7.5	As part of the Operation Environmental Management Plan for the development, Redox shall prepare and implement the following Management Plans: (a) Noise Management Plan (b) Transport Management Plan (c) Stormwater Management Plan (d) Waste Management Plan (e) Landscape Management Plan			✓ ✓ ✓ ✓ ✓	Compliant	ENVIRON has sighted each of specified management plans required under this condition and confirm the plans have been prepared and are implemented as required. ENVIRON was provided a copy of correspondence from the Department approving the OEMP (which contains each of these plans) and acknowledging that Campbelltown City Council and the (then) Department of Environment and Conservation (i.e. EPA) had been consulted with respect to the OEMP. Based on ENVIRON's site walk over and a review of a sample of documentation, it is considered that the Management Plans specified in requirements a) to e) of this condition are being implemented by the facility. For example, the following observations were made: • Excessive levels of noise were not noted, particularly when forklifts and transport vehicles were in use; • The storage areas and yard areas were clean and tidy, and waste materials were stored in dedicated areas. Waste logs were maintained to monitor the quantities generated on site; • Traffic flow requirements at the site were signposted and the traffic movement was in compliance with site requirements. Traffic route inspection forms were provided to ENVIRON to confirm checks on compliance with transport procedures were undertaken as required;



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		General	Construction	Operation		
						Laboratory reports for the analysis of stormwater quality was provided to ENVIRON to demonstrate that monitoring is undertaken. The stormwater isolation valves at the stormwater pits were sighted by ENVIRON.
7.6	At least one month prior to the operation of Stage 2, Stage 3 and Stage 4 of the development, Redox shall update and submit for the approval of the Director-General, the Operation Environmental Management Plan. Operation of Stage 2, Stage 3 and Stage 4 shall not commence until the Director-General has approved the updated Plans.			✓	Compliant	Not applicable to this reporting period. Prepared as pre-operation requirement for Stages 1 & 2 of the development.
8	ENVIRONMENTAL REPORTING					
Incident Reporting						
8.1	Redox shall notify the EPA and the Director-General of any incident with actual or potential significant off-site impacts on people or the biophysical environment as soon as practicable after the occurrence of the incident. The Applicant shall provide written details of the incident to the EPA and the Director-General within seven days of the date on which the incident occurred.	✓			Compliant	Facility personnel advised there have been no incidents with actual or potentially significant off-site impacts requiring notification to the EPA or Department of Planning and Infrastructure. A review of the incident register by ENVIRON notes that in the past few years (2010 to 2013) there have been between 6 to 9 incidents each year, of which approximately half related to injuries. There were no significant environmental issues reported.
8.2	Redox shall meet the requirements of the Director-General to address the cause or impact of any incident, as it relates to this consent, reported in accordance with 8.1, within such period as the Director-General may require.	✓			N/A	Noted. Facility personnel advised that there have been no requirements by the Director-General for this condition as no incidents have been notified to the EPA or the Director-General.
Annual Performance Reporting						



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
8.3	The Applicant shall, throughout the life of the development, prepare & submit for the approval of the Director-General, an Annual Environmental Management Report (AEMR). The AEMR shall review the performance of the development against the Operation Environmental Management Plan (refer to condition 7.4 of this consent), the conditions of this consent and other licences and approvals relating to this development. The AEMR shall include, but not necessarily be limited to: a) Details of compliance with the conditions of this consent; b) A copy of the Complaints Register (refer to condition 6.3 of this consent) for the preceding twelve-month period (exclusive of personal details), and details of how these complaints were addressed and resolved; c) A comparison of the environmental impacts and performance of the development against the environmental impacts and performance predicted in those documents listed under condition 1.2 of this consent; d) Results of all environmental monitoring required under this consent and other approvals, including interpretations and discussion by a suitably qualified person; and e) A list of all occasions in the preceding twelve month period when environmental performance goals for the development have not been achieved, indicating the reason for failure to meet the goals and the action taken to prevent recurrence of that type of incident. The Applicant shall submit a copy of the AEMR to the Director-General every year, with the first AEMR to be submitted no later than twelve months after the commencement of operation. The Director-General	✓			Compliant	Facility personnel advised that an AEMR has been submitted to the Director-General each year since operations commenced. The latest AEMR for 2012 was submitted in early 2013. ENVIRON was provided a copy of the 2012 AEMR and notes that the requirements a) to e) of this condition have been addressed in the AEMR. In the AEMR, Redox noted that there was one environmental performance goal that had not been achieved at the time of report preparation (per requirement e)) and the associated action was reported as "pending." Facility personnel noted that there has been no acknowledgement of receipt of this AEMR by the Department of Planning and Infrastructure to date.



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
	may require the Applicant to address certain matters in relation the environmental performance of the development in response to review of the Annual Environmental Report. Any action required shall be completed within such period as the Director-General may require.					

2.2 Compliance with Environmental Protection Licence 12041

Table 2.2: Compliance with EPL 12041

Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
1	ADMINISTRATIVE CONDITIONS						
A1	What the licence authorises and regulates						
A1.1	N/A					N/A	
A1.2	This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation. Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition. Fee Based Activity: Scale General chemicals storage: 0–5000 kL of active storage capacity.			✓	Procedure 3801 – Warehouse Limitations.	Compliant	ENVIRON's review of the stock manifest dated 1 November 2012 notes that quantities of dangerous held at that time were below the maximum limit.



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Item	Licence Condition		Development Stage			Redox Procedure	Compliance	Evidence
			Gen.	Con.	Op.			
	Chemical storage waste generation: >5–100 T.				✓	Procedure 3402 – Waste Management & Disposal.		
A2	Premises to which this licence applies							
A2.1	Premises details.		✓				Noted	
A3	Other activities							
A3.1	N/A						N/A	
A4	Information supplied to the EPA							
2	DISCHARGES TO AIR & WATER & APPLICATIONS TO LAND							
P1	Location of Monitoring/Discharge Points and Areas							
P1.1	Air							
	EPA ID.	Type of Monitoring Point	Type of Discharge Point	Location				
	1	Discharge to air Air emissions monitoring	Discharge to air Air emissions monitoring	Acetic Acid Scrubber "Area A"	✓		Compliant	Not applicable to this reporting period. The Acetic Acid Scrubber will be part of Stage 4 of the development. The facility has not constructed the tank farm/ decanting area or the acetic acid scrubber, which are part of Stage 4, so this requirement is not applicable at this stage.
P1.2	N/A						N/A	
P1.3	N/A						N/A	
3	LIMIT CONDITIONS							
L1	Pollution of Waters							
L1.1	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.		✓			OEMP; Procedure 3405 – Water Release from Retention Basin.	Compliant	Facility personnel advised that stormwater isolation valves are used at the three oil and silt arrestor pits on site, which are located near the chemical storage warehouses. These isolation valves are in a permanently closed position to prevent potentially contaminated stormwater being released to



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
							Bow Bowling Canal. Testing of stormwater samples is undertaken prior to discharge to the canal to ensure stormwater quality meets acceptable criteria. Trade waste water generated at the site is licensed under a Consent to Discharge Industrial Trade WasteWater issued by Sydney Water Corporation. Trade wastewater is discharged to sewer and no other discharges were observed by ENVIRON during the site walk over.
L2	Load Limits						
L2.1	N/A					N/A	
L2.2	N/A					N/A	
L3	Concentration Limits						
L3.1	N/A					N/A	R1.2
L3.2	N/A					N/A	
L3.3	N/A					N/A	
L4	Volume and Mass Limits						
L4.1	N/A					N/A	
L5	Waste						
L5	Waste – The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled “Waste” and meeting the definition, if any, in the column titled “Description” in the table below. Note: Refer to Appendix B for the full conditions.			✓	Waste Management Plan (OEMP); Procedure 3402 – Waste Management & Disposal.	Compliant	Waste from off – site sources are not received at the facility. The only wastes present at the site are those that have been generated by site activities.
L6	Noise Limits						



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		Gen.	Con.	Op.			
L6.1	Noise from the premises must not exceed the sound pressure level (noise) limits at the nominated receiver locations.			✓	Noise Management Plan (OEMP); Procedure 3116 – Noise Management.	Compliant	ENVIRON was provided with the most recent noise assessment undertaken in May 2009 by Acoustic Dynamics (Minto Storage and Distribution Centre, Stage 3 Operational Noise Audit, 10 June 2009 by Acoustic Dynamics). The noise assessment was conducted after the construction of Stage 3, during normal operational times. The noise contributions from the development were measured to be below the maximum allowable noise contributions specified under this condition.
L7	Polychlorinated Biphenyls (PCBs)						
	Polychlorinated Biphenyls (PCBs) – the licensee must or where no specific conditions are outlined in this licence, the licensee must comply with the “Chemical Control Order in Relation to Materials and Waste Containing Polychlorinated Biphenyl, 1997.”	✓				N/A	The first stage of the site was constructed in 2005 and given its age ENVIRON considers that it is unlikely that PCBs would be present on-site.
L8	Asbestos						
	The licensee must comply with the Protection of the Environment Operations (Waste) Regulation 2005.	✓				N/A	The first stage of the site was constructed in 2005 and given its age ENVIRON considers it is unlikely that asbestos containing materials would be present onsite.
L9	Odour						
L9	No condition of this licence identifies a potentially offensive odour for the purpose of section 129 of the POEO Act 1997. Section 129 of the POEO Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises, ... except if the emission is identified [in L9.1].	✓			Significant Environmental Aspects & Potential Impacts: Odour Emissions (OEMP); Procedure 3117 – Odour Control Management.	Compliant	Redox has in place procedures to prevent the release of offensive odours. These procedures specify that if any materials delivered to site from a supplier, has a discernible odour or cannot be appropriately stacked (which may lead to packaging damage and release of odours) then this material is returned to the supplier at the earliest possible time, or if this is not possible is transported to another facility (i.e. a subcontract warehouse).
4	Operating Conditions						
O1	Activities must be carried out in a competent manner						



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		Gen.	Con.	Op.			
O1.1	Licensed activities must be carried out in a competent manner. This includes: (a) the processing, handling, movement & storage of materials and substances; and (b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.			✓ ✓	Procedure 3009 – Handling, Storage, Packing, Pres. & Del. Procedure 3402 – Waste Management & Disposal.	Compliant	The facility has implemented a number of procedures to manage the handling, storage and transport of materials and waste within the facility. During ENVIRON's site walk over, the implementation of some of these procedures was observed and it was considered that the environmental management of the facility was appropriate to minimise potential impacts on the environment.
O2	Maintenance of Plant and Equipment						
O2.1	All plant and equipment installed at the premises or used in connection with the licensed activity: (a) must be maintained in a proper and efficient condition; & (b) must be operated in a proper and efficient manner.			✓ ✓	Procedure 3901 – Equipment Service. Equipment Procedures: 3902, 3903, 3904, 3906, 3917, 3918, 3919.	Compliant	ENVIRON observed during the site walk over that plant and equipment was maintained in proper condition and that a maintenance schedule is in place to ensure regular inspections and maintenance are undertaken. ENVIRON did not audit the maintenance program.
O3	Emergency Response						
O3.1	The licensee must maintain, and implement as necessary, a current emergency response plan for the premises. The licensee must keep the emergency response plan on the premises at all times. The emergency response plan must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment. If a current emergency response plan does not exist at the date on which this condition is attached to the licence, the licensee must develop an emergency response plan within three months of that date.	✓			Procedure 3403 – Emergency Procedure.	Non-Compliant, refer to Action Plan table 2.3 below.	The facility has in place an Emergency Management Plan and related procedures (e.g. emergency procedure, spill procedure) that address the requirements of this condition. Changes to the POEO Act 1997 required licensed facilities to prepare and implement a Pollution Incident Response Management Plan (PIRMP) by 1 September 2012. A review of Redox's existing Emergency Management Plan by ENVIRON notes that this plan addresses many of the requirements of a PIRMP, however, some information was observed to be missing or the level of detail could be improved. These included, for example: • A description of the hazards to human health or the environment associated with the site activities; • The maximum quantity likely to be stored or held for any pollutants; • The contact details for all relevant authorities (e.g. EPA, local Council); • A detailed map showing the location of stormwater drains;



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
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							- The dates on which the PIRMP has been tested and the name of the person who carried out the test; - The dates on which the plan is updated; - The manner in which the plan is to be tested and maintained; - The PIRMP is to be made publicly available. Redox should review the Emergency Management Plan to ensure all information required for a PIRMP, as required under the POEO Act and associated Regulations are included in the plan. Further information can be found at http://www.epa.nsw.gov.au/legislation/poelegisamend2011.htm
O4	Process and management						
O4.1	The licensee must ensure that any liquid and/or non liquid waste generated and/or stored at the premises is assessed and classified in accordance with the DECC Waste Classification Guidelines as in force from time to time.	✓			Waste Management Plan (CEMP & OEMP); Procedure 3402 – Waste Management & Disposal.	Compliant	The facility tracks waste generated at the site through the use of a waste log that records the waste name, waste code, quantity, waste disposal company, hazard and/or dangerous goods classification amongst other information. Wastes that are to be recycled are segregated from other waste types and stored in separate waste bins. Refer to previous comment made for condition 4.32 of the Project Consent (Table 1) regarding waste classifications (i.e. Z500).
O4.2	The licensee must ensure that waste identified for recycling is stored separately from other waste.			✓	Waste Management Plan (CEMP & OEMP); Procedure 3404 – Recycling.	Compliant	Refer to O4.1
O5	Dust						
O5.1	All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.	✓			Significant Environmental Aspects & Potential Impacts: Dust Emissions (OEMP);	Compliant	As previously mentioned for Development Consent condition 4.38, the site has developed and implemented a Dust Control Management procedure to minimise dust emissions from site activities. Measures that are in place include immediate clean-up of any spilled materials such as from damaged packages,



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence								
		Gen.	Con.	Op.											
					Procedure 3110 – Dust Control Management.		daily sweeping and vacuuming of warehouse floors, keeping the garage doors to each warehouse area closed when access is not required, and regular sweeping and vacuuming of other hardstand areas such as driveways and external paved areas. In addition, the Store Manager undertakes weekly inspections of the warehouses to ensure that these areas are kept clean and tidy, amongst other criteria. During ENVIRON's site walk over, the site was observed to be in a clean and tidy state with no significant dust emissions being generated.								
5	MONITORING & RECORDING CONDITIONS														
M1	Monitoring Records														
M1.1 M2.1 M2.2	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition. For each monitoring/ discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample a the frequency, specified opposite in the other columns: Point 1 <table><tr><th>Pollutan t</th><th>Units of Measure</th><th>Frequenc y</th><th>Sampling Method</th></tr><tr><td>Acetic Acid</td><td>mg/m³</td><td>Quarterly</td><td>Method approved in writing by the Authority</td></tr></table> Monitoring for acetic acid is not required until the	Pollutan t	Units of Measure	Frequenc y	Sampling Method	Acetic Acid	mg/m ³	Quarterly	Method approved in writing by the Authority	✓				N/A	Stage 4 of the facility has not yet been constructed and acetic acid is not currently being stored or decanted at the site and thus this condition is not currently applicable.
Pollutan t	Units of Measure	Frequenc y	Sampling Method												
Acetic Acid	mg/m ³	Quarterly	Method approved in writing by the Authority												



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
	completion of stage 4, approximately 31 July 2009.						
M4	Recording of Pollution Complaints						
M4.1	The licensee must keep a legible record of all complaints made to the licensee, employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.	✓			Procedure 3022 – Problems & complaints.	Compliant	No complaints received. The facility documents complaints in its Redebiz system. A review of the summary of complaints recorded in Redebiz by ENVIRON confirmed that condition requirements a) to f) are required to be entered into the system.
M4.2	The record must include details of the following: (a) the date and time of the complaint; (b) the method by which the complaint was made; (c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; (d) the nature of the complaint; € the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; (f) if no action was taken by the licensee, the reasons why no action was taken.	✓			Procedure 3022 – Problems & Complaints.	Noted	No complaints received, however Procedure 3022 details requirements for recording pollution complaints.
M4.3	The record of a complaint must be kept for at least four years after the complaint was made.	✓			Procedure 3022 – Problems & Complaints.	Noted	
M4.4	The record must be produced to any authorised officer of the EPA who asks to see them.	✓			Procedure 3022 – Problems & Complaints.	Noted	
M5	Telephone complaints line						



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
M5.1	The licensee must operate a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises, unless otherwise specified in the licence.	✓			Procedure 3022 – Problems Complaints &	Compliant	ENVIRON notes that the Redox website provides a telephone number and a toll-free number and an email address to make contact with the site.
M5.2	The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.	✓			Procedure 3022 – Problems Complaints &	Compliant	The telephone number is listed at http://www.redox.com/Community/
M5.3	Conditions M5.1 and M5.2 do not apply until three months after: (a) the date of issue of the licence or (b) if this licence is a replacement licence within the meaning of the POEO (Savings and Transitional) Regulation 1998, the date on which a copy of the licence was served on the licensee under clause 10 of that regulation.	✓				N/A	Noted
6	REPORTING CONDITIONS						
R1	Annual return documents						
R1.1	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: (a) a Statement of Compliance; and (b) a Monitoring and Complaints Summary. A copy of the form in which the Annual Return must be supplied to the EPA accompanies this licence. Before the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.	✓			Procedure 3118 – Environmental Management System.	Compliant	The facility completes an Annual Return each year. A copy of the latest Annual Return (for 2012) was provided to ENVIRON to confirm this had been prepared and submitted. ENVIRON's review of the NSW EPA website noted that Redox has submitted an Annual Return since January 2005.
R2	The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.	✓				Compliant	Facility personnel advised there have been no incidents with actual or potential significant off-site impacts requiring notification to the EPA or Department of Planning and Infrastructure. A review of the incident register by ENVIRON notes that in the



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence								
		Gen.	Con.	Op.											
							past few years (2010 to 2013) there have been between 6 to 9 incidents each year. There were no significant environmental issues reported or requiring reporting to the EPA.								
Special Conditions															
E1	Construction Activities														
E1.1 E1.2	Noise from the construction of the plant must not exceed the sound pressure level (noise) limits presented in the table below. <table border="1"><thead><tr><th>Locations</th><th>Day L_{Aeq}(15min) (dB(A))</th></tr></thead><tbody><tr><td>St Andrews Residences</td><td>46</td></tr><tr><td>Minto Residences</td><td>46</td></tr><tr><td>Childcare Centre (30 Swettenham Rd)</td><td>62</td></tr></tbody></table> All construction activities, including transportation of fill and spoil, must be restricted to the hours of 7am to 6pm Monday to Friday, 8am to 1pm Saturday and at no time on Sundays and public holidays.	Locations	Day L _{Aeq} (15min) (dB(A))	St Andrews Residences	46	Minto Residences	46	Childcare Centre (30 Swettenham Rd)	62		✓		Construction Noise Management Plan (CEMP).	N/A	There have been no construction activities undertaken since 2008 and it is assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010.
Locations	Day L _{Aeq} (15min) (dB(A))														
St Andrews Residences	46														
Minto Residences	46														
Childcare Centre (30 Swettenham Rd)	62														
E2	Noise compliance monitoring														
E2.2	After the commencement of all operations at the premises, the licensee must submit a noise compliance assessment report to the DEC's Manager Metro Illawarra, to demonstrate compliance with the limits specified in condition L6.1. The assessment must be prepared by a suitably qualified acoustical consultant.			✓	Noise Management Plan (OEMP); Procedure 3116 - Noise Management.	N/A	The last stage of construction occurred in 2008 with the nature of operations remaining the same since that time. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010.								
E3	Acetic Acid Scrubber														
E3.1	The objective of this condition is to develop emission concentration limits to ensure that the premises can comply with Section 129 of the POEO Act 1997.	✓				N/A	Not applicable to this reporting period. The Acetic Acid Scrubber will be part of Stage 4 of the development.								



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
E3.2	Prior to the commencement of construction of the plant, the licensee must submit a report to the EPA's Manager Illawarra, on the development of a site specific emission concentration limit for the acetic acid scrubber.		✓			N/A	Not applicable to this reporting period. The Acetic Acid Scrubber will be part of Stage 4 of the development, construction date TBA.
E3.3	Prior to the commencement of construction of the plant, the licensee must provide to the EPA's Manager Illawarra, the manufacturer's performance guarantees for the acetic acid scrubber, demonstrating that emissions will comply with the ground level concentration specified in the EPA's <i>Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW, August 2001</i> .		✓			N/A	Not applicable to this reporting period. The Acetic Acid Scrubber will be part of Stage 4 of the development, construction date TBA.

Action Plan

Table 2.3. Action Plan

Item No.	Reference	Recommendation	Time-Frame	Responsible Person	Action Taken	Completed Date
4.1	For each of the dangerous goods classes and materials listed in the table below, the Applicant shall not permit the materials listed as "prohibited" to be received, stored, or handled on the site. To avoid any doubt the Applicant shall only permit the materials listed as "permitted" to be received, stored or handled on the site. This condition does not apply to those materials that may be associated with office, laboratory, construction, maintenance or vehicular/ equipment components (including forklifts) of the development, and are not purchased and sold as part	A review of the Stock Manifest at 1 November 2013 noted that for that particular day, following non-compliances to this condition were identified: Class 3 Packaging Group I ("Diethyl Ether Traded") was stored in Building B1; Redox should	N/A	IT	Facility personnel noted that a computer programming error allowed the prohibited Class 3 PGI material to be ordered. ENVIRON has been informed that this program error has now been resolved and should not occur again. The prohibited material	6 November 2013



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	of the principal commercial operations of the development. <table><tr><th>DG Class</th><th>Prohibited</th><th>Permitted</th></tr><tr><td>Class 1</td><td>All</td><td>None</td></tr><tr><td>Class 2</td><td>All</td><td>None</td></tr><tr><td>Class 3</td><td>PG I Subclass 6.1</td><td>PG II & III (unless otherwise prohibited)</td></tr><tr><td>Class 4</td><td>All</td><td>None</td></tr><tr><td>Class 5</td><td>All except those listed as permitted</td><td>Solids of Class 5.1, PG III</td></tr><tr><td>Class 6</td><td>Subclass 3 All Class 6.2</td><td>All Class 6.1 (unless other, but not Class 6.1 with subclass 3)</td></tr><tr><td>Class 7</td><td>All</td><td>None</td></tr><tr><td>Class 8</td><td>None</td><td>All</td></tr><tr><td>Class 9</td><td>None</td><td>All</td></tr><tr><td>Non-DG</td><td>None</td><td>All</td></tr></table>	DG Class	Prohibited	Permitted	Class 1	All	None	Class 2	All	None	Class 3	PG I Subclass 6.1	PG II & III (unless otherwise prohibited)	Class 4	All	None	Class 5	All except those listed as permitted	Solids of Class 5.1, PG III	Class 6	Subclass 3 All Class 6.2	All Class 6.1 (unless other, but not Class 6.1 with subclass 3)	Class 7	All	None	Class 8	None	All	Class 9	None	All	Non-DG	None	All	investigate the reason for the presence of this prohibited material and implement appropriate measures to ensure future incidents do not occur. Whilst this is noted as a non-compliance, Redox has already corrected the non-compliance. It is recommended that Redox include a review of the materials tracking system as part of the internal audit program to ensure that compliance with this condition is maintained.			has since been transferred off-site.	
DG Class	Prohibited	Permitted																																					
Class 1	All	None																																					
Class 2	All	None																																					
Class 3	PG I Subclass 6.1	PG II & III (unless otherwise prohibited)																																					
Class 4	All	None																																					
Class 5	All except those listed as permitted	Solids of Class 5.1, PG III																																					
Class 6	Subclass 3 All Class 6.2	All Class 6.1 (unless other, but not Class 6.1 with subclass 3)																																					
Class 7	All	None																																					
Class 8	None	All																																					
Class 9	None	All																																					
Non-DG	None	All																																					
4.3	Prior to any dangerous goods being brought to the site, the Applicant shall demonstrate to the satisfaction of the Director-General that it has a system in place to track the quantities and locations of dangerous goods on the site at all times.	It is recommended that Redox obtain written confirmation from the Director-General that the department is satisfied with the current Redebiz system that used to track quantities and locations of dangerous goods.	N/A	IT	Facility personnel stated that: The DG approved the Pick system upon inspection in 2010. Redebiz is the upgraded version of the Pick system. On 15/08/2013, Redox demonstrated the use of Redebiz to track quantities and locations of the dangerous goods to the NSW DPI auditors and Redox																																		



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					informed ENVIRON that they were satisfied with the current intranet system. Redox continues to improve the Redebiz systems to meet the changing demands and any future Regulatory requirements.	
7.4	The Applicant shall prepare and implement an Operational Environmental Management Plan to detail an environmental management framework,	ENVIRON's review of the current Plan (dated November 2011, Revision	N/A	Trami Tran Michael Sims	Noted	
EP Licence O4.1	The licensee must maintain, and implement as necessary, a current emergency response plan for the premises. The licensee must keep the emergency response plan on the premises at all times. The emergency response plan must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment. If a current emergency response plan does not exist at the date on which this condition is attached to the licence, the licensee must develop an emergency response plan within three months of that date.	Changes to the POEO Act 1997 required licensed facilities to prepare and implement a Pollution Incident Response Management Plan (PIRMP) by 1 September 2012. A review of Redox's existing Emergency Management Plan by ENVIRON notes that this plan addresses many of the requirements of a PIRMP, however, some information was observed to be missing or the level of detail could be improved. These included, for example: • A description of the hazards to human health or the environment associated with the site activities; • The maximum quantity likely to be stored or held for any pollutants; • The contact details for all relevant authorities (e.g. EPA, local Council);	N/A	Trami Tran	Redox have stated that they shall review the Emergency Management Plan to ensure all information required for a PIRMP, as required under the POEO Act and associated Regulations are included in the plan.	5/05/2015



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		• A detailed map showing the location of stormwater drains; • The dates on which the PIRMP has been tested and the name of the person who carried out the test; • The dates on which the plan as updated; • The manner in which the plan is to be tested and maintained; • The PIRMP is to be made publicly available. Redox should review the Emergency Management Plan to ensure all information required for a PIRMP, as required under the POEO Act and associated Regulations, are included in the plan. Further information can be found at http://www.epa.nsw.gov.au/legislation/poelegisamend2011.htm.				

Compliance with Consent to Discharge Industrial Trade Wastewater

Table 3. Compliance with Consent to Discharge Industrial Trade Wastewater (No. 29981)

Item No.	Requirement and Reference	Compliant?	Findings
1	The customer may discharge trade wastewater into the sewer in a manner whereby the substance characteristics of the trade wastewater are of a type and discharged at a rate, level or concentration equal to or less than that described in this schedule.	yes	The facility holds a consent from Sydney Water to discharge trade wastewater to the sewer. ENVIRON has not reviewed compliance with all the conditions of the consent, however, the facility has maintained the consent, reports on trade wastewater quality to Sydney Water and facility personnel have advised that there have been no notices or penalties issued by Sydney Water for noncompliance with the consent. A selection of trade wastewater sample analysis reports for 2012 and 2013 were provided to ENVIRON for review and it is noted that the parameters to be monitored, as specified in the consent, are being monitored.



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Compliance with Notification of Dangerous Goods on Premises

Table 4. Compliance with Notification of Dangerous Goods on Premises (No. NDG037356)

Item No.	Requirement and Reference	Compliant?	Findings
-	The Notification details maximum storage capacities for each storage facility	yes	A review of the stock manifest at 1 November 2013 indicates the quantities stored at each storage facility (i.e. depot), are below the specified maximum storage quantities notified to WorkCover. It should be noted that at the time of the audit, the Notification had expired and was in the process of being renewed by NSW WorkCover. ENVIRON was provided with copies of correspondence from WorkCover indicating that due to the WorkCover's delayed invitation to renotify, Redox were granted an extension on their Notification. The extended expiry date for their Notification was to 28 September 2013. A copy of a tax invoice from WorkCover, dated 2 October 2013, for receipt of payment for the renewal of the Notification indicates that Redox's renewal is in progress.



3 Community & Environmental Complaints

No community, environmental or pollution complaints were received during 2015 relating to the operation of the Minto facility.

Procedure 3022 – Problems & Complaints describes the method by which all problems, non-conformances, customer and community complaints would be recorded and actioned, including recording of pollution complaints in accordance with EPL 12041 Condition M4.

4 Environmental Impacts & Performance

Table 5.0: Environmental Impacts & Performance

Environmental Aspect (Operational Pathway)	Potential Environmental Impacts	Potential Risk of Impact	Duration of Potential Impact	Operational Procedure to prevent & control Impacts	Environmental Performance 2012
1. Transportation - Transport of goods to the site; - Delivery of goods to customers; and - Unloading/loading of trucks and shipping containers into transit storage areas.	Noise Emissions	Low	Intermittent	3109, 3116, 3412, 3715	Noise emissions effectively prevented and controlled. No complaints received regarding noise emissions.
	Air Emissions	Low	Intermittent	3109, 3412, 3715	Air emissions not required to be monitored. No complaints received regarding air emissions.
	Spillage of product(s) causing contamination of stormwater, soil or groundwater.	Low-Moderate	Infrequent	3022, 3109, 3114, 3412, 3702	No spillages of product during transportation causing contamination of stormwater, soil or groundwater.
	Operational Traffic Impacts	Moderate	Regular	3109, 3412, 3715	The system put in place to monitor that the routes utilised by heavy vehicles is working effectively and is substantially as it was when approved, its ongoing use is recommended". No complaints received regarding operational traffic impacts.
	Community Health	Low	Infrequent	3109, 3412	Community Health not required to be monitored. No Community Complaints received.
	Use of resources	Low-Moderate	Intermittent	3109	Use of resources not monitored with regards to the Transportation Pathway.
2. Storage & Handling - Movement of goods in and out of storage; and - Repackaging of	Spillage of goods	Low-Moderate	Infrequent	3022, 3109, 3401, 3402	No spillages of product during storage & handling causing contamination of stormwater.
	Spillage of goods causing contamination of soil/groundwater.	Low-Moderate	Infrequent	3022, 3109, 3401	No spillages of product during storage & handling causing contamination of soil or groundwater.



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Environmental Aspect (Operational Pathway)	Potential Environmental Impacts	Potential Risk of Impact	Duration of Potential Impact	Operational Procedure to prevent & control Impacts	Environmental Performance 2012
damaged goods and returned product.	Air Emissions – dust and particulate matter.	Low	Intermittent	3109, 3110	Air emissions of dust and particulate matter not required to be monitored. No complaints received regarding air emissions.
	Air Emissions - chemical reactions.	Moderate	Infrequent	3109	Air emissions caused by chemical reactions not monitored.
	Air Emissions from LPG forklifts.	Low	Constant	3109	Air emissions from LPG forklifts not monitored.
	Air Emissions from Greenhouse Gases.	Low- Moderate	Constant	3109	Greenhouse Gas emissions not required to be monitored.
	Operational Noise emissions.	Moderate	Intermittent	3022, 3109, 3116	Noise emissions effectively prevented and controlled. No complaints received regarding operational noise emissions.
	Waste – packaging (recyclable and non- recyclable).	Low	Intermittent	3109, 3401, 3402	Waste packaging not monitored with regards to storage and handling operations.
	Hazardous Waste – spillage and rejected products.	Moderate	Infrequent	3109, 3401, 3402	Refer 5.4 – In compliance with EPL (L5) waste conditions.
	Community Health	Low	Infrequent	3109, 3412	No community complaints received regarding community health impacts of storage & handling operations.
	Use of resources	Low- Moderate	Constant	3109	General use of resources not monitored for storage and handling operations.
3. Management & Administration	Waste – recyclable office waste	Low	Intermittent	3109, 3402	Paper/cardboard recycling only.
	Waste – non recyclable	Low	Intermittent	3109, 3402	Non-recyclable office waste not monitored.
	Waste – hazardous (samples)	Low	Infrequent	3109, 3402	As per hazardous waste – storage & handling above.
	Land & water pollution	Low- moderate	Intermittent	CEMP – Hazardous Materials Management Plan	No spillages of materials reported with potential for contamination of soil/ groundwater.
	Construction waste management	Low	Intermittent	CEMP – Construction Waste Management Plan	Not applicable to this report.



5 Environmental Monitoring

Aspect	Frequency	Process	Documentation	Procedure References	Responsibility
Noise Emissions	Within one month of commencement of construction activities associated with each stage of the development.	Construction Noise Audit	Construction Noise Audit report.	Procedure 3116.	Independent auditor
	Within 90 days of commencement of operation of each stage of development.	Operational Noise Audit	Operational Noise Audit Report	Procedure 3116	Independent auditor
Traffic Impacts	Monthly, four vehicles per period.	Random spot checks on routes taken.	Form 21085; QP records & Corrective Action Requests.	Procedure 3022 and 3715.	Redox Transport Coordinator
	Within 90 days of commissioning each stage of the development.	Independent Transport Audit	Independent Transport Audit report	Procedure 3715.	Independent auditor
Storm water Quality	Weekly & prior to discharge.	Visual and parameter analysis.	Form 2190 – Water Quality Inspection Form	Procedure 3405.	Redox Chemist
	Quarterly and following chemical contamination.	Parameter analysis	Parameter Analysis Report	Procedure 3405.	NATA Approved Laboratory
Waste	Continual	Continual log of waste generation.	Form 21152, 21157 and WasteLog.	Procedure 3402.	Redox Regulatory Affairs Coordinator
Incident/Near Miss Reporting	Continual	Record details of all incidents/near misses.	Form 21139 & 21140.	Procedure 3114 and 3401.	Redox Site Environmental Officer
Air emissions – dust and particulate matter	Daily	Regular sweeping. Weekly Inspection.	Form 21110 – Sydney Warehouse Inspection.	Procedure 3110 and 3521.	Redox Store Manager
Community Complaints	Continual.	Record details of all complaints received.	Complaints Register.	Procedure 3022 and 3412.	Redox Regulatory Affairs Coordinator
Environmental Management System	Annual reporting & triennial independent auditing.	Independent environmental audit.	Environmental Audit Report.	Procedure 2718.	Independent auditor
		Environmental performance review.	AEMR – Annual Environmental Management Report.	Procedure 2718.	Redox Regulatory Affairs Coordinator

5.1 Transport Monitoring & Auditing

5.1.1 Independent Transport Auditing

No independent transport auditing was conducted during 2015.

5.1.2 Monitoring Heavy Vehicle Routes/Requirements

Table 5.1.2: Heavy Vehicle Routes/Requirements: Non-Conformance Details

Date	Time	Carrier/ Customer Name	Vehicle Rego #	Route Travelled	Non- Conformance Details	QP Ref.	Corrective Action Summary
24/11/2015	5.30pm	Boarder Express	AA94FE	Left onto Campbelltown Road then right on Raby Rd towards the entrance.	Incorrect route	86142	Driver was given location map and transport routes. Driver was given "Non- conformance" document which outlines the problem and then completed section titled "proposed Corrective Action."

Discussion of Results:

41 Heavy vehicles were randomly audited during 2015 for compliance with Redox Procedure 3715 - NSW Heavy Vehicle Routes/Requirements. Of the 41 vehicles monitored only one driver found to have travelled by the incorrect route.

5.2 Noise Monitoring & Auditing

N/A - No operational noise auditing was required during this reporting period.

5.2.1 Construction Noise Auditing

No construction noise auditing was required during this reporting period.

5.2.2 Operational Noise Auditing

No operational noise auditing was required during this reporting period.



5.3 Stormwater Quality Monitoring

A three tiered monitoring program tests stormwater quality prior to release from the retention pits on site, including weekly internal analysis prior to discharge, quarterly external analysis, and external analysis in the event of a chemical spill.

Acceptable values for each parameter are taken to be those of:

- the *Clean Waters Regulations 1972*, Section 8 – Class R: Restricted Water;
- Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000* – “Default trigger values for physical and chemical stressors for south-east Australia”, for slightly disturbed ecosystems; and
- Baseline Contamination Assessment for Redox Chemicals Facility Swettenham Road, Minto* (Environmental Audits of Australia, January 2003).

5.3.1 Internal Stormwater Analysis

Redox personnel did not conduct any internal stormwater analysis and also did not send off stormwater samples to independent laboratory during the year 2015, reason being, we identified the *Clean Waters Act & Regulations* have been repealed for a number of many years before the construction of Minto’s facility. We have notified the Department of Planning & Environment (the Department) regarding the repealed laws. We also advised the Department that we would cease all testings until we received further instructions from them.

Table 5.3.1: Results of Internal Stormwater Analysis:

Nil results recorded in the table below.

Date	Sample	Colour	Clarity			Odour		pH	Temp.	Specific Gravity	Dissolved oxygen	Suspended Solids	Turbidity	Pass/Fail	Tested by:
			SS visible?	Foam?	Visible Film?	Smell?	Oil/Petrol Smell?								
	LIMIT	Clear	No	No	No	No	No	6.5-8.5	15-35°C	0.99-1.01	Min. 6.5 mg/L	Max. 50 mg/L	Max. 50 NTU	Pass	Name
Month?	Blank														



2015 Annual Environmental Management Report
2 Swettenham Road, Minto NSW

	PIT 1														
	PIT 2														
	PIT3														



Discussion of Results for Internal Stormwater Analysis

As mentioned under 5.3.1 – we did not conduct any internal stormwater analysis.

<u>Analyte</u>	<u>Results</u>
Colour	
Clarity	
Suspended Solids	
Foam	
Visible Film	
Odour - Smell	
Odour - Oil/Petrol	
pH	
Temperature	
Specific Gravity	
Dissolved Oxygen	
Suspended Solids	
Turbidity	
Pass/Fail	



5.3.2 External Stormwater Analysis

As mentioned under 5.3.1 – we did not send samples to external laboratory to analyse the stormwater during the year 2015.

Date	Sample	Total suspended solids	Turbidity	Total Kjeldahl Nitrogen (TKN)	NOx-N	Total nitrogen	Total phosphorus
		mg/L	NTU	mg/L	mg/L	mg/L	mg/L
Nil							

Test	Western Retaining Wall	Methods
Nil		

5.3.3 External Stormwater Analysis (Chemical Spill)

N/A



5.4 Waste Management

Table 5.4: WasteLog 2015 – Minto

No hazardous and/or industrial and/or Group A substances listed under 4.32 of Condition were disposed during 2015.

QP	Product Code	Product Name	DG Class	Form	Waste Code	Tracking	Qty	DISPOSAL COMPANY	CAN	TC No.	SPO	Dispatch Date	Disposal Method
	NIL												



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5.5 Independent Environmental Auditing

No environmental auditing was required during this reporting period.



6 Environmental Performance

Table 6.0 presents a list of all occasions in the preceding 12-month period when environmental performance goals for the development have not been achieved, indicating the reasons for failure to meet the goals, and the actions taken to prevent recurrence of that type of incident.

Table 6.0: Environmental Performance – Quality Problem Record

QP	Performance goal not achieved	Reason	Action	Status
Transport Management				
Nil				
Noise Monitoring & Auditing				
Nil				
Stormwater & Dust Management				
Nil				
Landscape Management				
Nil				
Waste Management				
Nil				
Environmental Reporting				
Nil				

2016 Annual Environmental Management Report



Redox Pty Ltd



**2 Swettenham Road
Minto NSW 2566**

Prepared by: Redox Pty Ltd

Trami Tran (Regulatory Affairs Coordinator)
Authorised by Malcolm Perrins (Director)

December 2016



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Executive Summary

This Annual Environmental Management Report (AEMR) has been prepared by Redox Pty Ltd (Redox) to review the performance of the development at 2 Swettenham Road, Minto NSW against the Operational Environmental Management Plan (OEMP) and Construction Environmental Management Plan (CEMP), the conditions of consent, Environmental Protection Licence 12041 and Environmental Legislation pertaining to the site, during the period January to December 2016.

The AEMR is intended to meet the requirements of the NSW Department of Planning, under development consent condition 8.3 – Annual Performance Reporting.

Site environmental management procedures and monitoring systems are in place for noise, transport, stormwater, waste, landscape, dust and odour control, community communication and incident reporting, as per the Operational Environmental Management Plans.

Ultimate responsibility for site environmental performance rests with the Managing Director. Day-to-day environmental management is the combined responsibility of the Regulatory Affairs Coordinator and the Store Manager.

No community, environmental or pollution complaints were received during 2016 related to the Minto facility operations.



1 Introduction

This Annual Environmental Management Report (AEMR) has been prepared by Redox Pty Ltd (Redox) to review the performance of the development at 2 Swettenham Road, Minto NSW against the Operational Environmental Management Plan (OEMP), the conditions of consent, Environmental Protection Licence 12041 and Environmental Legislation pertaining to the site, during the period January to December 2016.

The AEMR is intended to meet the requirements of the NSW Department of Planning, under development consent condition 8.3 – Annual Performance Reporting.

Condition 8.3 requires that Redox, throughout the life of the development, prepare and submit for the approval of the Director-General, and Annual Environmental Management Report (AEMR). The AEMR shall review the performance of the development against the Operational Environmental Management Plan, the conditions of consent and other licences and approvals relating to the development. The AEMR shall include, but not necessarily be limited to:

- (a) Details of compliance with the conditions of consent;
- (b) A copy of the Complaints Register for the preceding twelve-month period, and details of how these complaints were addressed and resolved;
- (c) A comparison of the environmental impacts and performance of the development against the environmental impacts and performance predicted in those documents listed under Condition 1.2 of consent;
- (d) Results of all environmental monitoring required under this consent and other approvals, including interpretations and discussion by a suitably qualified person; and
- (e) A list of all occasions in the preceding twelve-month period when environmental performance goals for the development have not been achieved, indicating the reason for failure to meet the goals and the action taken to prevent recurrence of that type of incident.

Redox shall submit a copy of the AEMR to the Director-General every year.

The Director-General may require Redox to address certain matters in relation to the environmental performance of the development in response to review of the Annual Environmental Management Report. Any action required to be undertaken shall be completed within such period as the Director-General may require.

1.1 Site & Operational Overview

Redox is an importer and distributor of close to 1,000 different organic and inorganic chemicals and raw materials. Used in more than 140 different industries, including Agriculture, Detergent, Food & Beverage, Mining & Metal, Surface Coating and Chemical Manufacture, these products are supplied to all areas of industry throughout Australia and New Zealand.

Redox operates five sites in Australia and three in New Zealand. The Head Office site in Minto (this site) is the base for the company's Marketing and Administration functions for its Australian and New Zealand operations. This site consists of two office/Administration buildings and five warehouses for the storage of both dangerous and non-dangerous goods.

The 5.984ha Redox owned site is located within the Minto Industrial Estate and is surrounded predominantly by light industrial and commercial operations to the west, north and south. Bow Bowing Canal forms the eastern boundary to the site. The nearest sensitive land use is the New Generation Child Care Centre, situated on the site's northern boundary. The nearest residential properties are situated on the opposite side of Campbelltown Road.



Figure 1.1: Aerial view, Redox Minto Facility.



The Minto facility, operational since 5 December 2005, was officially opened on 26 April 2006. The construction of Stage 3 of the development, a 2935m² non-dangerous goods store, commenced August 2008 and was completed February 2009. The new store was occupied from 27 February 2009.

Operational and construction site environmental management procedures are in place for noise, transport, stormwater, waste, landscape, dust and odour control, community communication and incident reporting. Ultimate responsibility for site environmental performance rests with the Managing Director; day-to-day environmental management is the combined responsibility of the Regulatory Affairs Coordinator and the Store Manager.

1.2 Operational Environmental Management Plan

Prior to commencement of operations on the site, an Operational Environmental Management Plan (OEMP) was prepared by Redox, and approved by the Director-General of the Department of Infrastructure, Planning and Natural Resources (DIPNR). This OEMP details the environmental management framework, practices and procedures to be followed during the operation of the development. The OEMP includes:

- (a) Identification of all statutory and other obligations that Redox is required to fulfil in relation to operation of the development, including all consents, licences, approvals and consultations;
- (b) A description of the roles and responsibilities for all relevant employees involved in the operation of the development;
- (c) Overall environmental policies and principles to be applied to the operation of the development;
- (d) Standards and performance measures to be applied to the development, and a means by which environmental performance can be periodically reviewed and improved;
- (e) Management policies to ensure that environmental performance goals are met and to comply with the conditions of consent;
- (f) The listed Management Plans:
 - (i) Noise Management Plan;
 - (ii) Transport Management Plan;
 - (iii) Stormwater Management Plan;
 - (iv) Waste Management Plan;
 - (v) Landscape Management Plan; and
- (g) The environmental monitoring requirements outlined in the conditions of consent.



1.3 Development Consent Conditions

The Minister for Infrastructure and Planning, the Hon Craig Knowles MP, determined to approve the Chemical Storage and Distribution Facility, Lot 171 Swettenham Road, Minto, Campbelltown LGA (DA No: 367-11-2002-i) on 16 September 2003, subject to Development Consent Conditions.

The reason for the imposition of conditions is to:

- (a) Minimise any adverse environmental impacts associated with the development;
- (b) Ensure effective on-going environmental and safety management and monitoring;
- (c) Minimise potential safety impacts associated with the development; and
- (d) Implement the recommendations of the Commission of Inquiry into all environmental aspects of the development.

1.4 Environmental Protection Licence

Environmental Protection Licence 12041 authorises Redox to carry out Chemical Storage and Waste Activities at 2 Swettenham Road, Minto.

General obligations of the licensee under this licence, and as set out in the *Protection of the Environment Operations Act 1997* and the Regulations made under the Act, include to:

- (a) Ensure persons associated with Redox comply with this Licence,
- (b) Control the pollution of waters and the pollution of air, and
- (c) Report incidents causing or threatening material environmental harm.



2 Details of Compliance

On 14 and 15 December 2016, Ramboll Environ Ltd was engaged by Redox Pty Ltd (Redox) to conduct an Independent Environmental Audit and Hazard Audit of the Redox Chemical Storage and Distribution Centre at 2 Swettenham Road, Minto, New South Wales (NSW) 2566.

The Independent Audits are required to be undertaken every three years pursuant to Conditions 5.12 and 5.13 of the Project Consent, issued by the (now) NSW Department of Planning and Environment (DP&E).

2.1 Compliance with Development Consent Conditions

Table 2.1: Compliance with Development Consent Conditions

Table 2.1 is intended to address the findings and the recommendations issued by the abovementioned independent Hazard and Environmental Auditors.

Consent Condition		Compliance Requirements	Requirement			Status	Findings
			General	Construction	Operation		
1		GENERAL					
Obligation to Minimise Harm to the Environment							
1.1	Redox shall implement all practicable measures to prevent or minimise any harm to the environment that may result from the construction, commissioning, operation ... of the development.	✓			Compliant	Redox has an environmental management system (EMS) in place comprising management plans, process and procedures to manage risks to the environment. Procedures (e.g. spill management, hazardous materials handling and storage, stormwater management) were observed by the Auditor to be prepared and being followed, to the extent observations could be made at the time of the site visit. A dedicated resource has been assigned responsibility for environmental management although in practice it is a shared role amongst primary employees (i.e Regulatory Affairs Coordinator, Quality Assurance Manager). The EMS and environmental management practices appeared appropriate to the nature of the operations.	

Scope of Development



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
1.2	The Applicant shall carry out the development generally in accordance with requirements a) to s). Note, due to the large number of requirements these have not been replicated here. Refer to Appendix A for the full list of requirements.	✓			Not verified	Ramboll Environ notes that the Independent Environmental Audit conducted by Ramboll Environ (formally Environ) in 2013 had included a review of a selection of documents listed in this condition and that these documents had provided additional information in response to regulatory agency enquiries of EIS or associated studies. At the end of 2013 audit, Ramboll Environ had assumed compliance Audits undertaken in 2006 and 2010. This assumption by Ramboll Environ still applies for this current audit and for this reason Ramboll Environ has not conducted a review of compliance against all documents listed in a) to s) in this condition. No construction has been conducted since 2008.
1.3	In the event of any inconsistency between the conditions of consent and/or any scope document(s), the conditions of consent and/or the most recent document shall prevail to the extent of the inconsistency.	✓			Noted	N/A
Provision of Documents						
1.4	Where practicable, the Applicant shall provide all documents and reports required to be submitted to the Director-General under this consent in an appropriate electronic format. Provision of documents and reports to other parties, as required under this consent, shall be in a format acceptable to those parties and shall	✓			Noted	
1.5	Nothing in this consent prevents Redox from combining reporting requirements under this consent with reporting requirements for submission to another relevant party.	✓			Noted	
Statutory Requirements						
1.6	The Applicant shall ensure all licences, permits & approvals are obtained and kept up-to-date as required throughout the life of the development. No	✓			Compliant	The Regulatory Affairs Coordinator is responsible for identifying and maintaining the currency of environmental licences and permits. The Redebiz system and workflow



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
	condition of this consent removes the obligation for the Applicant to obtain, renew or comply with such licences, permits or approvals.					tasks are used to generate automatic reminders for licence renewal dates or other regulatory obligation requirements. An excel spreadsheet, with a column for "due date, is used to track when the Annual Environmental Return submission to the NSW EPA is required. As a member of the Plastics and Chemicals Industries Association (PACIA), Redox receives industry bulletins on regulatory matters, mainly safety related, for their industry. SafeWork NSW also provides information bulletins regarding dangerous goods to Redox. Redox do not subscribe to any other associations for legal/regulatory information.
1.7	In the event that a dispute arises between the Applicant and Council or a public authority, other than the Department, in relation to a specification or requirement under this consent, the matter shall be referred by either party to the Director-General, or if not resolved to the Minister, whose determination shall be final and binding on all parties.	✓			Noted	Site personnel advised that there have no disputes or issues requiring referral to the Department.
2	COMPLIANCE					
2.1	Redox shall ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.	✓			Compliant	Redox has established a number of procedures to ensure employees and contractors are aware of and comply with the sites' environmental obligations. Training on procedures and in environmental matters is provided to employees during induction and as required based on role requirements, usually through on-the-job training. Assessment of competency is undertaken and recorded in Redebiz. Refresher training requirements are also flagged to the responsible manager within the Redebiz system. Contractors employed to assist with loading/unloading



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
						activities are provided induction and relevant training (e.g. manual handling, dangerous goods handling etc.) by Redox personnel. An internal audit process operates at Redox with audits occurring usually annually. The last environmental compliance audit conducted was in September 2015. Observation: A number of non-conformances were identified that are still open related to: - Operational Environmental Management Plan - an Annual Environmental Management Report has not been prepared and submitted to the DP&E since 2013 due to an outstanding enquiry to the DP&E regarding stormwater quality testing. It is recommended that Redox resolve the stormwater quality testing issue as a priority and continue to submit their Annual Environmental Management Report. - Environmental Policy - the policy has not been updated since 2005. It is understood the last review of the policy was undertaken in May 2015. A copy of the policy provided to the Auditor was undated and unsigned. Redox should review the policy to ensure it is contemporary, sign and date the policy, and make it publicly available (e.g. on website). Training - training on basic environmental awareness has not been provided to employees. Redox provides general environmental information to employees through the environmental policy and Employee Introduction booklet provided at induction. It is recommended that in addition to the reading material provided/available, training is provided to ensure employees are made aware of and understand environmental management requirements



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
						and obligations.
2.2	Redox shall be responsible for environmental impacts resulting from the actions of all persons on site, including contractors, subcontractors and visitors.	✓			Noted	
2.3	Prior to each of the events listed below, Redox shall certify in writing to the satisfaction of the Director-General that it has complied with all conditions of this consent applicable prior to that event.				Not verified - Stage 1, 2 & 3 Not triggered - Stage 4	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 had noted that site personnel had advised the Director-General was notified in writing of the site's compliance with the relevant consent conditions prior to each of the events a) to c) for Stages 1, 2 and 3. Ramboll Environ has made no further enquiries regarding this condition given it applies to historical events related to construction and commencement of operations (as opposed to continuing operation of the facility). Stage 4 has not yet been constructed.
	(a) commencement of any physical works on the land subject to this consent; (b) commencement of construction of stages 1, 2, 3 and 4 of the development; and (c) commencement of operation of stages 1, 2, 3, and 4 of the development.		✓ ✓	✓		
2.4	Notwithstanding condition 2.3 of this consent, the Director-General may require an update report on compliance with all, or any part of the conditions of this consent.	✓			N/A	Noted.
2.5	The Applicant shall meet the requirements of the Director-General in respect of the implementation of any measure necessary to ensure compliance with the conditions of this consent, and general consistency with the documents listed in Condition 1.2. The Director-General may direct that such a measure be implemented in response to the information contained within any report, plan, correspondence or other document submitted in accordance with the conditions of this consent,	✓			Not verified	Facility personnel advised that to date there has been no additional Director-General requirements as outlined in condition 2.5.



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Consent Condition		Compliance Requirements	Requirement			Status	Findings
			General	Construction	Operation		
		within such time as the Director-General may require.					
3.1	In relation to the construction and occupation of the development, Redox shall provide the Director-General and Council with the following: (a) written notification of a Principal Certifying Authority; (b) copies of all construction certificates issued; (c) written notification of the intention to commence construction; (d) copies of all occupation certificates; (e) written notification of the intention to occupy.		✓ ✓ ✓	✓ ✓	Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 had noted that site personnel had advised that the last stage of construction occurred in 2008 and it was assumed at the time of the 2013 audit that compliance with this condition was confirmed by the previous Independent Environmental Audits undertaken in 2006 and 2010. This assumption continues to apply for this current audit.	
3.2	Prior to the commencement of any construction associated with the development, Redox shall erect at least one sign at the construction site. The sign shall be maintained for the duration of construction works, and shall be removed as soon as practicable after the conclusion of construction works.		✓		Not triggered	Refer comment to item 3.1	
4	ENVIRONMENTAL PERFORMANCE						
Hazards and Risk Impacts							
4.1	For each of the dangerous goods classes and materials listed in the table below, the Applicant shall not permit the materials listed as “prohibited” to be received, stored, or handled on the site. To avoid any doubt the Applicant shall only permit the materials listed as “permitted” to be received, stored or handled on the site. This condition does not apply to those materials that may be associated with office, laboratory, construction, maintenance or vehicular/ equipment components			✓	Compliant	The Redebiz system is the main system to manage inventory, quality problems and retain information, amongst other functions. Redox reported that the Redebiz system was modified so that prohibited materials (as noted in the Development Consent e.g. Class 1, Class 2, Class 6.2 etc.) could not be ordered through the purchasing system, by setting the allowable order quantity to zero for the prohibited materials. The Auditor sighted the order quantity restrictions for prohibited materials within the Redebiz system to confirm the required modifications had been made.	



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Consent Condition	Compliance Requirements	Requirement			Status	Findings																																
		General	Construction	Operation																																		
	(including forklifts) of the development, and are not purchased and sold as part of the principal commercial operations of the development. <table><tr><th>DG Class</th><th>Prohibited</th><th>Permitted</th></tr><tr><td>Class 1</td><td>All</td><td>None</td></tr><tr><td>Class 2</td><td>All</td><td>None</td></tr><tr><td>Class 3</td><td>PG I Subclass 6.1</td><td>PG II & III (unless otherwise prohibited)</td></tr><tr><td>Class 4</td><td>All</td><td>None</td></tr><tr><td>Class 5</td><td>All except those listed as permitted</td><td>Solids of Class 5.1, PG III</td></tr></table> <table><tr><td>Class 6</td><td>Subclass 3 All Class 6.2</td><td>All Class 6.1 (unless other, but not Class 6.1 with subclass 3)</td></tr><tr><td>Class 7</td><td>All</td><td>None</td></tr><tr><td>Class 8</td><td>None</td><td>All</td></tr><tr><td>Class 9</td><td>None</td><td>All</td></tr><tr><td>Non-DG</td><td>None</td><td>All</td></tr></table>	DG Class	Prohibited	Permitted	Class 1	All	None	Class 2	All	None	Class 3	PG I Subclass 6.1	PG II & III (unless otherwise prohibited)	Class 4	All	None	Class 5	All except those listed as permitted	Solids of Class 5.1, PG III	Class 6	Subclass 3 All Class 6.2	All Class 6.1 (unless other, but not Class 6.1 with subclass 3)	Class 7	All	None	Class 8	None	All	Class 9	None	All	Non-DG	None	All				A review of the DG manifest (as at 15/12/2016) for a selected prohibited material (e.g. Class 6.1 Subclass 3) showed that these prohibited materials were not present at the site, at the time of the audit. Other prohibited materials (e.g. Class 4, Class 5.1 PGII) were also present as “samples” which according to the Development Consent condition are permissible when not purchased and sold as part of the principal commercial operations of the site.
DG Class	Prohibited	Permitted																																				
Class 1	All	None																																				
Class 2	All	None																																				
Class 3	PG I Subclass 6.1	PG II & III (unless otherwise prohibited)																																				
Class 4	All	None																																				
Class 5	All except those listed as permitted	Solids of Class 5.1, PG III																																				
Class 6	Subclass 3 All Class 6.2	All Class 6.1 (unless other, but not Class 6.1 with subclass 3)																																				
Class 7	All	None																																				
Class 8	None	All																																				
Class 9	None	All																																				
Non-DG	None	All																																				
4.2	Redox shall only permit non-dangerous goods, and dangerous goods of class 8 to be stored or handled in bulk on the site.			✓	Compliant	A review of the DG manifest (as at 15/12/2016) showed that the following materials in bulk were present at the site: Code SOSSIL1100, Class 6.1, Packing Group III material (i.e. Sodium Silicofluoride) in two orders: 125 x 1,000kg bulkers and 1.9 x 1,000kg bulkers (as Reject) within Store D2. However, these ‘bulkiers’ (i.e. bulker bags/flexible IBCs) are exempt																																



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						as bulk containers as defined in the Australian Code for the Transport of Dangerous Goods by Road & Rail (i.e. the ADG Code) section 1.2.1.2.2.2.
4.3	Prior to any dangerous goods being brought to the site, Redox shall demonstrate to the satisfaction of the Director-General that it has a system in place to track the quantities and locations of dangerous goods on the site at all times.			✓	Compliant	The Redebiz system is the inventory system for dangerous goods and hazardous materials stored at the site. Redebiz records the quantity, dangerous good type, packing group, hazard classification, storage location (including aisle number) amongst other information. Information was provided by Redox regarding an independent hazard audit conducted by the DP&E in 2013 and 2015, as part of the Departments 2013-2015 compliance audit campaign of potentially hazardous facilities to verify compliance with the status of Independent Hazard Audit recommendations (in this case made following the 2013 Independent Hazard Audit). A copy of the DP&E 2015 compliance audit report only was provided to the Auditor however, recommendations from the DP&E 2013 compliance audit were included in this 2015 report. The DP&E 2015 compliance audit identified five non-compliances and made one observation, with recommended actions to be undertaken. The observation related to the stock control system (i.e. Redebiz) with a recommendation made by the DP&E to modify the stock control system to more comprehensively prevent acceptance of prohibited materials. The Auditor sighted the order quantity restrictions for prohibited materials within the Redebiz system and confirms the required modifications had been made. A review of the DG manifest also confirmed that prohibited materials, as noted in item 4.1, were not present at the site at the time of the audit.

Bunding and Spill Management

4.4	Redox shall ensure that all bunding installed at the development site is constructed strictly in accordance with:				Compliant	The Auditor was advised that the warehouse buildings were constructed per design requirements and to the development consent conditions in relation to bunding.
	(a) all relevant Australian Standards;		✓			During the site walk over, the Auditor observed all warehouse buildings to be constructed with an angled ramp from the



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	(b) a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; (c) the EPA's Environmental Protection Manual Technical Bulletin Bunding and Spill Management.		✓			exterior of the warehouse Store down into the Store which is at a slightly lower level than the loading area outside the Store. This provides bunding for each Store in the event of spills or leaks. Just before the entrance to each Store, except at Stores B1 and B2, blind sumps are present to collect potential spills of materials. The Auditor did not review documentation associated with the bunding design as it is assumed that compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010 or prior. The Auditor notes that chlorinated compounds (i.e. Class 6.1 Trichloroethylene and Dichloromethane) are permitted to be stored on-site, and that concrete paving may not be sufficient to contain and prevent land contamination.
4.5	At least one month prior to the commencement of construction of the development ... Redox shall prepare and submit for the approval of the Director-General the studies set out below. (a) A Fire Safety Study (b) A Final Hazard Analysis (c) A Construction Safety Study		✓ ✓ ✓		Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 had assumed that compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010 or prior. Site personnel advised that there has been no significant construction between 2013 and 2016, including no construction for the proposed Stage 4 development.
Pre-Commissioning Studies						
4.6	No later than two months prior to the commencement of commissioning of the development, Redox shall prepare and submit for the approval of the Director-General the studies set out below: (a) A Transport of Hazardous Materials Study for the development. (b) An Emergency Plan for the development. (c) A Safety management System.			✓ ✓ ✓	Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 had noted that site personnel had provided a copy of correspondence from the Department approving the study reports with the exception of the Safety Management System (SMS). The Department had provided comments on the SMS to Redox in August 2005 and whilst further correspondence from the Department could not be provided to confirm that the comments had been satisfactorily addressed, Ramboll Environ considered that Redox would have addressed any concerns and that the SMS would have met the Departments requirements. At the time of the 2013 audit Ramboll Environ had reviewed the three documents a) to c) and considered that they had



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						been prepared to substantially address the requirements of a) to c). With the exception of the Transport of Hazardous Materials study, Ramboll Environ reviewed the Emergency Plan and SMS, where revisions to these documents had been made since the 2013 audit. The Emergency Plan (Procedure 3403, 6 October 2015) is a complementary document to the Emergency Management Plan. The following observations are made in relation to the Emergency Plan (procedure 3403): - The Emergency Plan is considered thorough containing realistic emergency scenarios and response actions. Emergency scenarios considered in the Procedure/Plan are representative of the hazards on the site although consideration of sabotage, vandalism and arson (to buildings, equipment or vehicles) could also be included. The emergency scenarios included information on control measures, response actions for staff and/or key emergency response personnel (i.e. Chief Warden, Deputy Chief Warden, Wardens and Communications Officer) for the scenarios: - Fire/ Explosion with details of fire control measures available - Severe Storms with details of resulting impacts (e.g. destructive winds, flooding etc.) - Gas Release due to the formation of toxic gases from the chemical reaction of incompatible substances - Dangerous Goods Emergency due to a major release or spill of a hazardous material in an uncontrolled or unconfined space, including details



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						of the control measures available - Bomb Threat/ Suspect Package - Medical Emergency such as a heart attack, respiratory failure or broken limb including details on controls measures available Observation: It is recommended that other emergency scenarios involving sabotage, vandalism and arson to buildings, equipment or vehicles are included in the Emergency Procedure/Plan.
4.7	Prior to commencement of construction, the Applicant shall submit to the Director-General a Security Management Plan for the development. The Plan shall detail the specific security infrastructure to be installed at the site, including the operation of the security gates and video surveillance, procedures and protocols for tracking dangerous goods and a general program for identifying potential external risks and ensuring the security of the site. The Plan shall be prepared in consultation with Council, and with reference to the matters detailed in the Department's <i>document Crime Prevention and the Assessment of Development Applications</i> .		✓		Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 had noted that the last stage of construction occurred in 2008. Since that time, there has been no significant construction and Stage 4 has not yet been constructed. The nature of operations since the 2013 audit have remained predominantly the same. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010 or prior.

Traffic and Transport

Community Enhancement Program

4.8	Prior to the commencement of operation, or within such time as agreed by the Director-General, the Applicant shall negotiate an agreed outcome with Council for an appropriate level of contribution (financial or in-kind) and as applicable, towards mitigating any cumulative social and/or community impacts as a result of the proposed development.			✓	Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 noted that Redox had advised a contribution was made to Council for the construction of an off- or on-ramp to the M5 motorway. The contribution was understood to be negotiated between the then Department of Infrastructure, Planning and Natural Resources (now DP&E) and Redox. No other contributions



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						have been made to Council since that time.
Site Access, Internal Roads and Parking						
4.9	The Applicant shall ensure all heavy vehicles access the site in a forward direction via the Holmes Road entrance and not via Swettenham Rd entrance. Not applicable during emergencies or as directed by relevant authority (including the police and emergency services).			✓	Compliant	Redox has implemented a Traffic Management Plan and a Traffic Management and Heavy Vehicle Requirements procedure (Procedure 3715) to minimise amenity impacts to the local community from heavy vehicle access to and exits from the site. The Plan and procedure specify heavy vehicle movement to be in a forward direction from Holmes Road into the site, and that four inspections per month will be undertaken to monitor the routes taken by the heavy vehicles comply with the designated routes when leaving the site. Redox provided Heavy Vehicle Routes audit results to Ramboll Environ showing that for most months 2-3 audits per month were undertaken (rather than the four noted in documentation). During the site visit, Ramboll Environ observed that all heavy vehicles entering the site did so via the Holmes Road entrance and moved in a forward direction.



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		General	Construction	Operation		
4.10	The Applicant shall develop and implement, in consultation with Council, a road hierarchy for heavy vehicles travelling to and from the site, with the Holmes Rd, Ben Lomond Rd, Airds Rd, Rose Payten Drive, Campbelltown Rd, and M5 Motorway forming the principal route to and from the site. The Applicant shall submit details of the road hierarchy for the approval of the Director-General prior to commencement of operations on the site.			✓	Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 noted this condition had been complied with. At the time, Redox had provided to Ramboll Environ in 2013 correspondence from the then Department of Planning (dated 21 May 2009) confirming approval of the road hierarchy from the Department and Campbelltown City Council. The Heavy Vehicle Route map shown on Redox's website shows the heavy vehicle road hierarchy to include travel on Holmes Road, Ben Lomond Road, Airds Road, Rose Payten Drive, Campbelltown Road and the M5/M31 motorway, as specified in this condition.
4.11	Prior to the commencement of operations, Redox shall submit for the Director-General's approval a Transport Code of Conduct for the development.			✓	Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010 or prior, as the last stage of construction occurred in 2008 with the nature of operations remaining the same since that time.
4.12	Prior to the commencement of any B-double transport to the site, Redox shall demonstrate to the satisfaction of the Director-General that the B-double reclassification of Holmes Road has been approved by the RTA in association with Council.			✓	Not Verified	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010 or prior, as the last stage of construction occurred in 2008 with the nature of operations remaining the same since that time.
4.13	The use of landscaping shall not affect driver sight distance for vehicles entering and exiting the site.		✓		Compliant	During the site walk over, the Auditor observed that on-site landscaping did not affect vehicle driver's sight distance.
4.14	Redox shall design and construct all internal road works, including assoc. parking facilities and loading bays:				Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 confirmed compliance with this condition: • Through discussions with site personnel that internal road works and parking infrastructure complied with RTA (now RMS) and Council standards and codes. The design
	(a) In accordance with the relevant RTA and Council standards & codes, and Australian Standards including AS2890.1-1993 and AS2890.2-1989;		✓			



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	(b) With clearly marked visitor, disabled, ambulance and service vehicle parking areas; and (c) With signage to demarcate all vehicle movements within the site.		✓			engineers Certificate confirmed the internal driveway and parking area gradients and levels complied with AS2890.1 and AS2890.2. During the 2013 site walkover, Ramboll Environ observed that parking areas were clearly marked for visitor, disabled, ambulance and service vehicle use, and signage was in place to indicate vehicle movements and directions within the site.
Road Works						
4.15	The Applicant shall ensure that the deceleration lane at Swettenham Rd entrance is designed in accordance with Council's <i>Specification for Construction of Subdivisional Road and Drainage Works</i> and that the land is constructed to the satisfaction of Council. The Applicant shall submit detailed engineering plans of the deceleration lane for the approval of Council prior to the commencement of any construction activities associated with Stage 1 of the development.		✓		Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 confirmed compliance with this condition: Through discussions with site personnel who indicated the deceleration lane at the Swettenham Road entrance and the lane were constructed to Council's satisfaction. The Certificate issued by the design engineers, Algorry Zappia & Associates was understood to also apply to this condition.
4.16	The Applicant shall ensure that a compensatory pedestrian footpath is designed and constructed to the satisfaction of Council. The footpath shall be within the site boundaries along the length of Swettenham Rd deceleration lane. This footpath shall be dedicated to Council as a Public Road prior to commencement of operations.		✓		Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2006 and/or 2010, as the last stage of construction occurred in 2008 with the nature of operations remaining the same since that time.

Noise Impacts

Construction Noise



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		General	Construction	Operation		
4.17	The Applicant shall ensure that all site preparation and construction activities associated with the development do not exceed the criteria at the nominated locations specified in Table 1. For the purpose of this condition, construction noise shall be determined at the locations under the conditions specified for operational noise, as provided in conditions 4.21 and 4.22 of this consent.		✓		Compliant	The last construction works undertaken at the site (for Stage 3) were completed at the end of 2008. The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 noted that site personnel advised at the time that there were no non-compliance issues associated with construction noise limits during preparation and construction activities. As part of the 2013 IEA, Ramboll Environ reviewed the noise assessment report undertaken during Stage 3 construction works (Minto Storage and Distribution Centre, Stage 3 Construction Noise Audit, 29 September 2008 by Acoustic Dynamics Pty Ltd) which reported that predicted noise emission levels at nearby residential receivers (including the New Generation Childcare Centre) were below the relevant noise criteria. In addition, Ramboll Environ was provided a copy of correspondence from the Department of Planning (now Department of Planning and Environment), dated 24 October 2008 that confirmed the Stage 3 Construction Noise Audit met the requirements of the consent condition 5.4 and construction noise was below the required criteria. For this IEA, Ramboll Environ has not re-checked compliance with this condition, based on the previous 2013 review findings.
4.18	The Applicant shall ensure that site preparation and construction activities associated with the development do not exceed 62 dB(A) _{(LAeq(15 minute))} at the New Generation Childcare Centre, 30 Swettenham Road, St Andrews, during normal operating hours and/or occupation of the Childcare Centre.		✓		Compliant	Refer item 4.17



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4.19	The Applicant shall only undertake noisy site preparation works and noisy construction activities (including transportation of fill and spoil) associated with the development, between the following hours: a) 7:00 am to 6:00 pm Mondays to Fridays, inclusive; b) 8:00 am to 1:00 pm on Saturdays; and c) At no time on Sundays or public holidays.		✓		Compliant	The last construction works undertaken at the site (for Stage 3) were completed at the end of 2008. The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 noted that site personnel advised at the time that preparation and construction activities were only undertaken during the hours specified in this condition. Ramboll Environ has not re-checked compliance with this condition, based on the previous 2013 review findings. Construction of the proposed Stage 4 has not yet occurred.
4.20	The hours of site preparation works and construction activities specified under condition 4.17 of this consent may be varied with the prior written approval of the Director-General. Any request to alter the hours of site preparation works or construction activities specified under condition 4.17 shall be: a) considered on a case-by-case basis; b) accompanied by details of the nature and need for activities to be conducted during the varied site preparation and construction hours; c) details of how potentially affected members of the community will be consulted and informed of the proposed varied site preparation and construction hours; and d) accompanied by written evidence of the EPA's agreement with the proposed variation in construction times, after providing any information necessary for the EPA to reasonably determine that activities undertaken during the varied construction hours will not adversely impact on the acoustic amenity of receptors in the vicinity of the site.		✓		N/A	There have been no site preparation or construction works since 2008.

Operational Noise



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4.21	The Applicant shall design, construct, operate and maintain the development to ensure that the noise contributions from the development to the background acoustic environment do not exceed the maximum allowable noise contributions specified in Table 2, at those locations and during those periods indicated. The maximum allowable noise contributions apply under: a) Wind speeds up to 3ms ⁻¹ (measured at 10 metres above ground level); or b) Temperature inversion conditions up to 3°C per 100 metres and wind speeds up to 2 ms ⁻¹ (measured at 10 metres above ground level).	✓			Compliant	The last construction works undertaken at the site (for Stage 3) were completed at the end of 2008. The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 noted that Redox had conducted a noise assessment in May 2009 (Minto Storage and Distribution Centre, Stage 3 Operational Noise Audit, 10 June 2009 by Acoustic Dynamics) after the construction of Stage 3, during normal operational times. The report indicated that noise contributions from the development were measured to be below the maximum allowable noise contributions specified in Table 2. Site personnel advised during this audit that: - No noise monitoring had been undertaken in the past three years and the Auditor has assumed that the last monitoring was conducted in May 2009 (as noted above). - There have been no complaints from neighbours in relation to noise. - The site activities have not changed significantly since the last noise monitoring was undertaken in 2009. Based on the above information and observations of the activities occurring during the site visit (e.g. no loud activities) Ramboll Environ considers the site to be compliant with this condition.

Measurement of Noise Impacts

4.22	Noise from the development shall be: a) Measured at the most affected point on or within the residential boundary to determine compliance with LAeq(15minute) noise limits; or b) Measured at 1 metre from the dwelling façade to determine compliance with LA1(1 minute) noise limits.	✓			Compliant	At the time of the 2013 IEA undertaken by Ramboll Environ, the Stage 3 Operational Noise Report by Acoustic Dynamics, 10 June 2009, indicated that noise contribution readings were taken at the locations specified by this condition.

Soil and Water Impacts



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4.23	Redox shall comply with section 120 of the <i>Protection of the Environment Operations Act 1997</i> , which prohibits the pollution of waters.	✓			Compliant	The paved areas surrounding the operational areas (i.e. of the chemical storage and distribution warehouses) direct on-site stormwater to three oil and silt arrestor (OSA) pits. These three OSA pits use stormwater isolation valves to manage the discharge of on-site stormwater to Bow Bowing Canal. The isolation valves are in a permanently closed position to prevent potentially contaminated stormwater from being released to the canal. These measures are considered by the Auditor to assist in preventing the pollution of waters. Observation: The Auditor notes that Redox has a procedure in place, as required under consent conditions 5.8 and 7.5 to monitor the quality of stormwater flows from the site. Since approximately early 2014, Redox has not conducted stormwater quality monitoring and testing (or submitted the required Annual Environmental Management Report (AEMR)) as required under the Stormwater Quality Monitoring program. Redox had queried the DP&E in June 2014 regarding the requirement to continue stormwater monitoring given the Clean Waters Act and Regulation (to which the condition refers to) were repealed in 1999 and to present date have not received confirmation from DP&E as to whether stormwater quality monitoring is still required and no communication regarding the lack of submission of the AEMR by Redox since 2013. Recommendations to resolve this issue immediately consult with the DP&E are made in item 7.5.
Soil, Contamination and Geotechnics						
4.24	The Applicant shall ensure that all materials displaced during site preparation and construction works are stabilised or relocated and made secure so that these materials will not detrimentally affect any watercourse or riparian area.		✓		Note	Ramboll Environ notes this condition is not applicable to the current operations and has excluded this condition from Ramboll Environ's scope of work.



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4.25	Prior to the commencement of any site preparation or construction work, Redox shall submit for the approval of the Director-General, a geo-technical assessment of the site.		✓		Note	Ramboll Environ notes this condition is not applicable to the current operations and has excluded this condition from Ramboll Environ's scope of work. The proposed Stage 4 development has not yet been constructed.
4.26	Prior to the commencement of any site preparation of construction work on the site, the Applicant shall submit for the approval of the Director-General, a contamination review of the site to confirm the presence, or otherwise of any contamination on the site, and to demonstrate that any contamination on the site is not inconsistent with the development. The contamination review shall be prepared by a suitably qualified person(s) and shall detail any additional measures that shall be implemented to address contamination, if identified, and if required.		✓		Note	The Auditor notes this condition is not applicable to the current operations and has excluded this condition from Ramboll Environ's scope of work. The proposed Stage 4 development has not yet been constructed.
4.27	Depending on the outcome of the investigations required by Condition 4.26, the Director-General may require Redox to prepare and implement a Soil Contamination Protocol.		✓		Note	The Auditor notes this condition is not applicable to the current operations and has excluded this condition from Ramboll Environ's scope of work. The proposed Stage 4 development has not yet been constructed.
Bow Bowing Canal and Riparian Zone						
4.28	The Applicant shall establish and maintain a riparian zone, consisting of local native plant species, in the area between the development and the watercourse within the property boundary. The zone shall be designed to ensure bed and bank stability of this area, and to prevent any sedimentation and water quality impacts on Bow Bowing Canal resulting		✓		Compliant	The riparian zone was established in early 2006 with local native species. Maintenance of the riparian is zone and other landscaped site areas is undertaken by Redox's Maintenance Officer. The Auditor observed during the site visit that the riparian zone contained mature native plants.



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	from the development. The riparian zone shall be designed and constructed to meet the requirements of the Department and shall be addressed as part of the Vegetation Construction Environmental Management Plan (condition 7.2(d) – should be 7.2(c)(v)).					
4.29	The Applicant shall maintain the riparian zone, as required by condition 4.28, for a period of at least two years after final planting. Every six months during that period the Applicant shall submit to the satisfaction of the Department, a status detailing the progress of implementation of the Vegetation Construction Environmental Management Plan (condition 7.2d).			✓	Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 noted that site personnel had advised that progress reports were submitted to the Department every six months during the two year period after final planting of the riparian zone. At the time of the 2013 audit, Ramboll Environ was provided copies of the Vegetation Management Report - Progress/ Status Reports for two of the four reporting periods (August 2006 and February 2007) during the two year period and copies of correspondence from the Department of Planning confirming receipt of reports for three of the four reporting periods (including the final progress report). The Department correspondence indicated the progress reports were approved as satisfying the requirements of this condition. Ramboll Environ has not re-checked compliance with this condition, based on the previous 2013 review findings.
4.30	The Applicant shall design and construct any stormwater outlet structure located within 40 metres of Bow Bowing Canal to ensure that the structure does not compromise the stability or function of the riparian zone. The design of any outlet structure within the riparian zone, including pipelines and spillways, shall be in accordance with the Departments guideline <i>Stormwater Outlet Structures to Streams</i> and shall be approved by the Director-General prior to the commencement of any construction works within the riparian zone.		✓		Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 noted that stormwater outlets from the site discharge directly to Bow Bowing Canal. There are no outlet structures discharging into the riparian zone. The Redox Operational Environmental Management Plan dated November 2011 (Revision 3) notes that there are two stormwater outlets draining to Bow Bowing Canal and that these were designed in accordance with Council's Standard Design Requirements SD88.



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	Amendment - The Applicant shall design and construct any stormwater outlet associated with the development for Bow Bowing Canal in accordance with Council's guideline Standard Design Requirements SD88 – Standard Main Channel Outlet Design.					
Waste Generation and Management						
4.31	The Applicant shall not receive waste at the site for storage, treatment, processing or reprocessing, and shall not dispose of waste generated by the development on the site, except as may be expressly permitted by an EP Licence for the development under the <i>Protection of the Environment Operations Act 1997</i> .			✓	Compliant	Site personnel advised that wastes from off-site sources are not received, stored or treated at the site. Wastes generated by the site are disposed off-site either to landfill or for recycling by waste contractors. During the site visit, Ramboll Environ did not observe any waste transporters delivering waste material to the site for storage, treatment or processing.
4.32	Except as provided by any EP Licences issued for the development, the Applicant shall ensure that only the following hazardous &/or industrial and/or Group A waste listed below are generated &/or stored at the site: i) Acidic solutions or acids in solid form; ii) Basic solution or bases in solid form; iii) Non-toxic salts; iv) Zinc compounds; v) Waste oil/water, hydrocarbons/water mixtures or emulsions; vi) Containers that are contaminated with residues of substances referred to in the National Environment Protection (Movement of Controlled			✓	Not verified	Redox does not currently have a readily available record (e.g. waste log) of all waste types generated and stored at the site (e.g. waste type, quantities). Information on waste disposed off-site must be collated from purchase orders issued to waste contractors for waste disposal, which are recorded in the Redebiz system. The Auditor was therefore not able to confirm whether the waste types, including waste quantities generated and stored at the site complied with this condition. However, the last waste log prepared in 2012 indicated that the total waste stored at any one time did not exceed the 50 tonnes limit. Redox personnel advised that between 2014 and 2016 the only waste types generated were non-dangerous and non-hazardous wastes. Observation: It is recommended that Redox prepare a waste log for all waste generated, stored and disposed, similar to Table 5.4 in the last Annual Environmental Management



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	Wastes between States and Territories) Measure list of hazardous, industrial and liquid waste codes; vii) Surface active agents (surfactants), containing principally organic constituents and which may contain metals and inorganic materials; viii) Boron compounds; ix) Cadmium, cadmium compounds; x) Chromium compounds (hexavalent and trivalent); xi) Cobalt compounds; xii) Copper compounds; xiii) Ethers; xiv) Phenols, phenol compounds including chlorophenols; xv) Phosphorus compounds excluding mineral phosphates; xvi) Selenium, selenium compounds; xvii) Waste chemical substances arising from research and development or teaching activities including those which are not identified and/or new and whose effects on human health and/or the environment are not known; xviii) Fire debris and fire washwaters; xix) Halogenated organic solvents; xx) Inorganic fluorine compounds excluding calcium fluoride; xxi) Inorganic sulphides; xxii) Isocyanate compounds; xxiii) Lead, lead compounds; xxiv) Nickel compounds; xxv) Organic phosphorous compounds;					Report dated December 2012 to maintain an easily available record of waste materials on site. The waste log should contain information such as the product name/waste description, dangerous goods class, waste code, waste quantity, waste contractor, disposal date.
4.33	The quantity of hazardous and/or Industrial and/or Group A waste generated at the site per year shall not exceed 100 tonnes.			✓	Not verified	Refer item 4.32. However, based on the waste log from 2012 the total quantity of hazardous and/or industrial and/or Group A waste generated per year did not exceed 100 tonnes.



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4.34	The quantity of hazardous and/or Industrial and/or Group A waste stored at the sit shall not exceed 50 tonnes at any one time.			✓	Compliant	Refer item 4.32. However, based on the waste log from 2012 the total quantity of hazardous and/or industrial and/or Group A waste stored at any one time did not exceed 50 tonnes.
4.34A	Amendment – Prior to the commencement of construction of the truck wash facility at the site, the Applicant shall consult with Sydney Water with respect to the design of the facility to ensure that discharges to the sewer from the development can meet any relevant standards set by Sydney Water. Prior to the operational use of the truck wash facility, the Applicant shall demonstrate to the Director-General that a Trade Waste Agreement has been entered into with Sydney Water for the discharge of wastewater generated by that facility.				Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 noted site personnel advised at the time that Sydney Water was consulted during the design of the truck wash facility. Ramboll Environ was also provided a copy of correspondence from the Department acknowledging that Sydney Water had approved in-principle the truck wash facility. Compliance with this condition is also supported by the issue of a Sydney Water Consent to Discharge Industrial Trade Wastewater (Consent No. 29981, issued 25 August 2010) and continued recent correspondence with Sydney Water (e.g. March 2016 regarding annual testing of backflow prevention containment device).

Air Quality Impacts

Odour

4.35	Redox shall design, construct, operate and maintain the development to prevent the emission of any offensive odour from the site that is attributable to the operation of the development.	✓			Compliant	It is assumed the development was designed and constructed to prevent the emission of offensive odours and that compliance with this requirement was audited previously following completion of Stages 1 to 3. Redox advised there have been no significant changes to the activities undertaken at site since the completion of Stage 3 in 2008. Redox has a procedure in place to manage the emission of offensive odours, which are likely to only occur through damaged packaging. Redox advised during the site visit that there have been no complaints regarding odour emissions since the 2013 audit.

Acetic Acid Scrubber



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
4.36	The Applicant shall design, construct, commission and operate the acetic acid scrubber to ensure that the emissions from the scrubber meet the requirements specified in the Environment Protection Licence.	✓			Not triggered	The acetic acid scrubber has not yet been constructed (associated with the proposed Stage 4 development) therefore compliance with this condition cannot be assessed for this audit.
4.37	Prior to the commencement of decanting activities involving acetic acid on the site, the Applicant shall submit to the Director-General and the EPA the manufacturer's performance guarantee and the detailed final design of the acetic acid scrubber.			✓	Not triggered	Decanting activities involving acetic acid (associated with the proposed Stage 4 development) have not yet commenced. Site personnel advised there is currently no confirmed timeframe for when Stage 4 will be constructed.
Dust Emissions						
4.38	Redox shall design, construct, commission, operate and maintain the development in a manner that minimises dust emissions.	✓			Compliant	Given the nature of activities at the site (i.e. storage and distribution of packaged chemicals and raw materials, with no opening or decanting of materials) Ramboll Environ considers the likelihood of large quantities of dust being generated from spilled material or damaged packaging to be low. Redox has implemented a dust control management procedure (Procedure 3110) to minimise dust emissions from the site. Dust control measures include regular sweeping and vacuuming of warehouses (e.g. daily) and hardstand areas and internal driveways (e.g. weekly) and weekly inspections of warehouse and external hardstand areas for spilled materials and accumulated dust. During the site visit, Ramboll Environ observed that the site was maintained in a clean and tidy state and that a street sweeper was being used on the external hardstand areas.
Visual Amenity Impacts						
4.39	Redox shall prepare an external design panel indicating the proposed external design finishes, materials and configuration, in consultation with Council. The Applicant shall submit the design panel to the Director-General for approval prior to the commencement of the construction.		✓		No triggered	This condition is not applicable to the current operations as construction of the development was completed in 2008 and no further construction works have occurred since then.



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		General	Construction	Operation		
4.40	The Applicant shall ensure that all external lighting associated with the development is mounted, screened and directed in such a manner so as not to create a nuisance to surrounding properties or roadways. The lighting must be the minimum level of illumination necessary and shall comply with AS4282 (INT) 1995 Control of Obtrusive Effects of Outdoor Lighting.	✓			Compliant	At the time of the 2013 IEA undertaken by Ramboll Environ, site personnel had advised that external lighting present on the site was used primarily for security purposes, and not for operational activities. The external lighting was reported by site personnel at the time of the 2013 IEA to be compliant with AS4282. Site personnel advised that there have been no complaints from neighbours relating to lighting issues.
4.41	This consent does not permit the display of any advertisement, or the erection of any advertising structure on the site. This does not apply to any advertisement or structure that cannot be seen from the nearest public space, nor any signage specified elsewhere in this consent (refer condition 3.2).	✓			Compliant	During the visit the Auditor did not observe any advertisement signs at the site.
5	ENVIRONMENTAL MONITORING AND AUDITING					
5.1	Redox shall undertake all monitoring, including recording and reporting of monitoring results, as required under this consent, and as may be specified under an Environmental Protection Licence.	✓			Non-compliant (please refer to Action Plan table"	For the current operations, the site is required to undertake monitoring of operational noise, stormwater quality and air quality. The status of compliance with the monitoring requirements are: - Construction and operational noise - refer item 5.4 to 5.7. - Stormwater quality - refer item 5.8 and 7.5 where the Auditor has noted Redox are have not been conducting stormwater testing. It is recommended that Redox resolve with the DP&E as a priority whether continued stormwater testing is required. - Air quality associated with the acetic acid scrubber - refer item 5.9 to 5.11. The EPL requires monitoring and reporting of air emissions from the acetic acid scrubber only. As decanting activities and the acetic acid scrubber are not yet operational (or been constructed), there is no current requirement for air emissions



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		General	Construction	Operation		
						monitoring and reporting (to the EPA).
Transport Auditing						
5.2	Within 90 days of commissioning each stage of the development, and then as may be required by the Director-General, the Applicant shall commission an independent Transport Audit of the development. This Audit shall: a) Be undertaken by a suitably qualified and experienced person, approved by the Director General prior to the commencement of the Audit; b) Assess whether the heavy vehicles associated with the development are complying with the measures detailed in Traffic Management Plan (condition 7.5(b)) and as required by this consent; and c) If any non-compliance is detected, identify what additional measures will be implemented to ensure compliance.			✓	Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 noted that Redox had provided a copy of correspondence from the then Department of Planning showing approval of the consultant used for the Transport Audit for Stage 3 (i.e. the last stage of development to have occurred on the site). In addition, Ramboll Environ's review of the Transport Audit report in 2013, noted that one recommendation was made by the consultant that had been addressed and closed out. For this audit, Ramboll Environ has not re-audited compliance with this condition based on the previous audit findings and that no further significant construction activities have occurred since 2008 (i.e. Stage 3).
5.3	Within 28 days of conducting the Audit (for 5.2), the Applicant shall provide the Director-General and Council with a copy of the audit report. If the Audit identifies any non-compliance with the Transport Management Plan or any Consent conditions, the Applicant shall detail what additional measures would be implemented to ensure compliance, indicating who would implement these measures, when by and how effectiveness of the measures would be measured & reported to the Director-General.			✓	Compliant	At the time of the 2013 IEA undertaken by Ramboll Environ, site personnel had advised that the Transport Audit report for Stage 3 had been submitted to the then Department of Planning within the required timeframe, and that an action plan for addressing the transport auditors recommendation had been provided to the Department and implemented. Refer item 5.2 above.



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			General	Construction	Operation		
Noise Monitoring and Auditing							
Construction Noise							
5.4	Within one month of commencement of construction activities associated with each stage development, the Applicant shall submit to the Director-General and the EPA a Construction Noise Audit to demonstrate compliance with the construction noise limits specified in conditions 4.17 & 4.18. The Audit shall be completed by a suitably qualified acoustic consultant, approved by the Director-General prior to commencement of the Audit. Should the Audit indicate that construction activities are above the set noise criteria, the report shall identify additional measures to be implemented to ensure compliance, indicating who would implement the measures, when by, and how the effectiveness of the Audit. Should the Audit indicate that construction activities are above the set noise criteria, the report shall identify additional measures to be implemented to ensure compliance, indicating who would implement the measures, when by, and how the effectiveness of the measures would be measured and reported to the Director-General.		✓		Compliant	At the time of the 2013 IEA undertaken by Ramboll Environ, site personnel had provided a copy of the last construction noise audit (for Stage 3) and correspondence from the then Department of Planning approving the consultant to be used, Acoustic Dynamics Pty Ltd, for the Construction Noise Audit for Stage 3. The Construction Noise Audit report (Minto Storage and Distribution Centre, Stage 3 Construction Noise Audit, 29 September 2008 by Acoustic Dynamics) noted that noise emission levels at the nearby receivers were below the relevant criteria and that no special noise mitigation measures were required for the Stage 3 construction works. For this audit, Ramboll Environ has not re-checked compliance with this condition based on the previous audit findings and that no further significant construction activities have occurred since 2008 (i.e. Stage 3).	
5.5	Redox may seek the Director-General's approval, in consultation with the EPA, to dispense with the requirement to undertake a Construction Noise Audit for stage 2, 3 and/or 4 of the development.		✓		Not triggered	Stage 4 of the development has not yet been constructed and Redox has not sought dispensation for this condition.	
Operational Noise							
5.6	Within 90 days of the commencement of operation of each stage of the development, Redox shall conduct an Operational Noise Audit of its operations.			✓	Compliant	The site is currently operating Stage 3 (of 4) of the development. As noted for the Independent Environmental Audit conducted by Ramboll Environ in 2013, an operational noise audit was undertaken in May 2009 (Redox Pty Ltd – Minto Storage and Distribution Centre, Stage 3 Operational	



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		General	Construction	Operation		
						Noise Audit, 10 June 2009, by Acoustic Dynamics). At the time of the 2013 IEA, Ramboll Environ reviewed the audit report which concluded that the site operations complied with the relevant noise criteria and that no additional noise mitigation measures were required for the operation of Stage 3. In addition, Redox advised that correspondence from the Department approving the consultant to be used for the operational noise audit was not available. However, as the consultant, Acoustic Dynamics Pty Ltd, was previously approved for the construction noise audit in 2008, Ramboll Environ had assumed approval would have been granted as a suitably qualified and experienced person. For this audit, Ramboll Environ has not re-checked compliance with this condition based on the previous audit findings and that no further significant construction activities have occurred since 2008 (i.e. Stage 3).
5.7	Within 28 days of conducting the Audit, Redox shall provide the Director-General and EPA with a copy of the Noise Audit report.			✓	Compliant	At the time of the 2013 IEA undertaken by Ramboll Environ, site personnel provided a copy of the Operational Noise Audit report for the operation of Stage 3 (prepared in June 2009), and were informed that the audit report was submitted to the Department, although no record was available to confirm this. Ramboll Environ has assumed that Redox had submitted the audit report to the Department and complied with this condition based on Redox's responsive to other historical DP&E requests associated with the development.
Stormwater Quality Monitoring						
5.8	Prior to commencement of operations, the Applicant shall submit for the approval of the Director-General, in consultation with Council, a Stormwater Quality Monitoring Program. The Program shall form part of the Stormwater Operational Environmental Management Plan (per condition 7.5(c)). The Program shall include, but not limited to: a) Identification of contaminants to be tested, including those required under the Clean Water			✓	Compliant	The Stormwater Quality Monitoring Program (i.e. Procedure 3405 Water Release from Retention Basin) is referenced in the site's Stormwater Management Plan within the Operational Environmental Management Plan. At the time of the 2013 IEA undertaken by Ramboll Environ, site personnel advised the Director-General had approved the Stormwater Quality Monitoring Program, and had provided a copy of the correspondence from the Department approving the OEMP (which contains the Stormwater Monitoring Plan). Ramboll Environ has not re-checked compliance with this



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		General	Construction	Operation		
	Regulation (Class R classification) b) Monitoring frequencies c) Methodologies for stormwater quality monitoring The Stormwater Quality Monitoring Program shall be submitted to Director-General for approval prior to commencement of operations.					condition based on the previous review findings. Ramboll Environ notes that the latest version of the Operational Environmental Management Plan (Rev 3, November 2011) refers to Procedure 3405 as the 'Stormwater Monitoring and Release' however, the title of this procedure is 'Water Release from Retention Basin'. Observation: It is recommended that Redox review the OEMP to ensure the document content correctly reflects the situation at the site and is correctly aligned with/referenced to information in related documents.
Air Quality Monitoring and Auditing						
Acetic Acid Scrubber						
5.9	The Applicant shall periodically determine the pollutant concentrations discharged from the acetic acid scrubber, per performance guarantee in condition 4.37 and at the frequency in Table 3. All monitoring carried out in accordance with Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (NSW EPA 2001). Table 3 – Pollutant and Parameter Monitoring (Air)				✓	Not triggered
	Pollutant	Units of Measures	Frequency	Method		
	Acetic Acid	mg/m3	Quarterly	As determined by the EPA		
5.10	Within 90 days of commencing acetic acid decanting activities at the site ... Redox shall conduct an Air Quality Audit of its operations to confirm the air emission performance of the acetic acid scrubber.				✓	Not triggered
5.11	Within 28 days of conducting the Audit referred to under condition 5.10 of this consent, Redox shall provide the Director-General and EPA with a copy of the Air Quality Audit report.				✓	Not triggered



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			General	Construction	Operation		
Independent Hazard Auditing							
5.12	Twelve months after the commencement of operation of Stage 1 of the development ... Redox shall commission an independent, qualified person or team to undertake a Hazard Audit of the development. Further Hazard Audits shall be undertaken every three years or within 12 months of commissioning Stages 2, 3 and 4 of the development.			✓	Compliant	Site personnel advised that Independent Hazard Audits have been undertaken for the site in 2006 and 2010. Ramboll Environ (formerly ENVIRON) conducted the Independent Environmental Audit in 2013 and were provided at the time, copies of correspondence with the Department confirming that the 2006 and 2010 IHAs had been undertaken. In 2013, the IEA was undertaken by Moore Management and Ramboll Environ had sighted the Department's approval of this consultant to conduct the audit. Ramboll Environ has not re-checked compliance with this condition based on the previous audit findings. Ramboll Environ is currently undertaking the IHA for the site, and has been approved by the DP&E to conduct the audit. Ramboll Environ notes that a 2015 DP&E Hazard Compliance Audit (Exec Summary) report makes a recommendation that the frequency of independent hazard audits be increased to annually until Redox can demonstrate the satisfactory commitment to implementing the recommendations of both the ongoing independent hazard audits and the recommendations arising from the Department's 2013-2015 Potentially Hazardous Industries compliance audit campaign. Ramboll Environ discussed this recommendation with Redox and were advised that no further communications with DP&E have been held or received regarding an annual audit requirement.	
Independent Environmental Auditing							
5.13	Twelve months after the commencement of operation of each stage of the development, and every three years thereafter, Redox shall commission an independent, qualified person or team to undertake an Environmental Audit of the development.			✓	Compliant	Site personnel advised that Independent Environmental Audits have been undertaken for the site in 2006 and 2010. Ramboll Environ (formerly ENVIRON) conducted the IEA in November/December 2013 and were provided at the time, copies of correspondence with the Department confirming that the 2006 and 2010 audits had been undertaken. Ramboll Environ has not re-checked compliance with this condition based on the previous audit findings.	



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		General	Construction	Operation		
						Ramboll Environ is currently undertaking the IEA for the site, which is within the three yearly audit timeframe, and has been approved by the DP&E to conduct the audit.
5	ENVIRONMENTAL MONITORING AND AUDITING					
6.1	Subject to confidentiality, Redox shall make all documents required under this consent available for public inspection on request.	✓			Compliant	Redox subscribes to the Plastics and Chemical Industries Association (PACIA) Community Right to Know code of conduct and has in place a Community Right to Know procedure (Procedure 3104) that commits to providing information to the community on activities, products and health, safety and environmental performance, amongst other information and listening and responding to their concerns. On the Redox website information is available for example on emergency response, processes for: risk identification and management, waste management, environmental licences, transport/heavy vehicle routes.
Complaints Procedure						
6.2	Prior to the commencement of construction of the development, Redox shall ensure that the following are available: (a) a 24-hour, toll-free telephone number on which complaints about the development may be registered; (b) a postal address to which written complaints may be sent; and (c) an email address to which complaints may be transmitted.		✓ ✓ ✓		Compliant	At the time of the 2013 IEA undertaken by Ramboll Environ, site personnel advised that a 24-hour toll free telephone number, a postal address and email address where available during construction of the development for registering complaints. Ramboll Environ notes that the current Redox website has provided a postal address, a toll free telephone number (within and outside Australia) and an on-line contact form for registering complaints associated with the operations.



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		General	Construction	Operation		
	The telephone number, postal address and email address shall be advertised on at least one occasion prior to the commencement of construction of each stage of the development, through a medium approved by the Director-General.		✓			
6.3	Redox shall record details of all complaints received ... in an up-to-date Complaints Register. The Complaints Register shall be made available upon request.	✓			Compliant	Complaints would be recorded on either an Incident Report form or a Pollution Incident Response Management Plan (PIRMP) Notification form (e.g. for pollution incidents) depending on the nature of the complaint. The complaint would then be entered as a Quality Problem (QP) within the Redebiz system, where the details a) to f) would be recorded, mostly within the general text box. To produce a summary log of all complaints in Redebiz would require the user to search under specific categories depending on the nature of the complaint, and appears to require the user to have some prior knowledge of the complaint to ensure the correct category is searched. There is no one specific category for complaints. Ramboll Environ were advised by site personnel that there have been no complaints between 2014 and 2016. Observation: Whilst it is recognised that Redox has received no complaints in the past few years, it is recommended that the Redebiz system be modified to allow a 'complaint' category to be included so that complaints can be easily classified within this group and allow for easier searching and reporting of complaints.
Community Communication Strategy						
6.4	Prior to the commencement of operations at the site, Redox shall prepare and implement a Community Communication Strategy for the development. The Strategy shall be approved by the Director-General prior to the commencement of any operations on the site.			✓	Compliant	At the time of the 2013 IEA undertaken by Ramboll Environ, site personnel provided documentation confirming the Director-General's approval of the Community Communication Strategy. Ramboll has not re-checked compliance with this condition based on the previous audit findings. Redox has in place a Community Right to Know procedure (Procedure 3104 that addresses requirements a) to c).



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			General	Construction	Operation		
7		ENVIRONMENTAL MANAGEMENT					
Environmental Representative							
7.1	Prior to the commencement of construction of the development, Redox shall notify the Director-General of the name and contact details of a suitably qualified and experienced Environmental Representative, and any changes to that appointment that may occur from time to time.		✓			Compliant	At the time of the 2013 IEA undertaken by Ramboll Environ, site personnel advised that during construction, commissioning and operation of the development, an Environmental Representative was and continues to be employed on a full-time basis. The current Environmental Representative has the responsibilities noted in this condition and Redox has advised the DP&E of the Environmental Representative's contact details.
Construction Environmental Management Plan							
7.2	Redox shall prepare and implement a Construction Environmental Management Plan to outline environmental management practices to be followed during site preparation and construction activities during each stage of the development.			✓		Not verified	This condition is not applicable to the current operations as construction of the development was completed in 2008 and no further construction works have occurred since then. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010.
	The plan shall be submitted for the approval of the Director-General no later than one month prior to the commencement of any site preparation and construction works associated with the development.			✓			
	Preparation and construction works associated with any stage of the development shall not commence until written approval has been received from the Director-General.			✓		Noted	
7.3	As part of the Construction Environmental Management Plan for the development, Redox shall prepare and implement the following Management Plans:			✓		Not verified	This condition is not applicable to the current operations as construction of the development was completed in 2008 and no further construction works have occurred since then. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010.
	(a) Noise Management Plan						



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		General	Construction	Operation		
	(b) Transport Management Plan (c) Erosion and Sediment Management Plan (d) Vegetation Management Plan		✓ ✓ ✓			
Operation Environmental Management Plan						
7.4	The Applicant shall prepare and implement an Operational Environmental Management Plan to detail an environmental management framework, practices and procedures to be followed during the operation of the development. The Plan shall include, but not necessarily limited to: i) Identification of all statutory & other obligations required to fulfil in relation to operation of phase 1 of the development, including all consents, licences, approvals and consultations ii) A description of the roles and responsibilities for all relevant employees involved in the operation of the development iii) Overall environmental policies and principles to be applied to be applied to the operation of the development iv) Standards and performance measures to be applied to the development, and a means by which environmental performance can be periodically reviewed and improved, where appropriate v) Management policies to ensure that environmental performance goals are met and to comply with the conditions of this			✓	Non-compliant (refer to Action Plan table)	Redox has prepared and implemented an Operational Environmental Management Plan (OEMP) (Rev 3, November 2011) that considers the requirements i) to vii) of this condition. At the time of the 2013 IEA undertaken by Ramboll Environ had been provided a copy of correspondence from the Department approving the OEMP. Ramboll Environ had also recommended that the OEMP could be improved by including other environmental obligations/approvals that apply to the site, other than just the development consent and Environment Protection Licence. These other obligations/approvals include the Sydney Water Consent to Discharge Industrial Trade Wastewater and the SafeWork NSW Notification of Hazardous Chemicals on Premises. Ramboll Environ's review of the OEMP indicates that this recommendation has not been implemented (as noted by the same revision number and document date). This recommendation still applies for the current audit (i.e. the OEMP should include mention of other environmental obligations and approvals such as the Trade Wastewater Consent and Notification of Hazardous Chemicals on Premises).



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		General	Construction	Operation		
	consent vi) The Management Plans listed under Condition 7.5 of this consent vii) The environmental monitoring requirements under conditions 5.8 (stormwater quality monitoring) and 5.9 (pollutant concentrations at acetic acid scrubber) of this consent, inclusive. The Plan shall be submitted for the approval of the Director-General no later than one month prior to commencement of operation of stage 1, or such period agreed by the Director-General. Operation shall not commence until written approval received from Director-General.					
7.5	As part of the Operational Environmental Management Plan for the development, required under condition 7.4 of this consent, the Applicant shall prepare and implement the following Management Plans: a) A Noise Management Plan to outline measures to manage noise impacts associated with the operation of the development. The Plan shall be submitted to the EPA and address the requirements of Council. The Plan shall include, but not necessarily limited to: i) Identification of the potential sources of			✓	Non-Compliant (refer to Action Plan Act)	The OEMP contains each of the Management Plans a) to e) listed in this condition. At the time of the 2013 IEA undertaken by Ramboll Environ, site personnel provided a copy of correspondence from the Department approving the prepared OEMP (and the Management Plans) and acknowledging that Campbelltown City Council and the then Department of Environment and Conservation (i.e. EPA) had been consulted with respect to the OEMP. Ramboll Environ has not re-checked compliance with this part of the condition for this audit based on the previous audit findings. During the site walk over and review of documentation, Ramboll Environ considers the Management Plans are generally being implemented as supported by the following observations:



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		General	Construction	Operation		
	noise during the site operations; ii) Specification of the noise criteria for these operations; iii) A detailed description of what actions and measures would be implemented to ensure that operations would comply with specified noise criteria; iv) A description of how the effectiveness of actions and measures would be monitored over time; and v) If any non-compliance is detected what procedures would be followed to ensure compliance. b) A Transport Management Plan to outline measures to ensure minimal amenity impacts on the locality through appropriate management of heavy vehicles accessing and departing the development. The Plan shall be submitted to the EPA and prepared in consultation with Council. The Plan shall include, but not necessarily limited to: i) Details of measures that would be implemented to minimise noise and amenity impacts on residential areas resulting from heavy vehicle movements, including those required by condition 4.9 and condition 4.12; ii) Consideration of all possibilities for					- There were no activities that generated excessive levels of noise - Traffic movement within the site generally followed traffic signage - Regular inspections of the routes taken by heavy vehicles leaving the site were conducted to ensure local amenity was not impacted - Landscaped areas appeared maintained with no overgrown plantings Ramboll Environ notes aspects of the Stormwater Management Plan and Waste Management Plan are not being implemented: - Stormwater quality monitoring, prior to release to Bow Bowling Canal, has not been conducted since at least mid-2014. Redox had sent a query to the DP&E in mid-2014 as to this requirement given the Clean Waters Regulation 1972 was repealed in 1999 and this legislation was considered by Redox to no longer be relevant. Since that time Redox has made subsequent follow up communication to the DP&E seeking a response but to date has not received confirmation whether continued stormwater quality monitoring is required. It is recommended that Redox resolve this issue with the DP&E as a priority. The Auditor notes that Redox is required to demonstrate compliance with Section 120 of the <i>Protection of the Environment Operations Act 1997 NSW</i> in relation to pollution of waters. The Waste Management Plan notes a waste log is maintained



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		General	Construction	Operation		
	reducing the required daily heavy vehicle movements and movements during peak or night-time periods; iii) Procedures for monitoring the effectiveness and suitability of these measures, particularly the periodic and random monitoring of heavy vehicle routes; and iv) Details of additional measures that would be implemented should a non-compliance be detected. c) A Stormwater Management Plan to outline measures to mitigate impacts of stormwater run-off from and within the premises. The Plan shall be submitted to the EPA, and prepared in consultation with Council. The Plan shall include, but not necessarily limited to: i) Details of all relevant stormwater control infrastructure and how that infrastructure minimise stormwater peak flows and peak pollutant concentrations; ii) Procedures for the installation and maintenance of gross pollutant traps to screen stormwater from the site; iii) A demonstration of consistency with the stormwater management plan for the catchment and any relevant stormwater guidelines prepared by Council;					to record waste types, quantities, and disposal methods for all waste streams to better manage waste minimisation. Redox advised this waste log has not been maintained as Redox has not submitted an AEMR to the DP&E since late 2013 (where a summary of the waste log is included). It is noted though that this waste information can be extracted from the Redebiz system. Observation: As noted for item 4.32, it is recommended that Redox consider preparing a waste log for all waste generated, stored and disposed, similar to Table 5.4 in the last Annual Environmental Management Report dated December 2012 to maintain an easily available record of waste materials on site. If possible, the Redebiz system could be programmed to produce a summary waste report that contains information such as the product name/waste description, dangerous goods class, waste code, waste quantity, waste contractor, disposal date.



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		General	Construction	Operation		
	iv) Amendment - Details of the monitoring program, as required by condition 5.8, to monitor stormwater flows from the site to meet discharge requirements for Class R (Restricted) Waters under <i>the Clean Waters Regulations</i>; and v) Details of contingency measures that would be followed to ensure the protection of Bow Bowing Canal, should an accident or emergency occur at the site. d) A Waste Management Plan to outline measures to ensure the appropriate handling, storage & disposal of wastes generated during operations at site. The Plan shall be prepared in consultation with Council, and shall include, but not necessarily limited to: i) Identification of the types and quantities of waste that would be generated during operations, and the areas in which waste will be stored prior to removal; ii) Standards and performance measures for dealing with this waste; iii) A detailed description of how this waste would be reused, recycled and, if necessary, appropriately treated and disposed of in accordance with the EPA's guidelines on the <i>Assessment, Classification and Management of Liquid</i>					



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		General	Construction	Operation		
	<i>and Non-Liquid Waste;</i> iv) A description of how the effectiveness of these actions and measures would be monitored over time; and v) A description of what procedures would be followed to ensure compliance if any non-conformance is detected. e) A Landscape Management Plan to outline measures to ensure appropriate development and maintenance of landscaping on the site. The Plan shall include, but not necessarily limited to: i) Details of all landscaping to be undertaken on the site with specific reference to revegetation along the riparian zone (condition 4.28); ii) Maximisation of flora species endemic to the locality in landscaping the site; iii) A program to ensure that all landscaped areas on the site are maintained in a tidy, healthy state.			✓ ✓ ✓ ✓		



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			General	Construction	Operation		
	7.6	At least one month prior to the operation of Stage 2, Stage 3 and Stage 4 of the development, Redox shall update and submit for the approval of the Director-General, the Operation Environmental Management Plan. Operation of Stage 2, Stage 3 and Stage 4 shall not commence until the Director-General has approved the updated Plans.			✓	Compliant	As noted in item 7.5, Ramboll Environ was advised by site personnel during the 2013 IEA, that the Director-General's approval for the OEMP was obtained (for Stages 1 to 3). For this audit, Ramboll Environ has not re-checked compliance with condition based on the previous audit findings.
8		ENVIRONMENTAL REPORTING					
Incident Reporting							
	8.1	Redox shall notify the EPA and the Director-General of any incident with actual or potential significant off-site impacts on people or the biophysical environment as soon as practicable after the occurrence of the incident.	✓			Not triggered	Site personnel advised there have been no incidents with off-site impacts between 2014 and 2016 requiring notification to the EPA and Director-General. Ramboll Environ's review of the incident register (between 2014 and 2016) showed one to seven incidents per year with approximately half related to injuries and no significant environmental issues reported.
		The Applicant shall provide written details of the incident to the EPA and the Director-General within seven days of the date on which the incident occurred.					
	8.2	Redox shall meet the requirements of the Director-General to address the cause or impact of any incident, as it relates to this consent, reported in accordance with 8.1, within such period as the Director-General may require.	✓			N/A	Refer item 8.1
Annual Performance Reporting							
	8.3	The Applicant shall, throughout the life of the development, prepare & submit for the approval of the Director-General, an Annual Environmental Management Report (AEMR). The AEMR shall review the performance of the development against the Operation Environmental Management Plan (refer to condition 7.4 of this consent), the	✓			Non-Compliant (Refer to Action Plan Table)	2012. Redox advised that the AEMR for 2013 was completed however not submitted at the time due to Redox identifying the repealed Clean Waters Regulation 1972 and subsequent queries to the DP&E in 2014 as to whether continued stormwater quality monitoring was required (with subsequent reporting of stormwater testing results included in the AEMR). This query remains open as no response has been



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
	conditions of this consent and other licences and approvals relating to this development. The AEMR shall include, but not necessarily be limited to: a) Details of compliance with the conditions of this consent; b) A copy of the Complaints Register (refer to condition 6.3 of this consent) for the preceding twelve-month period (exclusive of personal details), and details of how these complaints were addressed and resolved; c) A comparison of the environmental impacts and performance of the development against the environmental impacts and performance predicted in those documents listed under condition 1.2 of this consent; d) Results of all environmental monitoring required under this consent and other approvals, including interpretations and discussion by a suitably qualified person; and e) A list of all occasions in the preceding twelve month period when environmental performance goals for the development have not been achieved, indicating the reason for failure to meet the goals and the action taken to prevent recurrence of that type of incident. The Applicant shall submit a copy of the AEMR to the Director-General every year, with the first AEMR to be submitted no later than twelve months after the commencement of operation. The Director-General may require the Applicant to address certain matters in relation the environmental performance of the development in response to review of the Annual Environmental Report. Any action required					received from the DP&E to confirm that stormwater quality monitoring is still required or to acknowledge that Redox has not submitted an AEMR since 2013. Due to the lack of response from the DP&E, Redox has subsequently not undertaken stormwater quality monitoring and has not prepared its AEMR. As noted in item 7.5, It is recommended that Redox continue the preparation and submission of the Annual Environmental Management Report (AEMR) to ensure continuing compliance with this condition, and make reference in the AEMR to the queries/correspondence made regarding the stormwater quality monitoring requirements.



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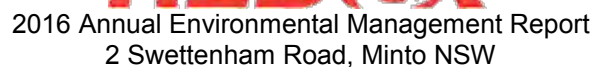
Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
	shall be completed within such period as the Director-General may require.					

2.2 Compliance with Environmental Protection Licence 12041, Licence version date: 21/12/2012

Table 2.2: Compliance with EPL 12041

Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence								
		Gen.	Con.	Op.											
1	ADMINISTRATIVE CONDITIONS														
A1	What the licence authorises and regulates														
A1.1	N/A					N/A									
A1.2	This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation. Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.					Not verified	According to the Dangerous Goods manifest (on 15 December 2016), the total quantities of hazardous materials stored at the site on that day and the quantities noted on the Hazardous Materials Notification are shown in the table below. Assuming the weight of the materials stored (i.e. in kg) is approximately the equivalent of the volume of the material (i.e. in L), the total quantity of materials stored on site was approximately 937.5 kL. This total quantity is below the maximum allowable quantity of 5,000 kL.								
							<table><tr><th rowspan="2">Class / Division</th><th colspan="2">Quantity Stored</th><th rowspan="2">Within Maximum Storage Capacity of</th></tr><tr><th>Kg</th><th>Litres</th></tr></table>			Class / Division	Quantity Stored		Within Maximum Storage Capacity of	Kg	Litres
Class / Division	Quantity Stored		Within Maximum Storage Capacity of												
	Kg	Litres													

Class / Division	Quantity Stored		Within Maximum Storage Capacity of
	Kg	Litres	



At the time of the site visit, Redox did not have a readily available record (e.g. waste log) of all waste types generated and stored at the site (e.g. waste type, quantities). Information on waste disposed off-site must be collated from purchase orders issued to waste contractors for waste disposal, which are recorded in the Redebiz system. The Auditor was therefore not able to confirm whether the waste types, including waste quantities generated and stored at the site complied with this condition. However, the last waste log prepared in 2012 indicated that the total waste stored at any one time did not exceed the 50 tonnes limit, and it is considered by the Auditor that this limit is unlikely to be exceeded.

Observation: It is recommended that Redox consider preparing a waste log for all waste generated, stored and disposed, similar to Table 5.4 in the last Annual Environmental Management Report dated December 2012 to maintain an easily available record of waste materials on site. If possible, the Redebiz system could be programmed to produce a summary waste report that contains information such as the product name/waste description, dangerous goods class,



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
	Fee Based Activity: Scale General chemicals storage: 0-5000 kL of active storage capacity. Chemical storage waste generation: >5-100 T.			✓ ✓	Procedure 3801 – Warehouse Limitations. Procedure 3402 – Waste Management & Disposal.		waste code, waste quantity, waste contractor, disposal date.
A2	Premises to which this licence applies						
A2.1	Premises details.	✓				Noted	
A3	Other activities						
A3.1	N/A					N/A	
A4	Information supplied to the EPA						
2	DISCHARGES TO AIR & WATER & APPLICATIONS TO LAND						
P1	Location of Monitoring/Discharge Points and Areas						



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Item	Licence Condition				Development Stage			Redox Procedure	Compliance	Evidence
					Gen.	Con.	Op.			
P1.1	The following points referred to in the table are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.									
	Air									
	EPA ID.	Type of Monitoring Point	Type of Discharge Point	Location			✓		Not triggered	As decanting activities and the acetic acid scrubber are not yet operational (or been constructed as part of the proposed Stage 4 development), there is no current requirement for air emission monitoring.
	1	Discharge to air Air emissions monitoring	Discharge to air Air emissions monitoring	Acetic Acid Scrubber "Area A"						
P1.2	N/A								N/A	
P1.3	N/A								N/A	
3	LIMIT CONDITIONS									
L1	Pollution of Waters									
L1.1	Pollution of Waters - Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.				✓			OEMP; Procedure 3405 – Water Release from Retention Basin.	Compliant	The paved areas surrounding the operational areas (i.e. of the chemical storage and distribution warehouses) direct on-site stormwater to three oil and silt arrestor (OSA) pits. These three OSA pits use stormwater isolation valves to manage the discharge of on-site stormwater to Bow Bowing Canal. The isolation valves are in a permanently closed position to prevent potentially contaminated stormwater from being released to the canal. These measures are considered by the Auditor to assist in preventing the pollution of waters. Observation: The Auditor notes that Redox has a procedure in place, as required under consent conditions 5.8 and 7.5 to monitor the quality of stormwater flows from the site. Since approximately early 2014, Redox has not conducted stormwater quality monitoring and testing (or submitted the



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
							required Annual Environmental Management Report (AEMR)) as required under the Stormwater Quality Monitoring program. Redox had queried the DP&E in June 2014 regarding the requirement to continue stormwater monitoring given the Clean Waters Act and Regulation (to which the condition refers to) were repealed in 1999 and to present date have not received confirmation from DP&E as to whether stormwater quality monitoring is still required and no communication regarding the lack of submission of the AEMR by Redox since 2013. Trade waste water generated at the site is discharged under a Sydney Water Consent to Discharge Industrial Trade Wastewater. Trade wastewater is discharged to sewer.
	Load Limits						
L2	Waste – The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled “Waste” and meeting the definition, if any, in the column titled “Description” in the table below. Note: Refer to EPL for Table.					Compliant	Site personnel advised that waste from off-site sources are not received at the site. During the site visit, the Auditor did not observe significant quantities of stored waste materials or waste types that would be considered unusual for the site activities.
L3	Concentration Limits						



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence																									
		Gen.	Con.	Op.																												
L3.1	Noise Limits – Noise from the premises must not exceed the sound pressure level (noise) limits at the nominated receiver locations in the below table. <table><thead><tr><th>ocation</th><th>Day</th><th>Evening</th><th>Night</th><th>Night</th></tr></thead><tbody><tr><td></td><td>LAeq(15 minute)</td><td>LAeq(15 minute)</td><td>LAeq(15 minute)</td><td>LA1(1 minute)</td></tr><tr><td>St Andrews Residences</td><td>36</td><td>36</td><td>36</td><td>50</td></tr><tr><td>Minto Residences</td><td>36</td><td>36</td><td>36</td><td>50</td></tr><tr><td>Child Care Centre (30 Swettenham Road)</td><td>44</td><td>N/A</td><td>N/A</td><td>N/A</td></tr></tbody></table>	ocation	Day	Evening	Night	Night		LAeq(15 minute)	LAeq(15 minute)	LAeq(15 minute)	LA1(1 minute)	St Andrews Residences	36	36	36	50	Minto Residences	36	36	36	50	Child Care Centre (30 Swettenham Road)	44	N/A	N/A	N/A					Compliant	As noted for the Independent Environmental Audit conducted by Ramboll Environ in 2013, an operational noise audit was undertaken in May 2009 (Redox Pty Ltd – Minto Storage and Distribution Centre, Stage 3 Operational Noise Audit, 10 June 2009, by Acoustic Dynamics). At the time of the 2013 IEA, Ramboll Environ reviewed the audit report which concluded that the site operations complied with the relevant noise criteria and that no additional noise mitigation measures were required for the operation of Stage 3. For this audit, Ramboll Environ has not re-checked compliance with this condition based on the previous audit findings and that no further significant construction activities have occurred since 2008 (i.e. Stage 3).
ocation	Day	Evening	Night	Night																												
	LAeq(15 minute)	LAeq(15 minute)	LAeq(15 minute)	LA1(1 minute)																												
St Andrews Residences	36	36	36	50																												
Minto Residences	36	36	36	50																												
Child Care Centre (30 Swettenham Road)	44	N/A	N/A	N/A																												
L3.2	Noise from the premises is to be measured at the most affected point on or within the residential boundary to determine compliance with the LAeq (15 minute) noise limits in L3.1.					Compliant	Refer item L3.1																									
L3.3						Compliant	Refer item L3.1																									
L4	Volume and Mass Limits																															



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
L4.1	Potentially offensive odour - No condition of this licence identifies a potentially offensive odour for the purposes of section 129 of the Protection of the Environment Operations Act 1997. Section 129 of the POEO Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour. Confirm whether any potentially offensive odour has been emitted and if any complaints received.					Compliant	Redox has a procedure in place to manage the emission of offensive odours, which are likely to only occur through damaged packaging. Redox advised during the site visit that there have been no complaints regarding odour emissions since the 2013 audit.
L5	Waste						
L5.1	Polychlorinated Biphenyls (PCBs) – the licensee must comply with the conditions as specified in this licence or where no specific conditions are outlined in this licence, the licensee must comply with the “Chemical Control Order in Relation to Materials and Waste Containing Polychlorinated Biphenyl, 1997.”			✓	Waste Management Plan (OEMP); Procedure 3402 – Waste Management & Disposal.	Note	The development was initially constructed in 2005 and given the age of the development Ramboll Environ considers it unlikely that PCB materials would be present on the site.
4	Operating Conditions						
O1	Activities must be carried out in a competent manner						
O1.1	Licensed activities must be carried out in a competent manner. This includes: (a) the processing, handling, movement & storage of materials and substances; and (b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.			✓ ✓	Procedure 3009 – Handling, Storage, Packing, Pres. & Del. Procedure 3402 – Waste Management & Disposal.	Compliant	Redox has an environmental management system (EMS) in place comprising management plans, processes and procedures to manage risks to the environment. Procedures (e.g. spill management, hazardous materials handling and storage, stormwater management) were observed by the Auditor to be prepared and being followed, to the



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		Gen.	Con.	Op.			
							extent observations could be made at the time of the site visit. A dedicated resource has been assigned responsibility for environmental management although in practice it is a shared role amongst two primary employees (i.e. Regulatory Affairs Coordinator, Quality Assurance Manager). The EMS and environmental management practices seemed appropriate to the nature of the operations.
O2	Maintenance of Plant and Equipment						
O2.1	All plant and equipment installed at the premises or used in connection with the licensed activity: (a) must be maintained in a proper and efficient condition; & (b) must be operated in a proper and efficient manner.			✓ ✓	Procedure 3901 – Equipment Service. Equipment Procedures: 3902, 3903, 3904, 3906, 3917, 3918, 3919.	Compliant	The main maintenance activities on site related to minor repairs of building fixtures and maintenance of the landscaped/ grassed areas. Redox does not have a dedicated maintenance department although does employ one permanent employee to carry out the noted minor maintenance activities. Regular servicing or repair of larger equipment (e.g. self-opening/closing roller doors at Store entrances, forklifts, storage racking, fire protection system) is conducted by specialist contractors on a regular maintenance schedule. During the site walk over, the Auditor observed that plant and equipment was maintained and appeared in good condition. Ramboll Environ did not audit the maintenance program.
O3	Emergency Response						



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
O3.1	The licensee must maintain, and implement as necessary, a current emergency response plan for the premises. The licensee must keep the emergency response plan on the premises at all times. The emergency response plan must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment. If a current emergency response plan does not exist at the date on which this condition is attached to the licence, the licensee must develop an emergency response plan within three months of that date.	✓			Procedure 3403 – Emergency Procedure.	Compliant.	Redox has implemented a dust control management procedure (Procedure 3110) to minimise dust emissions from the site. Dust control measures include regular sweeping and vacuuming of warehouses (e.g. daily) and hardstand areas and internal driveways (e.g. weekly) and weekly inspections of warehouse and external hardstand areas for spilled materials and accumulated dust. During the site visit, the Auditor observed that the site was maintained in a clean and tidy state and that a street sweeper was being used on the external hardstand areas.
O4	Process and management						
O4.1	The licensee must ensure that any liquid and/or non liquid waste generated and/or stored at the premises is assessed and classified in accordance with the DECC Waste Classification Guidelines as in force from time to time.	✓			Waste Management Plan (CEMP & OEMP); Procedure 3402 – Waste Management & Disposal.	Compliant	Redox has an Emergency Plan (Procedure 3403, 6 October 2015) and an Emergency Management Plan. The former document is a complementary document to the Emergency Management Plan. The following observations are made in relation to the Emergency Plan (procedure 3403): The Emergency Plan is considered thorough containing realistic emergency scenarios and response actions. Emergency scenarios considered in the Procedure/Plan are representative of the hazards on the site although consideration of sabotage, vandalism and arson (to buildings, equipment or vehicles) could also be included. The emergency scenarios included information on control measures, response actions for staff and/or key emergency response personnel (i.e. Chief Warden, Deputy Chief Warden, Wardens and Communications Officer) for the scenarios:



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							• Fire/ Explosion with details of fire control measures available • Severe Storms with details of resulting impacts (e.g. destructive winds, flooding etc.) • Gas Release due to the formation of toxic gases from the chemical reaction of incompatible substances • Dangerous Goods Emergency due to a major release or spill of a hazardous material in an uncontrolled or unconfined space, including details of the control measures available • Bomb Threat/ Suspect Package • Medical Emergency such as a heart attack, respiratory failure or broken limb including details on controls measures available Observation: It is recommended that other emergency scenarios involving sabotage, vandalism and arson to buildings, equipment or vehicles are included in the Emergency Procedure/Plan. The site has also recently developed and implemented a Pollution Incident Response Management Plan (PIRMP) to address pollution incidents. The PIRMP was prepared in consultation with the NSW EPA and a final version provided to the EPA in October 2016.
O5	Dust						
O5.1, O5.2	The licensee must ensure that any liquid and/or non-liquid waste generated and/or stored at the premises is assessed and classified in accordance with the DECC Waste Classification Guidelines as in force from time to time. The licensee must ensure that waste identified for recycling is stored separately from other waste.	✓			Significant Environmental Aspects & Potential Impacts: Dust Emissions (OEMP); Procedure 3110 – Dust Control	Compliant	Redox assess and classify waste types prior to off-site disposal and record this information in Redebiz (as part of a purchase order issued to waste disposal contractors). During the site walk over the Auditor observed that waste for recycling was stored separately from other waste materials.



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
					Management.		
5	MONITORING & RECORDING CONDITIONS						
M1	Monitoring Records						
M1.1	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.	✓				Not triggered	Stage 4 of the development (including the acetic acid decanting facility and scrubber) have not yet been construction and this condition is not currently applicable.
M1.2	All records required to be kept by this licence must be: a) in a legible form, or in a form that can readily be reduced to a legible form; b) kept for at least 4 years after the monitoring or event to which they relate took place; and c) produced in a legible form to any authorised officer of the EPA who asks to see them.	✓				Note	There are currently no monitoring records for the acetic acid decanting facility as this has not yet been constructed.
M1.3	The following records must be kept in respect of any samples required to be collected for the purposes of this licence: a) the date(s) on which the sample was taken; b) the time(s) at which the sample was collected; c) the point at which the sample was taken; and d) the name of the person who collected the sample.	✓				Note	There are currently no monitoring records for the acetic acid decanting facility as this has not yet been constructed.



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
M2.1, M2.2	The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies. The record must include details of the following: a) The date and time of the complaint; b) The method by which the complaint was made; c) Any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; d) The nature of the complaint; e) The action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and f) If no action was taken by the licensee, the reasons why no action was taken.	✓				Compliant	As noted in item 6.3, complaints would be recorded on either an Incident Report form or a Pollution Incident Response Management Plan (PIRMP) Notification form (e.g. for pollution incidents) depending on the nature of the complaint. The complaint would then be entered as a Quality Problem (QP) within the Redebiz system, where the details a) to f) would be recorded, mostly within the general text/non-compliance description box. To produce a summary log of all complaints in Redebiz would require the user to search under specific categories depending on the nature of the complaint, and appears to require the user to have some prior knowledge of the complaint to ensure the correct category is searched. There is no one specific category for complaints. The Auditor was advised by site personnel that there have been no complaints between 2014 and 2016. Observation: Whilst it is recognised that Redox has received no complaints in the past few years, it is recommended that the Redebiz system be modified to allow a 'complaint' category to be included so that complaints can be easily classified within this group and allow for easier searching and reporting of complaints.
M2.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	✓				Compliant	Information in Redebiz is available for this time period.
M3.1, M3.2	The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence. The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.					Compliant	Ramboll Environ notes that the current Redox website has provided a postal address, a toll free telephone number (within and outside Australia) and an on-line contact form for registering complaints associated with the operations



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
6	REPORTING CONDITIONS						
R1	Annual return documents						
R1.1	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: (a) a Statement of Compliance; and (b) a Monitoring and Complaints Summary. A copy of the form in which the Annual Return must be supplied to the EPA accompanies this licence. Before the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.	✓			Procedure 3118 – Environmental Management System.	Compliant	Redox advised that an Annual Return is completed and submitted to the EPA each year. Ramboll Environ was provided a copy of the 2014 and 2015 Annual Returns to confirm these had been prepared and submitted. The Auditor has confirmed that the Annual Returns have been received by the EPA as indicated on the EPA website.
R2	The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act. Notifications must be made by telephoning the Environment Line service on 131 555. The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.	✓				Compliant	Site personnel advised there have been no incidents requiring notification to the EPA. Ramboll Environ's review of the incident register (between 2014 and 2016) showed one to seven incidents per year with approximately half related to injuries and no significant environmental issues reported.
R3.1	Where an authorised officer of the EPA suspects on reasonable grounds that: a) where this licence applies to premises, an event has occurred at the premises; or b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.					Not triggered	Redox advised there have been no events that have resulted in the EPA requesting a written report.



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence								
		Gen.	Con.	Op.											
Special Conditions															
E1	Construction Activities														
E1.1 E1.2	Construction Activities - Noise from the construction of the plant must not exceed the sound pressure level (noise) limits presented in the table below. <table><tr><td>Locations</td><td>Day L_{Aeq}(15min) (dB(A))</td></tr><tr><td>St Andrews Residences</td><td>46</td></tr><tr><td>Minto Residences</td><td>46</td></tr><tr><td>Childcare Centre (30 Swettenham Rd)</td><td>62</td></tr></table> All construction activities, including transportation of fill and spoil, must be restricted to the hours of 7am to 6pm Monday to Friday, 8am to 1pm Saturday and at no time on Sundays and public holidays.	Locations	Day L _{Aeq} (15min) (dB(A))	St Andrews Residences	46	Minto Residences	46	Childcare Centre (30 Swettenham Rd)	62		✓		Construction Noise Management Plan (CEMP).	Not verified	There have been no construction activities since 2008 (i.e. completion of Stage 3) and it is assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010.
Locations	Day L _{Aeq} (15min) (dB(A))														
St Andrews Residences	46														
Minto Residences	46														
Childcare Centre (30 Swettenham Rd)	62														
E2	Noise compliance monitoring														
E2.2	After the commencement of all operations at the premises, the licensee must submit a noise compliance assessment report to the DEC's Manager Metro Illawarra, to demonstrate compliance with the limits specified in condition L6.1. The assessment must be prepared by a suitably qualified acoustical consultant.			✓	Noise Management Plan (OEMP); Procedure 3116 - Noise Management.	Not verified	There have been no construction activities since 2008 (i.e. completion of stage 3) and it is assumed compliance with this condition was confirmed by the previous Independent Audit undertaken in 2010. In addition refer to item L3.1.								
E3	Acetic Acid Scrubber														
E3.1	The objective of this condition is to develop emission concentration limits to ensure that the premises can comply with Section 129 of the POEO Act 1997.	✓				Not triggered	Stage 4 of the development (including the acetic acid decanting facility and scrubber) have not yet been construction and this condition is not currently applicable.								
E3.2	Prior to the commencement of construction of the plant, the licensee must submit a report to the EPA's Manager Illawarra, on the development of a site specific emission concentration limit for the acetic acid scrubber.		✓			Not triggered									



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
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E3.3	Prior to the commencement of construction of the plant, the licensee must provide to the EPA's Manager Illawarra, the manufacturer's performance guarantees for the acetic acid scrubber, demonstrating that emissions will comply with the ground level concentration specified in the EPA's <i>Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW, August 2001</i> .		✓			Not triggered	

Action Plan Table

Item No.	Reference	Time-Frame	Responsible Person	Action Taken OR response to recommendation	Completed Date
Condition 4.32	Redox should consider preparing a waste log for all waste generated, stored and disposed, similar to Table 5.4 in the last Annual Environmental Management Report dated December 2012 to maintain an easily available record of waste materials on site. If possible, the Redebiz system could be programmed to produce a summary waste report that contains information such as the product name/waste description, dangerous goods class, waste code, waste quantity, waste contractor, disposal date.	31 March 2017	Trami	It is not a requirement for us to keep a manual Waste log because we already have more efficient tracking method for all our disposals, that is, via our Redebiz system through CHEDIS product code which we can use to extract information for AEM report. Furthermore, Redox does not "generate, store and dispose wastes". Our products are classified as either goods or reject stock. Most reject stock could still be sold under discounted rates so they are not considered as wastes ready for disposals. Most of disposals are arranged off Minto's site, that is, at the customers' sites where they detected the goods not confirming to their specifications, therefore, these disposals are not subject to Condition 4.32. The only disposal we have arranged at Minto's site are food grade ingredients but they are also not subject to Condition 4.32. Previously we kept a waste log which contains waste disposed from all Redox facilities including contractors' warehouses, however, these	N/A



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				warehouses are not part of Consent Condition and therefore we do not want to continue keeping a manual log.	
5.1	Redox to resolve with the DP&E as a priority whether continued stormwater testing is required.	1 March 2017		Responded to DP&E show cause letter dated 27 April 2017	27 April 2017
7.4	The OEMP should be amended to include mention of other environmental obligations and approvals in place as the site such as the Trade Wastewater Consent and Notification of Hazardous Chemicals on Premises).	1 March	Trami Tran Michael Sims	Responded to DP&E show cause letter dated 27 April 2017	27 April 2017
7.5	- As noted in condition 5.1, Redox should resolve with the DP&E as a priority whether continued stormwater testing is required as specified by the Stormwater Management Plan (and Water Release from Retention Basin procedure) to ensure continuing compliance with this condition. - As noted in condition 4.32, Redox should consider preparing a waste log for all waste generated, stored and disposed, similar to Table 5.4 in the last Annual Environmental Management Report dated December 2012 to maintain an easily available record of waste materials on site.	1 March 2017 31 March 2017	Trami Tran	- Responded to DP&E show cause Letter dated 27 April 2017. - Please note item #1, Condition 4.32 above.	27 April 2017
8.3	Redox should continue the preparation and submission of the Annual Environmental Management Report (AEMR) to ensure continuing compliance with this condition, and make reference in the AEMR to the queries/correspondence made regarding the stormwater quality monitoring requirements.	1 December 2017	Trami	AEMR2014 to be submitted by 7 July AEMR2015 to be submitted by 7 July AEMR2016 to be submitted by 4 August	14 August 2017
Observations					
Compliance (Condition 2.1)	1. Environmental Policy - Review the policy to ensure it is contemporary (e.g. language), sign and date the policy, and make it publicly available	31 March 2017	Trami	Environmental Policy (Procedure 3109) has been placed in queue for review.	TBA



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	(e.g. on website). 2. Training - provide basic environmental awareness training to employees, in addition to the reading material provided/available, to ensure employees are aware of and understand environmental management requirements and obligations.			Redox has 500-600 Procedures and forms, some of which have been updated but lots are still pending for review.	
Compliance (Condition 4.23)	As noted in Condition 7.5, Redox should resolve with the DP&E as a priority whether continued storm water quality monitoring is required. The Annual Environmental Management Report (AEMR) should continue to be prepared and submitted to ensure compliance with the consent.	1 March 2017 & 1 December 2017	Trami	Refer to above Condition 8.3	August 2017
Emergency Plan (Condition 4.6)	Redox to consider including other emergency scenarios involving sabotage, vandalism and arson to buildings, equipment or vehicles in the Emergency Procedure/Plan.	1 June 2017	Trami	We already have these scenarios added in our Procedure 3802 (Dry Creek Major Incident Identification & Risk Assessment) for our facility in South Australia which we have been using as a guide for all other Redox warehouses. Furthermore, these incidences are unlikely to occur given that Redox's security is in compliance to all regulatory and insurance requirements. Our Minto office and warehouse surrounded by high electrical fences, gate passes, cameras, alarm systems all in place.	N/A
Documentation (Condition 5.8)	Redox should review the OEMP to ensure the document content correctly reflects the situation at the site and is correctly aligned with/referenced to information in related documents (e.g. reference to procedure 3405 should reflect the correct title of this document).	1 June 2017	Trami	The Director-General already approved Redox's OEMP prior to the commencement of operations at the site. We have not had any new developments after the approval and therefore, no requirement to vary the OEMP.	N/A
Complaints (Condition 6.3)	The Redebiz system should be modified to allow a 'complaint' category to be included so that complaints can be easily classified within this group and allow for easier searching and reporting of complaints.	1 June 2017	IT	QP90628 was created for IT to work on.	19 June 2017
Environment Protection Licence (No. 12041)					



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Observations					
Waste management (Condition A1.2)	As noted for Condition 4.32 of the Development Consent, Redox should consider preparing a waste log for all waste generated, stored and disposed, similar to Table 5.4 in the last Annual Environmental Management Report dated December 2012 to maintain an easily available record of waste materials on site and to ensure waste quantities are below the maximum limit allowable.	31 March 2017	Trami	Refer to above response to condition 4.32	N/A
Complaints (Condition M2.1, M2.2)	As noted for Condition 6.3 of the Development Consent, the Redebiz system be modified to allow a 'complaint' category to be included so that complaints can be easily classified within this group and allow for easier searching and reporting of complaints.	1 June 2017	IT	QP90628 was created for IT to work on.	19 June 2017
Emergency Plan (Condition O4.1)	As noted for Condition 4.6 of the Development Consent, Redox to consider including other emergency scenarios involving sabotage, vandalism and arson to buildings, equipment or vehicles in the Emergency Procedure/Plan.	1 June 2017		Please refer to response Emergency Plan (Condition 4.6)	N/A

Consent to Discharge Industrial Trade Wastewater (No. 29981)

Observations					
Wastewater monitoring (Condition 1a)	Redox to monitor future sample analysis results for total Iron and pH to assess whether there is a recurring issue with these parameters that may require further investigation and rectification.	1 March 2017	Trami	Environmental Policy (Procedure 3109) has been placed in queue for review. Redox has 500-600 Procedures and forms, some of which have been updated but lots are still pending for review.	TBA

Compliance with Consent to Discharge Industrial Trade Wastewater

Table 5. Compliance with Consent to Discharge Industrial Wastewater (No.29981)			
Item No.	Requirement and Reference	Compliant	Ramboll Comments
Schedule 1, 1a	The customer may discharge trade wastewater into the sewer in a manner	Compliant	Trade wastewater generated at the site is discharged under a Sydney



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whereby the substance characteristics of the trade wastewater are of a type and discharged at a rate, level or concentration equal to or less than that described in this schedule.

Water Consent to Discharge Industrial Trade Wastewater to the sewer. Redox advised that regular sampling of trade wastewater discharges is undertaken by an external laboratory (LabPoint Pty Ltd) and the sample analysis reports are sent to Sydney Water as required. Sydney Water will also carry out their own sampling but Redox do not receive copies of these analysis reports.

The Auditor reviewed a selection of LabPoint sample analysis reports and noted the following:

- For a sample taken on 19/9/2014, the TSS calculated mass was 0.183 kg/day exceeding the 0.09 kg/day maximum daily limit
- For a sample taken on 12/5/2016, the total Iron measured concentration was 128 mg/L and calculated mass was 0.179 kg/day exceeding the 50 mg/L and 0.009 kg/day limits, respectively
- For a sample taken on 14/9/2016, the total Iron measured concentration was 82 mg/L and calculated mass was 0.0492 kg/day exceeding the 50 mg/L and 0.009 kg/day limits, respectively, and the pH at the start and end of sampling (i.e. 5.6 and 5.0) was outside of the acceptable 7-10 range.

Redox reported that there has only been one issue raised with Sydney Water although the details could not be provided to Ramboll Environ at the time of the audit and there have been no notices/ penalties issued by Sydney Water.

Observation: It is recommended that Redox monitor future sample analysis results for total Iron and pH to assess whether there is a recurring issue with these parameters that may require further investigation and rectification.

Compliance with Notification of Dangerous Goods on Premises

Table 6. Compliance with Notification of Dangerous Goods on Premises (No. NDG037356)

Item No.	Requirement and Reference	Compliant?	Findings
-	The Notification details maximum storage capacities for each storage facility	yes	A review of the stock manifest at 1 November 2013 indicates the quantities stored at each storage facility (i.e. depot), are below the specified maximum storage quantities notified to WorkCover.



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			It should be noted that at the time of the audit, the Notification had expired and was in the process of being renewed by NSW WorkCover. ENVIRON was provided with copies of correspondence from WorkCover indicating that due to the WorkCover's delayed invitation to renotify, Redox were granted an extension on their Notification. The extended expiry date for their Notification was to 28 September 2013. A copy of a tax invoice from WorkCover, dated 2 October 2013, for receipt of payment for the renewal of the Notification indicates that Redox's renewal is in progress.



3 Community & Environmental Complaints

No community, environmental or pollution complaints were received during 2015 relating to the operation of the Minto facility.

Procedure 3022 – Problems & Complaints describes the method by which all problems, non-conformances, customer and community complaints would be recorded and actioned, including recording of pollution complaints in accordance with EPL 12041 Condition M4.

4 Environmental Impacts & Performance

Table 5.0: Environmental Impacts & Performance

Environmental Aspect (Operational Pathway)	Potential Environmental Impacts	Potential Risk of Impact	Duration of Potential Impact	Operational Procedure to prevent & control Impacts	Environmental Performance 2016
1. Transportation - Transport of goods to the site; - Delivery of goods to customers; and - Unloading/loading of trucks and shipping containers into transit storage areas.	Noise Emissions	Low	Intermittent	3109, 3116, 3412, 3715	Noise emissions effectively prevented and controlled. No complaints received regarding noise emissions.
	Air Emissions	Low	Intermittent	3109, 3412, 3715	Air emissions not required to be monitored. No complaints received regarding air emissions.
	Spillage of product(s) causing contamination of stormwater, soil or groundwater.	Low-Moderate	Infrequent	3022, 3109, 3114, 3412, 3702	No spillages of product during transportation causing contamination of stormwater, soil or groundwater.
	Operational Traffic Impacts	Moderate	Regular	3109, 3412, 3715	The system put in place to monitor that the routes utilised by heavy vehicles is working effectively and is substantially as it was when approved, its ongoing use is recommended". No complaints received regarding operational traffic impacts.
	Community Health	Low	Infrequent	3109, 3412	Community Health not required to be monitored. No Community Complaints received.
	Use of resources	Low-Moderate	Intermittent	3109	Use of resources not monitored with regards to the Transportation Pathway.
2. Storage & Handling - Movement of goods in and out of storage; and - Repackaging of	Spillage of goods	Low-Moderate	Infrequent	3022, 3109, 3401, 3402	No spillages of product during storage & handling causing contamination of stormwater.
	Spillage of goods causing contamination of soil/groundwater.	Low-Moderate	Infrequent	3022, 3109, 3401	No spillages of product during storage & handling causing contamination of soil or groundwater.



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Environmental Aspect (Operational Pathway)	Potential Environmental Impacts	Potential Risk of Impact	Duration of Potential Impact	Operational Procedure to prevent & control Impacts	Environmental Performance 2016
damaged goods and returned product.	Air Emissions – dust and particulate matter.	Low	Intermittent	3109, 3110	Air emissions of dust and particulate matter not required to be monitored. No complaints received regarding air emissions.
	Air Emissions - chemical reactions.	Moderate	Infrequent	3109	Air emissions caused by chemical reactions not monitored.
	Air Emissions from LPG forklifts.	Low	Constant	3109	Air emissions from LPG forklifts not monitored.
	Air Emissions from Greenhouse Gases.	Low- Moderate	Constant	3109	Greenhouse Gas emissions not required to be monitored.
	Operational Noise emissions.	Moderate	Intermittent	3022, 3109, 3116	Noise emissions effectively prevented and controlled. No complaints received regarding operational noise emissions.
	Waste – packaging (recyclable and non- recyclable).	Low	Intermittent	3109, 3401, 3402	Waste packaging not monitored with regards to storage and handling operations.
	Hazardous Waste – spillage and rejected products.	Moderate	Infrequent	3109, 3401, 3402	Refer 5.4 – In compliance with EPL (L5) waste conditions.
	Community Health	Low	Infrequent	3109, 3412	No community complaints received regarding community health impacts of storage & handling operations.
	Use of resources	Low- Moderate	Constant	3109	General use of resources not monitored for storage and handling operations.
3. Management & Administration	Waste – recyclable office waste	Low	Intermittent	3109, 3402	Paper/cardboard recycling only.
	Waste – non recyclable	Low	Intermittent	3109, 3402	Non-recyclable office waste not monitored.
	Waste – hazardous (samples)	Low	Infrequent	3109, 3402	As per hazardous waste – storage & handling above.
	Land & water pollution	Low- moderate	Intermittent	CEMP – Hazardous Materials Management Plan	No spillages of materials reported with potential for contamination of soil/ groundwater.
	Construction waste management	Low	Intermittent	CEMP – Construction Waste Management Plan	Not applicable to this report.



5 Environmental Monitoring

Aspect	Frequency	Process	Documentation	Procedure References	Responsibility
Noise Emissions	Within one month of commencement of construction activities associated with each stage of the development.	Construction Noise Audit	Construction Noise Audit report.	Procedure 3116.	Independent auditor
	Within 90 days of commencement of operation of each stage of development.	Operational Noise Audit	Operational Noise Audit Report	Procedure 3116	Independent auditor
Traffic Impacts	Monthly, four vehicles per period.	Random spot checks on routes taken.	Form 21085; QP records & Corrective Action Requests.	Procedure 3022 and 3715.	Redox Transport Coordinator
	Within 90 days of commissioning each stage of the development.	Independent Transport Audit	Independent Transport Audit report	Procedure 3715.	Independent auditor
Storm water Quality	Weekly & prior to discharge.	Visual and parameter analysis.	Form 2190 – Water Quality Inspection Form	Procedure 3405.	Redox Chemist
	Quarterly and following chemical contamination.	Parameter analysis	Parameter Analysis Report	Procedure 3405.	NATA Approved Laboratory
Waste	Continual	Continual log of waste generation.	Form 21152, 21157 and WasteLog.	Procedure 3402.	Redox Regulatory Affairs Coordinator
Incident/Near Miss Reporting	Continual	Record details of all incidents/near misses.	Form 21139 & 21140.	Procedure 3114 and 3401.	Redox Site Environmental Officer
Air emissions – dust and particulate matter	Daily	Regular sweeping. Weekly Inspection.	Form 21110 – Sydney Warehouse Inspection.	Procedure 3110 and 3521.	Redox Store Manager
Community Complaints	Continual.	Record details of all complaints received.	Complaints Register.	Procedure 3022 and 3412.	Redox Regulatory Affairs Coordinator
Environmental Management System	Annual reporting & triennial independent auditing.	Independent environmental audit.	Environmental Audit Report.	Procedure 2718.	Independent auditor
		Environmental performance review.	AEMR – Annual Environmental Management Report.	Procedure 2718.	Redox Regulatory Affairs Coordinator

5.1 Transport Monitoring & Auditing

5.1.1 Independent Transport Auditing

No independent transport auditing was conducted during 2016.

5.1.2 Monitoring Heavy Vehicle Routes/Requirements

Table 5.1.2: Heavy Vehicle Routes/Requirements: Non-Conformance Details

Date	Time	Carrier/ Customer Name	Vehicle Rego #	Route Travelled	Non- Conformance Details	QP Ref.	Corrective Action Summary
23/11/2016	9.20am	Hollis Transport	CC51LX	Driver Paul jobso CC51LX turned left onto ampbelltown road and went past main office	Incorrect route	91772	Driver was given location map and transport routes. Driver was given "Non- conformance" document which outlines the problem and then completed section titled "proposed Corrective Action."
12/7/2016	1.00pm	Customer Boral Australia Gypsum LTD	AR63SW	Customer Boral Australia Gypsum LTD Breached Redox Heavy Routes Requirements	Incorrect route	89923	Driver was given location map and transport routes. Driver was given "Non- conformance" document which outlines the problem and then completed section titled "proposed Corrective Action."
22/7/2016	11.55pm	Boral	ARG35W	JLP driver of EC 743 turned left onto Campbelltown road, thanks	Incorrect route	89983	Driver was given location map and transport routes. Driver was given "Non- conformance" document which outlines the problem and then completed section titled "proposed Corrective Action."
19/2/2016	11.25am	Coastal	CF49RU	Driver truck did not follow the correct route	Incorrect route	87359	Driver was given location map and transport routes. Driver was given "Non- conformance" document which outlines the problem and then



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							completed section titled "proposed Corrective Action."

Discussion of Results:

40 Heavy vehicles were randomly audited during 2016 for compliance with Redox Procedure 3715 - NSW Heavy Vehicle Routes/Requirements. Of the 40 vehicles monitored four drivers found to have travelled by the incorrect route.

5.2 Noise Monitoring & Auditing

N/A - No operational noise auditing was required during this reporting period.

5.2.1 Construction Noise Auditing

No construction noise auditing was required during this reporting period.

5.2.2 Operational Noise Auditing

No operational noise auditing was required during this reporting period.



5.3 Stormwater Quality Monitoring

A three tiered monitoring program tests stormwater quality prior to release from the retention pits on site, including weekly internal analysis prior to discharge, quarterly external analysis, and external analysis in the event of a chemical spill.

Acceptable values for each parameter are taken to be those of:

- the *Clean Waters Regulations 1972*, Section 8 – Class R: Restricted Water;
- Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000* – “Default trigger values for physical and chemical stressors for south-east Australia”, for slightly disturbed ecosystems; and
- Baseline Contamination Assessment for Redox Chemicals Facility Swettenham Road, Minto* (Environmental Audits of Australia, January 2003).

5.3.1 Internal Stormwater Analysis

Redox personnel did not conduct any internal stormwater analysis nor did we send off stormwater samples to independent laboratory during the year 2015, reason being, we identified the *Clean Waters Regulations 1972* and *Clean Water Act* have been repealed for many years. We have notified the Department of Planning and also advised that we would cease all testings until we received further instructions from the Department.

Table 5.3.1: Results of Internal Stormwater Analysis: NIL

Date	Sample	Colour	Clarity			Odour		pH	Temp.	Specific Gravity	Dissolved oxygen	Suspended Solids	Turbidity	Pass/Fail	Tested by:
			SS visible?	Foam?	Visible Film?	Smell?	Oil/Petrol Smell?								
	LIMIT	Clear	No	No	No	No	No	6.5-8.5	15-35°C	0.99-1.01	Min. 6.5 mg/L	Max. 50 mg/L	Max. 50 NTU	Pass	Name
January	Blank		BLANK												
	PIT 1														



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	PIT 2		BLANK
	PIT3		
February	PIT 1		
	PIT 2		
	PIT 3		
March	BLANK		
	PIT 1		
	PIT 2		
	PIT 3		



Discussion of Results for Internal Stormwater Analysis

As mentioned under 5.3.1 – we did not conduct any internal stormwater analysis.

The table below is left blank.

<u>Analyte</u>	<u>Results</u>
Colour	BLANK
Clarity	
Suspended Solids	
Foam	
Visible Film	
Odour - Smell	
Odour - Oil/Petrol	
pH	
Temperature	
Specific Gravity	
Dissolved Oxygen	
Suspended Solids	
Turbidity	
Pass/Fail	



5.3.2 External Stormwater Analysis

As mentioned under 5.3.1 – we did not send samples to external lab test to analyse the stormwater during the year 2016.

Date	Sample	Total suspended solids	Turbidity	Total Kjeldahl Nitrogen (TKN)	NOx-N	Total nitrogen	Total phosphorus
		mg/L	NTU	mg/L	mg/L	mg/L	mg/L
Nil							

Test	Western Retaining Wall	Methods
Nil		

5.3.3 External Stormwater Analysis (Chemical Spill)

N/A



5.4 Waste Management

Table 5.4: WasteLog 2015 – NSW

No hazardous and/or industrial and/or Group A substances listed under 4.32 of Condition were disposed during 2015.

QP	Product Code	Product Name	DG Class	Form	Waste Code	Tracking	Qty	DISPOSAL COMPANY	CAN	TC No.	SPO	Despatch Date	Disposal Method
	NIL												



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5.5 Independent Environmental Auditing

No environmental auditing was required during this reporting period.



6 Environmental Performance

Table 6.0 presents a list of all occasions in the preceding 12-month period when environmental performance goals for the development have not been achieved, indicating the reasons for failure to meet the goals, and the actions taken to prevent recurrence of that type of incident.

Table 6.0: Environmental Performance – Quality Problem Record

QP	Performance goal not achieved	Reason	Action	Status
Transport Management				
Nil				
Noise Monitoring & Auditing				
Nil				
Stormwater & Dust Management				
Nil				
Landscape Management				
Nil				
Waste Management				
Nil				
Environmental Reporting				
Nil				

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Redox Pty Ltd



**2 Swettenham Road
Minto NSW 2566**

Prepared by: Redox Pty Ltd

Trami Tran (Regulatory Affairs Coordinator)
Authorised by Malcolm Perrins (Director)

December 2017



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Executive Summary

This Annual Environmental Management Report (AEMR) has been prepared by Redox Pty Ltd (Redox) to review the performance of the development at 2 Swettenham Road, Minto NSW against the Operational Environmental Management Plan (OEMP) and Construction Environmental Management Plan (CEMP), the conditions of consent, Environmental Protection Licence 12041 and Environmental Legislation pertaining to the site, during the period January to December 2017.

The AEMR is intended to meet the requirements of the NSW Department of Planning, under development consent condition 8.3 – Annual Performance Reporting.

Site environmental management procedures and monitoring systems are in place for noise, transport, stormwater, waste, landscape, dust and odour control, community communication and incident reporting, as per the Operational Environmental Management Plans.

Ultimate responsibility for site environmental performance rests with the Managing Director. Day-to-day environmental management is the combined responsibility of the Regulatory Affairs Coordinator and the Store Manager.

No community, environmental or pollution complaints were received during 2017 related to the Minto facility operations.



1 Introduction

This Annual Environmental Management Report (AEMR) has been prepared by Redox Pty Ltd (Redox) to review the performance of the development at 2 Swettenham Road, Minto NSW against the Operational Environmental Management Plan (OEMP), the conditions of consent, Environmental Protection Licence 12041 and Environmental Legislation pertaining to the site, during the period January to December 2017.

The AEMR is intended to meet the requirements of the NSW Department of Planning, under development consent condition 8.3 – Annual Performance Reporting.

Condition 8.3 requires that Redox, throughout the life of the development, prepare and submit for the approval of the Director-General, and Annual Environmental Management Report (AEMR). The AEMR shall review the performance of the development against the Operational Environmental Management Plan, the conditions of consent and other licences and approvals relating to the development. The AEMR shall include, but not necessarily be limited to:

- (a) Details of compliance with the conditions of consent;
- (b) A copy of the Complaints Register for the preceding twelve-month period, and details of how these complaints were addressed and resolved;
- (c) A comparison of the environmental impacts and performance of the development against the environmental impacts and performance predicted in those documents listed under Condition 1.2 of consent;
- (d) Results of all environmental monitoring required under this consent and other approvals, including interpretations and discussion by a suitably qualified person; and
- (e) A list of all occasions in the preceding twelve-month period when environmental performance goals for the development have not been achieved, indicating the reason for failure to meet the goals and the action taken to prevent recurrence of that type of incident.

Redox shall submit a copy of the AEMR to the Director-General every year.

The Director-General may require Redox to address certain matters in relation to the environmental performance of the development in response to review of the Annual Environmental Management Report. Any action required to be undertaken shall be completed within such period as the Director-General may require.

1.1 Site & Operational Overview

Redox is an importer and distributor of close to 1,000 different organic and inorganic chemicals and raw materials. Used in more than 140 different industries, including Agriculture, Detergent, Food & Beverage, Mining & Metal, Surface Coating and Chemical Manufacture, these products are supplied to all areas of industry throughout Australia and New Zealand.

Redox operates five sites in Australia and three in New Zealand. The Head Office site in Minto (this site) is the base for the company's Marketing and Administration functions for its Australian and New Zealand operations. This site consists of two office/Administration buildings and five warehouses for the storage of both dangerous and non-dangerous goods.

The 5.984ha Redox owned site is located within the Minto Industrial Estate and is surrounded predominantly by light industrial and commercial operations to the west, north and south. Bow Bowing Canal forms the eastern boundary to the site. The nearest sensitive land use is the New Generation Child Care Centre, situated on the site's northern boundary. The nearest residential properties are situated on the opposite side of Campbelltown Road.



Figure 1.1: Aerial view, Redox Minto Facility.



The Minto facility, operational since 5 December 2005, was officially opened on 26 April 2006. The construction of Stage 3 of the development, a 2935m² non-dangerous goods store, commenced August 2008 and was completed February 2009. The new store was occupied from 27 February 2009.

Operational and construction site environmental management procedures are in place for noise, transport, stormwater, waste, landscape, dust and odour control, community communication and incident reporting. Ultimate responsibility for site environmental performance rests with the Managing Director; day-to-day environmental management is the combined responsibility of the Regulatory Affairs Coordinator and the Store Manager.

1.2 Operational Environmental Management Plan

Prior to commencement of operations on the site, an Operational Environmental Management Plan (OEMP) was prepared by Redox, and approved by the Director-General of the Department of Infrastructure, Planning and Natural Resources (DIPNR). This OEMP details the environmental management framework, practices and procedures to be followed during the operation of the development. The OEMP includes:

- (a) Identification of all statutory and other obligations that Redox is required to fulfil in relation to operation of the development, including all consents, licences, approvals and consultations;
- (b) A description of the roles and responsibilities for all relevant employees involved in the operation of the development;
- (c) Overall environmental policies and principles to be applied to the operation of the development;
- (d) Standards and performance measures to be applied to the development, and a means by which environmental performance can be periodically reviewed and improved;
- (e) Management policies to ensure that environmental performance goals are met and to comply with the conditions of consent;
- (f) The listed Management Plans:
 - (i) Noise Management Plan;
 - (ii) Transport Management Plan;
 - (iii) Stormwater Management Plan;
 - (iv) Waste Management Plan;
 - (v) Landscape Management Plan; and
- (g) The environmental monitoring requirements outlined in the conditions of consent.



1.3 Development Consent Conditions

The Minister for Infrastructure and Planning, the Hon Craig Knowles MP, determined to approve the Chemical Storage and Distribution Facility, Lot 171 Swettenham Road, Minto, Campbelltown LGA (DA No: 367-11-2002-i) on 16 September 2003, subject to Development Consent Conditions.

The reason for the imposition of conditions is to:

- (a) Minimise any adverse environmental impacts associated with the development;
- (b) Ensure effective on-going environmental and safety management and monitoring;
- (c) Minimise potential safety impacts associated with the development; and
- (d) Implement the recommendations of the Commission of Inquiry into all environmental aspects of the development.

1.4 Environmental Protection Licence

Environmental Protection Licence 12041 authorises Redox to carry out Chemical Storage and Waste Activities at 2 Swettenham Road, Minto.

General obligations of the licensee under this licence, and as set out in the *Protection of the Environment Operations Act 1997* and the Regulations made under the Act, include to:

- (a) Ensure persons associated with Redox comply with this Licence,
- (b) Control the pollution of waters and the pollution of air, and
- (c) Report incidents causing or threatening material environmental harm.



2 Details of Compliance

On 14 and 15 December 2016, Ramboll Environ Ltd was engaged by Redox Pty Ltd (Redox) to conduct an Independent Environmental Audit and Hazard Audit of the Redox Chemical Storage and Distribution Centre at 2 Swettenham Road, Minto, New South Wales (NSW) 2566.

The Independent Audits are required to be undertaken every three years pursuant to Conditions 5.12 and 5.13 of the Project Consent, issued by the (now) NSW Department of Planning and Environment (DP&E).

2.1 Compliance with Development Consent Conditions

Table 2.1: Compliance with Development Consent Conditions

Table 2.1 is intended to address the findings and the recommendations issued by the abovementioned independent Hazard and Environmental Auditors.

Consent Condition		Compliance Requirements	Requirement			Status	Findings
			General	Construction	Operation		
1		GENERAL					
Obligation to Minimise Harm to the Environment							
1.1	Redox shall implement all practicable measures to prevent or minimise any harm to the environment that may result from the construction, commissioning, operation ... of the development.	✓			Compliant	Redox has an environmental management system (EMS) in place comprising management plans, process and procedures to manage risks to the environment. Procedures (e.g. spill management, hazardous materials handling and storage, stormwater management) were observed by the Auditor to be prepared and being followed, to the extent observations could be made at the time of the site visit. A dedicated resource has been assigned responsibility for environmental management although in practice it is a shared role amongst primary employees (i.e Regulatory Affairs Coordinator, Quality Assurance Manager). The EMS and environmental management practices appeared appropriate to the nature of the operations.	

Scope of Development



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
1.2	The Applicant shall carry out the development generally in accordance with requirements a) to s). Note, due to the large number of requirements these have not been replicated here. Refer to Appendix A for the full list of requirements.	✓			Not verified	Ramboll Environ notes that the Independent Environmental Audit conducted by Ramboll Environ (formally Environ) in 2013 had included a review of a selection of documents listed in this condition and that these documents had provided additional information in response to regulatory agency enquiries of EIS or associated studies. At the end of 2013 audit, Ramboll Environ had assumed compliance Audits undertaken in 2006 and 2010. This assumption by Ramboll Environ still applies for this current audit and for this reason Ramboll Environ has not conducted a review of compliance against all documents listed in a) to s) in this condition. No construction has been conducted since 2008.
1.3	In the event of any inconsistency between the conditions of consent and/or any scope document(s), the conditions of consent and/or the most recent document shall prevail to the extent of the inconsistency.	✓			Noted	N/A
Provision of Documents						
1.4	Where practicable, the Applicant shall provide all documents and reports required to be submitted to the Director-General under this consent in an appropriate electronic format. Provision of documents and reports to other parties, as required under this consent, shall be in a format acceptable to those parties and shall	✓			Noted	
1.5	Nothing in this consent prevents Redox from combining reporting requirements under this consent with reporting requirements for submission to another relevant party.	✓			Noted	
Statutory Requirements						
1.6	The Applicant shall ensure all licences, permits & approvals are obtained and kept up-to-date as required throughout the life of the development. No	✓			Compliant	The Regulatory Affairs Coordinator is responsible for identifying and maintaining the currency of environmental licences and permits. The Redebiz system and workflow



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
	condition of this consent removes the obligation for the Applicant to obtain, renew or comply with such licences, permits or approvals.					tasks are used to generate automatic reminders for licence renewal dates or other regulatory obligation requirements. An excel spreadsheet, with a column for "due date, is used to track when the Annual Environmental Return submission to the NSW EPA is required. As a member of the Plastics and Chemicals Industries Association (PACIA), Redox receives industry bulletins on regulatory matters, mainly safety related, for their industry. SafeWork NSW also provides information bulletins regarding dangerous goods to Redox. Redox do not subscribe to any other associations for legal/regulatory information.
1.7	In the event that a dispute arises between the Applicant and Council or a public authority, other than the Department, in relation to a specification or requirement under this consent, the matter shall be referred by either party to the Director-General, or if not resolved to the Minister, whose determination shall be final and binding on all parties.	✓			Noted	Site personnel advised that there have no disputes or issues requiring referral to the Department.
2	COMPLIANCE					
2.1	Redox shall ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.	✓			Compliant	Redox has established a number of procedures to ensure employees and contractors are aware of and comply with the sites' environmental obligations. Training on procedures and in environmental matters is provided to employees during induction and as required based on role requirements, usually through on-the-job training. Assessment of competency is undertaken and recorded in Redebiz. Refresher training requirements are also flagged to the responsible manager within the Redebiz system. Contractors employed to assist with loading/unloading



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		General	Construction	Operation		
						activities are provided induction and relevant training (e.g. manual handling, dangerous goods handling etc.) by Redox personnel. An internal audit process operates at Redox with audits occurring usually annually. The last environmental compliance audit conducted was in September 2015. Observation: A number of non-conformances were identified that are still open related to: - Operational Environmental Management Plan - an Annual Environmental Management Report has not been prepared and submitted to the DP&E since 2013 due to an outstanding enquiry to the DP&E regarding stormwater quality testing. It is recommended that Redox resolve the stormwater quality testing issue as a priority and continue to submit their Annual Environmental Management Report. - Environmental Policy - the policy has not been updated since 2005. It is understood the last review of the policy was undertaken in May 2015. A copy of the policy provided to the Auditor was undated and unsigned. Redox should review the policy to ensure it is contemporary, sign and date the policy, and make it publicly available (e.g. on website). Training - training on basic environmental awareness has not been provided to employees. Redox provides general environmental information to employees through the environmental policy and Employee Introduction booklet provided at induction. It is recommended that in addition to the reading material provided/available, training is provided to ensure employees are made aware of and understand environmental management requirements



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		General	Construction	Operation		
						and obligations.
2.2	Redox shall be responsible for environmental impacts resulting from the actions of all persons on site, including contractors, subcontractors and visitors.	✓			Noted	
2.3	Prior to each of the events listed below, Redox shall certify in writing to the satisfaction of the Director-General that it has complied with all conditions of this consent applicable prior to that event.				Not verified - Stage 1, 2 & 3 Not triggered - Stage 4	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 had noted that site personnel had advised the Director-General was notified in writing of the site's compliance with the relevant consent conditions prior to each of the events a) to c) for Stages 1, 2 and 3. Ramboll Environ has made no further enquiries regarding this condition given it applies to historical events related to construction and commencement of operations (as opposed to continuing operation of the facility). Stage 4 has not yet been constructed.
	(a) commencement of any physical works on the land subject to this consent; (b) commencement of construction of stages 1, 2, 3 and 4 of the development; and (c) commencement of operation of stages 1, 2, 3, and 4 of the development.		✓ ✓	✓		
2.4	Notwithstanding condition 2.3 of this consent, the Director-General may require an update report on compliance with all, or any part of the conditions of this consent.	✓			N/A	Noted.
2.5	The Applicant shall meet the requirements of the Director-General in respect of the implementation of any measure necessary to ensure compliance with the conditions of this consent, and general consistency with the documents listed in Condition 1.2. The Director-General may direct that such a measure be implemented in response to the information contained within any report, plan, correspondence or other document submitted in accordance with the conditions of this consent,	✓			Not verified	Facility personnel advised that to date there has been no additional Director-General requirements as outlined in condition 2.5.



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			General	Construction	Operation		
		within such time as the Director-General may require.					
3.1	In relation to the construction and occupation of the development, Redox shall provide the Director-General and Council with the following: (a) written notification of a Principal Certifying Authority; (b) copies of all construction certificates issued; (c) written notification of the intention to commence construction; (d) copies of all occupation certificates; (e) written notification of the intention to occupy.		✓ ✓ ✓	✓ ✓	Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 had noted that site personnel had advised that the last stage of construction occurred in 2008 and it was assumed at the time of the 2013 audit that compliance with this condition was confirmed by the previous Independent Environmental Audits undertaken in 2006 and 2010. This assumption continues to apply for this current audit.	
3.2	Prior to the commencement of any construction associated with the development, Redox shall erect at least one sign at the construction site. The sign shall be maintained for the duration of construction works, and shall be removed as soon as practicable after the conclusion of construction works.		✓		Not triggered	Refer comment to item 3.1	
4	ENVIRONMENTAL PERFORMANCE						
Hazards and Risk Impacts							
4.1	For each of the dangerous goods classes and materials listed in the table below, the Applicant shall not permit the materials listed as “prohibited” to be received, stored, or handled on the site. To avoid any doubt the Applicant shall only permit the materials listed as “permitted” to be received, stored or handled on the site. This condition does not apply to those materials that may be associated with office, laboratory, construction, maintenance or vehicular/ equipment components			✓	Compliant	The Redebiz system is the main system to manage inventory, quality problems and retain information, amongst other functions. Redox reported that the Redebiz system was modified so that prohibited materials (as noted in the Development Consent e.g. Class 1, Class 2, Class 6.2 etc.) could not be ordered through the purchasing system, by setting the allowable order quantity to zero for the prohibited materials. The Auditor sighted the order quantity restrictions for prohibited materials within the Redebiz system to confirm the required modifications had been made.	



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Consent Condition	Compliance Requirements	Requirement			Status	Findings																																
		General	Construction	Operation																																		
	(including forklifts) of the development, and are not purchased and sold as part of the principal commercial operations of the development. <table><tr><th>DG Class</th><th>Prohibited</th><th>Permitted</th></tr><tr><td>Class 1</td><td>All</td><td>None</td></tr><tr><td>Class 2</td><td>All</td><td>None</td></tr><tr><td>Class 3</td><td>PG I Subclass 6.1</td><td>PG II & III (unless otherwise prohibited)</td></tr><tr><td>Class 4</td><td>All</td><td>None</td></tr><tr><td>Class 5</td><td>All except those listed as permitted</td><td>Solids of Class 5.1, PG III</td></tr></table> <table><tr><td>Class 6</td><td>Subclass 3 All Class 6.2</td><td>All Class 6.1 (unless other, but not Class 6.1 with subclass 3)</td></tr><tr><td>Class 7</td><td>All</td><td>None</td></tr><tr><td>Class 8</td><td>None</td><td>All</td></tr><tr><td>Class 9</td><td>None</td><td>All</td></tr><tr><td>Non-DG</td><td>None</td><td>All</td></tr></table>	DG Class	Prohibited	Permitted	Class 1	All	None	Class 2	All	None	Class 3	PG I Subclass 6.1	PG II & III (unless otherwise prohibited)	Class 4	All	None	Class 5	All except those listed as permitted	Solids of Class 5.1, PG III	Class 6	Subclass 3 All Class 6.2	All Class 6.1 (unless other, but not Class 6.1 with subclass 3)	Class 7	All	None	Class 8	None	All	Class 9	None	All	Non-DG	None	All				A review of the DG manifest (as at 15/12/2016) for a selected prohibited material (e.g. Class 6.1 Subclass 3) showed that these prohibited materials were not present at the site, at the time of the audit. Other prohibited materials (e.g. Class 4, Class 5.1 PGII) were also present as “samples” which according to the Development Consent condition are permissible when not purchased and sold as part of the principal commercial operations of the site.
DG Class	Prohibited	Permitted																																				
Class 1	All	None																																				
Class 2	All	None																																				
Class 3	PG I Subclass 6.1	PG II & III (unless otherwise prohibited)																																				
Class 4	All	None																																				
Class 5	All except those listed as permitted	Solids of Class 5.1, PG III																																				
Class 6	Subclass 3 All Class 6.2	All Class 6.1 (unless other, but not Class 6.1 with subclass 3)																																				
Class 7	All	None																																				
Class 8	None	All																																				
Class 9	None	All																																				
Non-DG	None	All																																				
4.2	Redox shall only permit non-dangerous goods, and dangerous goods of class 8 to be stored or handled in bulk on the site.			✓	Compliant	A review of the DG manifest (as at 15/12/2016) showed that the following materials in bulk were present at the site: Code SOSSIL1100, Class 6.1, Packing Group III material (i.e. Sodium Silicofluoride) in two orders: 125 x 1,000kg bulkers and 1.9 x 1,000kg bulkers (as Reject) within Store D2. However, these ‘bulkiers’ (i.e. bulker bags/flexible IBCs) are exempt																																



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
						as bulk containers as defined in the Australian Code for the Transport of Dangerous Goods by Road & Rail (i.e. the ADG Code) section 1.2.1.2.2.2.
4.3	Prior to any dangerous goods being brought to the site, Redox shall demonstrate to the satisfaction of the Director-General that it has a system in place to track the quantities and locations of dangerous goods on the site at all times.			✓	Compliant	The Redebiz system is the inventory system for dangerous goods and hazardous materials stored at the site. Redebiz records the quantity, dangerous good type, packing group, hazard classification, storage location (including aisle number) amongst other information. Information was provided by Redox regarding an independent hazard audit conducted by the DP&E in 2013 and 2015, as part of the Departments 2013-2015 compliance audit campaign of potentially hazardous facilities to verify compliance with the status of Independent Hazard Audit recommendations (in this case made following the 2013 Independent Hazard Audit). A copy of the DP&E 2015 compliance audit report only was provided to the Auditor however, recommendations from the DP&E 2013 compliance audit were included in this 2015 report. The DP&E 2015 compliance audit identified five non-compliances and made one observation, with recommended actions to be undertaken. The observation related to the stock control system (i.e. Redebiz) with a recommendation made by the DP&E to modify the stock control system to more comprehensively prevent acceptance of prohibited materials. The Auditor sighted the order quantity restrictions for prohibited materials within the Redebiz system and confirms the required modifications had been made. A review of the DG manifest also confirmed that prohibited materials, as noted in item 4.1, were not present at the site at the time of the audit.

Bunding and Spill Management

4.4	Redox shall ensure that all bunding installed at the development site is constructed strictly in accordance with:				Compliant	The Auditor was advised that the warehouse buildings were constructed per design requirements and to the development consent conditions in relation to bunding.
	(a) all relevant Australian Standards;		✓			During the site walk over, the Auditor observed all warehouse buildings to be constructed with an angled ramp from the



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		General	Construction	Operation		
	(b) a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; (c) the EPA's Environmental Protection Manual Technical Bulletin Bunding and Spill Management.		✓ ✓			exterior of the warehouse Store down into the Store which is at a slightly lower level than the loading area outside the Store. This provides bunding for each Store in the event of spills or leaks. Just before the entrance to each Store, except at Stores B1 and B2, blind sumps are present to collect potential spills of materials. The Auditor did not review documentation associated with the bunding design as it is assumed that compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010 or prior. The Auditor notes that chlorinated compounds (i.e. Class 6.1 Trichloroethylene and Dichloromethane) are permitted to be stored on-site, and that concrete paving may not be sufficient to contain and prevent land contamination.
4.5	At least one month prior to the commencement of construction of the development ... Redox shall prepare and submit for the approval of the Director-General the studies set out below. (a) A Fire Safety Study (b) A Final Hazard Analysis (c) A Construction Safety Study		✓ ✓ ✓		Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 had assumed that compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010 or prior. Site personnel advised that there has been no significant construction between 2013 and 2016, including no construction for the proposed Stage 4 development.
Pre-Commissioning Studies						
4.6	No later than two months prior to the commencement of commissioning of the development, Redox shall prepare and submit for the approval of the Director-General the studies set out below: (a) A Transport of Hazardous Materials Study for the development. (b) An Emergency Plan for the development. (c) A Safety management System.			✓ ✓ ✓	Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 had noted that site personnel had provided a copy of correspondence from the Department approving the study reports with the exception of the Safety Management System (SMS). The Department had provided comments on the SMS to Redox in August 2005 and whilst further correspondence from the Department could not be provided to confirm that the comments had been satisfactorily addressed, Ramboll Environ considered that Redox would have addressed any concerns and that the SMS would have met the Departments requirements. At the time of the 2013 audit Ramboll Environ had reviewed the three documents a) to c) and considered that they had



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		General	Construction	Operation		
						been prepared to substantially address the requirements of a) to c). With the exception of the Transport of Hazardous Materials study, Ramboll Environ reviewed the Emergency Plan and SMS, where revisions to these documents had been made since the 2013 audit. The Emergency Plan (Procedure 3403, 6 October 2015) is a complementary document to the Emergency Management Plan. The following observations are made in relation to the Emergency Plan (procedure 3403): - The Emergency Plan is considered thorough containing realistic emergency scenarios and response actions. Emergency scenarios considered in the Procedure/Plan are representative of the hazards on the site although consideration of sabotage, vandalism and arson (to buildings, equipment or vehicles) could also be included. The emergency scenarios included information on control measures, response actions for staff and/or key emergency response personnel (i.e. Chief Warden, Deputy Chief Warden, Wardens and Communications Officer) for the scenarios: - Fire/ Explosion with details of fire control measures available - Severe Storms with details of resulting impacts (e.g. destructive winds, flooding etc.) - Gas Release due to the formation of toxic gases from the chemical reaction of incompatible substances - Dangerous Goods Emergency due to a major release or spill of a hazardous material in an uncontrolled or unconfined space, including details



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		General	Construction	Operation		
						of the control measures available - Bomb Threat/ Suspect Package - Medical Emergency such as a heart attack, respiratory failure or broken limb including details on controls measures available Observation: It is recommended that other emergency scenarios involving sabotage, vandalism and arson to buildings, equipment or vehicles are included in the Emergency Procedure/Plan.
4.7	Prior to commencement of construction, the Applicant shall submit to the Director-General a Security Management Plan for the development. The Plan shall detail the specific security infrastructure to be installed at the site, including the operation of the security gates and video surveillance, procedures and protocols for tracking dangerous goods and a general program for identifying potential external risks and ensuring the security of the site. The Plan shall be prepared in consultation with Council, and with reference to the matters detailed in the Department's <i>document Crime Prevention and the Assessment of Development Applications</i> .		✓		Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 had noted that the last stage of construction occurred in 2008. Since that time, there has been no significant construction and Stage 4 has not yet been constructed. The nature of operations since the 2013 audit have remained predominantly the same. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010 or prior.

Traffic and Transport

Community Enhancement Program

4.8	Prior to the commencement of operation, or within such time as agreed by the Director-General, the Applicant shall negotiate an agreed outcome with Council for an appropriate level of contribution (financial or in-kind) and as applicable, towards mitigating any cumulative social and/or community impacts as a result of the proposed development.			✓	Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 noted that Redox had advised a contribution was made to Council for the construction of an off- or on-ramp to the M5 motorway. The contribution was understood to be negotiated between the then Department of Infrastructure, Planning and Natural Resources (now DP&E) and Redox. No other contributions



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
						have been made to Council since that time.
Site Access, Internal Roads and Parking						
4.9	The Applicant shall ensure all heavy vehicles access the site in a forward direction via the Holmes Road entrance and not via Swettenham Rd entrance. Not applicable during emergencies or as directed by relevant authority (including the police and emergency services).			✓	Compliant	Redox has implemented a Traffic Management Plan and a Traffic Management and Heavy Vehicle Requirements procedure (Procedure 3715) to minimise amenity impacts to the local community from heavy vehicle access to and exits from the site. The Plan and procedure specify heavy vehicle movement to be in a forward direction from Holmes Road into the site, and that four inspections per month will be undertaken to monitor the routes taken by the heavy vehicles comply with the designated routes when leaving the site. Redox provided Heavy Vehicle Routes audit results to Ramboll Environ showing that for most months 2-3 audits per month were undertaken (rather than the four noted in documentation). During the site visit, Ramboll Environ observed that all heavy vehicles entering the site did so via the Holmes Road entrance and moved in a forward direction.



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
4.10	The Applicant shall develop and implement, in consultation with Council, a road hierarchy for heavy vehicles travelling to and from the site, with the Holmes Rd, Ben Lomond Rd, Airds Rd, Rose Payten Drive, Campbelltown Rd, and M5 Motorway forming the principal route to and from the site. The Applicant shall submit details of the road hierarchy for the approval of the Director-General prior to commencement of operations on the site.			✓	Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 noted this condition had been complied with. At the time, Redox had provided to Ramboll Environ in 2013 correspondence from the then Department of Planning (dated 21 May 2009) confirming approval of the road hierarchy from the Department and Campbelltown City Council. The Heavy Vehicle Route map shown on Redox's website shows the heavy vehicle road hierarchy to include travel on Holmes Road, Ben Lomond Road, Airds Road, Rose Payten Drive, Campbelltown Road and the M5/M31 motorway, as specified in this condition.
4.11	Prior to the commencement of operations, Redox shall submit for the Director-General's approval a Transport Code of Conduct for the development.			✓	Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010 or prior, as the last stage of construction occurred in 2008 with the nature of operations remaining the same since that time.
4.12	Prior to the commencement of any B-double transport to the site, Redox shall demonstrate to the satisfaction of the Director-General that the B-double reclassification of Holmes Road has been approved by the RTA in association with Council.			✓	Not Verified	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010 or prior, as the last stage of construction occurred in 2008 with the nature of operations remaining the same since that time.
4.13	The use of landscaping shall not affect driver sight distance for vehicles entering and exiting the site.		✓		Compliant	During the site walk over, the Auditor observed that on-site landscaping did not affect vehicle driver's sight distance.
4.14	Redox shall design and construct all internal road works, including assoc. parking facilities and loading bays:				Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 confirmed compliance with this condition: • Through discussions with site personnel that internal road works and parking infrastructure complied with RTA (now RMS) and Council standards and codes. The design
	(a) In accordance with the relevant RTA and Council standards & codes, and Australian Standards including AS2890.1-1993 and AS2890.2-1989;		✓			



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		General	Construction	Operation		
	(b) With clearly marked visitor, disabled, ambulance and service vehicle parking areas; and (c) With signage to demarcate all vehicle movements within the site.		✓			engineers Certificate confirmed the internal driveway and parking area gradients and levels complied with AS2890.1 and AS2890.2. During the 2013 site walkover, Ramboll Environ observed that parking areas were clearly marked for visitor, disabled, ambulance and service vehicle use, and signage was in place to indicate vehicle movements and directions within the site.
			✓			
Road Works						
4.15	The Applicant shall ensure that the deceleration lane at Swettenham Rd entrance is designed in accordance with Council's <i>Specification for Construction of Subdivisional Road and Drainage Works</i> and that the land is constructed to the satisfaction of Council. The Applicant shall submit detailed engineering plans of the deceleration lane for the approval of Council prior to the commencement of any construction activities associated with Stage 1 of the development.		✓		Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 confirmed compliance with this condition: Through discussions with site personnel who indicated the deceleration lane at the Swettenham Road entrance and the lane were constructed to Council's satisfaction. The Certificate issued by the design engineers, Algorry Zappia & Associates was understood to also apply to this condition.
4.16	The Applicant shall ensure that a compensatory pedestrian footpath is designed and constructed to the satisfaction of Council. The footpath shall be within the site boundaries along the length of Swettenham Rd deceleration lane. This footpath shall be dedicated to Council as a Public Road prior to commencement of operations.		✓		Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2006 and/or 2010, as the last stage of construction occurred in 2008 with the nature of operations remaining the same since that time.

Noise Impacts

Construction Noise



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
4.17	The Applicant shall ensure that all site preparation and construction activities associated with the development do not exceed the criteria at the nominated locations specified in Table 1. For the purpose of this condition, construction noise shall be determined at the locations under the conditions specified for operational noise, as provided in conditions 4.21 and 4.22 of this consent.		✓		Compliant	The last construction works undertaken at the site (for Stage 3) were completed at the end of 2008. The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 noted that site personnel advised at the time that there were no non-compliance issues associated with construction noise limits during preparation and construction activities. As part of the 2013 IEA, Ramboll Environ reviewed the noise assessment report undertaken during Stage 3 construction works (Minto Storage and Distribution Centre, Stage 3 Construction Noise Audit, 29 September 2008 by Acoustic Dynamics Pty Ltd) which reported that predicted noise emission levels at nearby residential receivers (including the New Generation Childcare Centre) were below the relevant noise criteria. In addition, Ramboll Environ was provided a copy of correspondence from the Department of Planning (now Department of Planning and Environment), dated 24 October 2008 that confirmed the Stage 3 Construction Noise Audit met the requirements of the consent condition 5.4 and construction noise was below the required criteria. For this IEA, Ramboll Environ has not re-checked compliance with this condition, based on the previous 2013 review findings.
4.18	The Applicant shall ensure that site preparation and construction activities associated with the development do not exceed 62 dB(A) _{(LAeq(15 minute))} at the New Generation Childcare Centre, 30 Swettenham Road, St Andrews, during normal operating hours and/or occupation of the Childcare Centre.		✓		Compliant	Refer item 4.17



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
4.19	The Applicant shall only undertake noisy site preparation works and noisy construction activities (including transportation of fill and spoil) associated with the development, between the following hours: a) 7:00 am to 6:00 pm Mondays to Fridays, inclusive; b) 8:00 am to 1:00 pm on Saturdays; and c) At no time on Sundays or public holidays.		✓		Compliant	The last construction works undertaken at the site (for Stage 3) were completed at the end of 2008. The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 noted that site personnel advised at the time that preparation and construction activities were only undertaken during the hours specified in this condition. Ramboll Environ has not re-checked compliance with this condition, based on the previous 2013 review findings. Construction of the proposed Stage 4 has not yet occurred.
4.20	The hours of site preparation works and construction activities specified under condition 4.17 of this consent may be varied with the prior written approval of the Director-General. Any request to alter the hours of site preparation works or construction activities specified under condition 4.17 shall be: a) considered on a case-by-case basis; b) accompanied by details of the nature and need for activities to be conducted during the varied site preparation and construction hours; c) details of how potentially affected members of the community will be consulted and informed of the proposed varied site preparation and construction hours; and d) accompanied by written evidence of the EPA's agreement with the proposed variation in construction times, after providing any information necessary for the EPA to reasonably determine that activities undertaken during the varied construction hours will not adversely impact on the acoustic amenity of receptors in the vicinity of the site.		✓		N/A	There have been no site preparation or construction works since 2008.

Operational Noise



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		General	Construction	Operation		
4.21	The Applicant shall design, construct, operate and maintain the development to ensure that the noise contributions from the development to the background acoustic environment do not exceed the maximum allowable noise contributions specified in Table 2, at those locations and during those periods indicated. The maximum allowable noise contributions apply under: a) Wind speeds up to 3ms ⁻¹ (measured at 10 metres above ground level); or b) Temperature inversion conditions up to 3°C per 100 metres and wind speeds up to 2 ms ⁻¹ (measured at 10 metres above ground level).	✓			Compliant	The last construction works undertaken at the site (for Stage 3) were completed at the end of 2008. The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 noted that Redox had conducted a noise assessment in May 2009 (Minto Storage and Distribution Centre, Stage 3 Operational Noise Audit, 10 June 2009 by Acoustic Dynamics) after the construction of Stage 3, during normal operational times. The report indicated that noise contributions from the development were measured to be below the maximum allowable noise contributions specified in Table 2. Site personnel advised during this audit that: - No noise monitoring had been undertaken in the past three years and the Auditor has assumed that the last monitoring was conducted in May 2009 (as noted above). - There have been no complaints from neighbours in relation to noise. - The site activities have not changed significantly since the last noise monitoring was undertaken in 2009. Based on the above information and observations of the activities occurring during the site visit (e.g. no loud activities) Ramboll Environ considers the site to be compliant with this condition.

Measurement of Noise Impacts

4.22	Noise from the development shall be: a) Measured at the most affected point on or within the residential boundary to determine compliance with LAeq(15minute) noise limits; or b) Measured at 1 metre from the dwelling façade to determine compliance with LA1(1 minute) noise limits.	✓			Compliant	At the time of the 2013 IEA undertaken by Ramboll Environ, the Stage 3 Operational Noise Report by Acoustic Dynamics, 10 June 2009, indicated that noise contribution readings were taken at the locations specified by this condition.

Soil and Water Impacts



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		General	Construction	Operation		
4.23	Redox shall comply with section 120 of the <i>Protection of the Environment Operations Act 1997</i> , which prohibits the pollution of waters.	✓			Compliant	The paved areas surrounding the operational areas (i.e. of the chemical storage and distribution warehouses) direct on-site stormwater to three oil and silt arrestor (OSA) pits. These three OSA pits use stormwater isolation valves to manage the discharge of on-site stormwater to Bow Bowing Canal. The isolation valves are in a permanently closed position to prevent potentially contaminated stormwater from being released to the canal. These measures are considered by the Auditor to assist in preventing the pollution of waters. Observation: The Auditor notes that Redox has a procedure in place, as required under consent conditions 5.8 and 7.5 to monitor the quality of stormwater flows from the site. Since approximately early 2014, Redox has not conducted stormwater quality monitoring and testing (or submitted the required Annual Environmental Management Report (AEMR)) as required under the Stormwater Quality Monitoring program. Redox had queried the DP&E in June 2014 regarding the requirement to continue stormwater monitoring given the Clean Waters Act and Regulation (to which the condition refers to) were repealed in 1999 and to present date have not received confirmation from DP&E as to whether stormwater quality monitoring is still required and no communication regarding the lack of submission of the AEMR by Redox since 2013. Recommendations to resolve this issue immediately consult with the DP&E are made in item 7.5.
Soil, Contamination and Geotechnics						
4.24	The Applicant shall ensure that all materials displaced during site preparation and construction works are stabilised or relocated and made secure so that these materials will not detrimentally affect any watercourse or riparian area.		✓		Note	Ramboll Environ notes this condition is not applicable to the current operations and has excluded this condition from Ramboll Environ's scope of work.



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		General	Construction	Operation		
4.25	Prior to the commencement of any site preparation or construction work, Redox shall submit for the approval of the Director-General, a geo-technical assessment of the site.		✓		Note	Ramboll Environ notes this condition is not applicable to the current operations and has excluded this condition from Ramboll Environ's scope of work. The proposed Stage 4 development has not yet been constructed.
4.26	Prior to the commencement of any site preparation of construction work on the site, the Applicant shall submit for the approval of the Director-General, a contamination review of the site to confirm the presence, or otherwise of any contamination on the site, and to demonstrate that any contamination on the site is not inconsistent with the development. The contamination review shall be prepared by a suitably qualified person(s) and shall detail any additional measures that shall be implemented to address contamination, if identified, and if required.		✓		Note	The Auditor notes this condition is not applicable to the current operations and has excluded this condition from Ramboll Environ's scope of work. The proposed Stage 4 development has not yet been constructed.
4.27	Depending on the outcome of the investigations required by Condition 4.26, the Director-General may require Redox to prepare and implement a Soil Contamination Protocol.		✓		Note	The Auditor notes this condition is not applicable to the current operations and has excluded this condition from Ramboll Environ's scope of work. The proposed Stage 4 development has not yet been constructed.
Bow Bowing Canal and Riparian Zone						
4.28	The Applicant shall establish and maintain a riparian zone, consisting of local native plant species, in the area between the development and the watercourse within the property boundary. The zone shall be designed to ensure bed and bank stability of this area, and to prevent any sedimentation and water quality impacts on Bow Bowing Canal resulting		✓		Compliant	The riparian zone was established in early 2006 with local native species. Maintenance of the riparian is zone and other landscaped site areas is undertaken by Redox's Maintenance Officer. The Auditor observed during the site visit that the riparian zone contained mature native plants.



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		General	Construction	Operation		
	from the development. The riparian zone shall be designed and constructed to meet the requirements of the Department and shall be addressed as part of the Vegetation Construction Environmental Management Plan (condition 7.2(d) – should be 7.2(c)(v)).					
4.29	The Applicant shall maintain the riparian zone, as required by condition 4.28, for a period of at least two years after final planting. Every six months during that period the Applicant shall submit to the satisfaction of the Department, a status detailing the progress of implementation of the Vegetation Construction Environmental Management Plan (condition 7.2d).			✓	Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 noted that site personnel had advised that progress reports were submitted to the Department every six months during the two year period after final planting of the riparian zone. At the time of the 2013 audit, Ramboll Environ was provided copies of the Vegetation Management Report - Progress/ Status Reports for two of the four reporting periods (August 2006 and February 2007) during the two year period and copies of correspondence from the Department of Planning confirming receipt of reports for three of the four reporting periods (including the final progress report). The Department correspondence indicated the progress reports were approved as satisfying the requirements of this condition. Ramboll Environ has not re-checked compliance with this condition, based on the previous 2013 review findings.
4.30	The Applicant shall design and construct any stormwater outlet structure located within 40 metres of Bow Bowing Canal to ensure that the structure does not compromise the stability or function of the riparian zone. The design of any outlet structure within the riparian zone, including pipelines and spillways, shall be in accordance with the Departments guideline <i>Stormwater Outlet Structures to Streams</i> and shall be approved by the Director-General prior to the commencement of any construction works within the riparian zone.		✓		Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 noted that stormwater outlets from the site discharge directly to Bow Bowing Canal. There are no outlet structures discharging into the riparian zone. The Redox Operational Environmental Management Plan dated November 2011 (Revision 3) notes that there are two stormwater outlets draining to Bow Bowing Canal and that these were designed in accordance with Council's Standard Design Requirements SD88.



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		General	Construction	Operation		
	Amendment - The Applicant shall design and construct any stormwater outlet associated with the development for Bow Bowing Canal in accordance with Council's guideline Standard Design Requirements SD88 – Standard Main Channel Outlet Design.					
Waste Generation and Management						
4.31	The Applicant shall not receive waste at the site for storage, treatment, processing or reprocessing, and shall not dispose of waste generated by the development on the site, except as may be expressly permitted by an EP Licence for the development under the <i>Protection of the Environment Operations Act 1997</i> .			✓	Compliant	Site personnel advised that wastes from off-site sources are not received, stored or treated at the site. Wastes generated by the site are disposed off-site either to landfill or for recycling by waste contractors. During the site visit, Ramboll Environ did not observe any waste transporters delivering waste material to the site for storage, treatment or processing.
4.32	Except as provided by any EP Licences issued for the development, the Applicant shall ensure that only the following hazardous &/or industrial and/or Group A waste listed below are generated &/or stored at the site: i) Acidic solutions or acids in solid form; ii) Basic solution or bases in solid form; iii) Non-toxic salts; iv) Zinc compounds; v) Waste oil/water, hydrocarbons/water mixtures or emulsions; vi) Containers that are contaminated with residues of substances referred to in the National Environment Protection (Movement of Controlled			✓	Not verified	Redox does not currently have a readily available record (e.g. waste log) of all waste types generated and stored at the site (e.g. waste type, quantities). Information on waste disposed off-site must be collated from purchase orders issued to waste contractors for waste disposal, which are recorded in the Redebiz system. The Auditor was therefore not able to confirm whether the waste types, including waste quantities generated and stored at the site complied with this condition. However, the last waste log prepared in 2012 indicated that the total waste stored at any one time did not exceed the 50 tonnes limit. Redox personnel advised that between 2014 and 2016 the only waste types generated were non-dangerous and non-hazardous wastes. Observation: It is recommended that Redox prepare a waste log for all waste generated, stored and disposed, similar to Table 5.4 in the last Annual Environmental Management



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		General	Construction	Operation		
	Wastes between States and Territories) Measure list of hazardous, industrial and liquid waste codes; vii) Surface active agents (surfactants), containing principally organic constituents and which may contain metals and inorganic materials; viii) Boron compounds; ix) Cadmium, cadmium compounds; x) Chromium compounds (hexavalent and trivalent); xi) Cobalt compounds; xii) Copper compounds; xiii) Ethers; xiv) Phenols, phenol compounds including chlorophenols; xv) Phosphorus compounds excluding mineral phosphates; xvi) Selenium, selenium compounds; xvii) Waste chemical substances arising from research and development or teaching activities including those which are not identified and/or new and whose effects on human health and/or the environment are not known; xviii) Fire debris and fire washwaters; xix) Halogenated organic solvents; xx) Inorganic fluorine compounds excluding calcium fluoride; xxi) Inorganic sulphides; xxii) Isocyanate compounds; xxiii) Lead, lead compounds; xxiv) Nickel compounds; xxv) Organic phosphorous compounds;					Report dated December 2012 to maintain an easily available record of waste materials on site. The waste log should contain information such as the product name/waste description, dangerous goods class, waste code, waste quantity, waste contractor, disposal date.
4.33	The quantity of hazardous and/or Industrial and/or Group A waste generated at the site per year shall not exceed 100 tonnes.			✓	Not verified	Refer item 4.32. However, based on the waste log from 2012 the total quantity of hazardous and/or industrial and/or Group A waste generated per year did not exceed 100 tonnes.



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		General	Construction	Operation		
4.34	The quantity of hazardous and/or Industrial and/or Group A waste stored at the sit shall not exceed 50 tonnes at any one time.			✓	Compliant	Refer item 4.32. However, based on the waste log from 2012 the total quantity of hazardous and/or industrial and/or Group A waste stored at any one time did not exceed 50 tonnes.
4.34A	Amendment – Prior to the commencement of construction of the truck wash facility at the site, the Applicant shall consult with Sydney Water with respect to the design of the facility to ensure that discharges to the sewer from the development can meet any relevant standards set by Sydney Water. Prior to the operational use of the truck wash facility, the Applicant shall demonstrate to the Director-General that a Trade Waste Agreement has been entered into with Sydney Water for the discharge of wastewater generated by that facility.				Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 noted site personnel advised at the time that Sydney Water was consulted during the design of the truck wash facility. Ramboll Environ was also provided a copy of correspondence from the Department acknowledging that Sydney Water had approved in-principle the truck wash facility. Compliance with this condition is also supported by the issue of a Sydney Water Consent to Discharge Industrial Trade Wastewater (Consent No. 29981, issued 25 August 2010) and continued recent correspondence with Sydney Water (e.g. March 2016 regarding annual testing of backflow prevention containment device).

Air Quality Impacts

Odour

4.35	Redox shall design, construct, operate and maintain the development to prevent the emission of any offensive odour from the site that is attributable to the operation of the development.	✓			Compliant	It is assumed the development was designed and constructed to prevent the emission of offensive odours and that compliance with this requirement was audited previously following completion of Stages 1 to 3. Redox advised there have been no significant changes to the activities undertaken at site since the completion of Stage 3 in 2008. Redox has a procedure in place to manage the emission of offensive odours, which are likely to only occur through damaged packaging. Redox advised during the site visit that there have been no complaints regarding odour emissions since the 2013 audit.

Acetic Acid Scrubber



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
4.36	The Applicant shall design, construct, commission and operate the acetic acid scrubber to ensure that the emissions from the scrubber meet the requirements specified in the Environment Protection Licence.	✓			Not triggered	The acetic acid scrubber has not yet been constructed (associated with the proposed Stage 4 development) therefore compliance with this condition cannot be assessed for this audit.
4.37	Prior to the commencement of decanting activities involving acetic acid on the site, the Applicant shall submit to the Director-General and the EPA the manufacturer's performance guarantee and the detailed final design of the acetic acid scrubber.			✓	Not triggered	Decanting activities involving acetic acid (associated with the proposed Stage 4 development) have not yet commenced. Site personnel advised there is currently no confirmed timeframe for when Stage 4 will be constructed.
Dust Emissions						
4.38	Redox shall design, construct, commission, operate and maintain the development in a manner that minimises dust emissions.	✓			Compliant	Given the nature of activities at the site (i.e. storage and distribution of packaged chemicals and raw materials, with no opening or decanting of materials) Ramboll Environ considers the likelihood of large quantities of dust being generated from spilled material or damaged packaging to be low. Redox has implemented a dust control management procedure (Procedure 3110) to minimise dust emissions from the site. Dust control measures include regular sweeping and vacuuming of warehouses (e.g. daily) and hardstand areas and internal driveways (e.g. weekly) and weekly inspections of warehouse and external hardstand areas for spilled materials and accumulated dust. During the site visit, Ramboll Environ observed that the site was maintained in a clean and tidy state and that a street sweeper was being used on the external hardstand areas.
Visual Amenity Impacts						
4.39	Redox shall prepare an external design panel indicating the proposed external design finishes, materials and configuration, in consultation with Council. The Applicant shall submit the design panel to the Director-General for approval prior to the commencement of the construction.		✓		No triggered	This condition is not applicable to the current operations as construction of the development was completed in 2008 and no further construction works have occurred since then.



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		General	Construction	Operation		
4.40	The Applicant shall ensure that all external lighting associated with the development is mounted, screened and directed in such a manner so as not to create a nuisance to surrounding properties or roadways. The lighting must be the minimum level of illumination necessary and shall comply with AS4282 (INT) 1995 Control of Obtrusive Effects of Outdoor Lighting.	✓			Compliant	At the time of the 2013 IEA undertaken by Ramboll Environ, site personnel had advised that external lighting present on the site was used primarily for security purposes, and not for operational activities. The external lighting was reported by site personnel at the time of the 2013 IEA to be compliant with AS4282. Site personnel advised that there have been no complaints from neighbours relating to lighting issues.
4.41	This consent does not permit the display of any advertisement, or the erection of any advertising structure on the site. This does not apply to any advertisement or structure that cannot be seen from the nearest public space, nor any signage specified elsewhere in this consent (refer condition 3.2).	✓			Compliant	During the visit the Auditor did not observe any advertisement signs at the site.
5	ENVIRONMENTAL MONITORING AND AUDITING					
5.1	Redox shall undertake all monitoring, including recording and reporting of monitoring results, as required under this consent, and as may be specified under an Environmental Protection Licence.	✓			Non-compliant (please refer to Action Plan table"	For the current operations, the site is required to undertake monitoring of operational noise, stormwater quality and air quality. The status of compliance with the monitoring requirements are: - Construction and operational noise - refer item 5.4 to 5.7. - Stormwater quality - refer item 5.8 and 7.5 where the Auditor has noted Redox are have not been conducting stormwater testing. It is recommended that Redox resolve with the DP&E as a priority whether continued stormwater testing is required. - Air quality associated with the acetic acid scrubber - refer item 5.9 to 5.11. The EPL requires monitoring and reporting of air emissions from the acetic acid scrubber only. As decanting activities and the acetic acid scrubber are not yet operational (or been constructed), there is no current requirement for air emissions



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		General	Construction	Operation		
						monitoring and reporting (to the EPA).
Transport Auditing						
5.2	Within 90 days of commissioning each stage of the development, and then as may be required by the Director-General, the Applicant shall commission an independent Transport Audit of the development. This Audit shall: a) Be undertaken by a suitably qualified and experienced person, approved by the Director General prior to the commencement of the Audit; b) Assess whether the heavy vehicles associated with the development are complying with the measures detailed in Traffic Management Plan (condition 7.5(b)) and as required by this consent; and c) If any non-compliance is detected, identify what additional measures will be implemented to ensure compliance.			✓	Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 noted that Redox had provided a copy of correspondence from the then Department of Planning showing approval of the consultant used for the Transport Audit for Stage 3 (i.e. the last stage of development to have occurred on the site). In addition, Ramboll Environ's review of the Transport Audit report in 2013, noted that one recommendation was made by the consultant that had been addressed and closed out. For this audit, Ramboll Environ has not re-audited compliance with this condition based on the previous audit findings and that no further significant construction activities have occurred since 2008 (i.e. Stage 3).
5.3	Within 28 days of conducting the Audit (for 5.2), the Applicant shall provide the Director-General and Council with a copy of the audit report. If the Audit identifies any non-compliance with the Transport Management Plan or any Consent conditions, the Applicant shall detail what additional measures would be implemented to ensure compliance, indicating who would implement these measures, when by and how effectiveness of the measures would be measured & reported to the Director-General.			✓	Compliant	At the time of the 2013 IEA undertaken by Ramboll Environ, site personnel had advised that the Transport Audit report for Stage 3 had been submitted to the then Department of Planning within the required timeframe, and that an action plan for addressing the transport auditors recommendation had been provided to the Department and implemented. Refer item 5.2 above.



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			General	Construction	Operation		
Noise Monitoring and Auditing							
Construction Noise							
5.4	Within one month of commencement of construction activities associated with each stage development, the Applicant shall submit to the Director-General and the EPA a Construction Noise Audit to demonstrate compliance with the construction noise limits specified in conditions 4.17 & 4.18. The Audit shall be completed by a suitably qualified acoustic consultant, approved by the Director-General prior to commencement of the Audit. Should the Audit indicate that construction activities are above the set noise criteria, the report shall identify additional measures to be implemented to ensure compliance, indicating who would implement the measures, when by, and how the effectiveness of the Audit. Should the Audit indicate that construction activities are above the set noise criteria, the report shall identify additional measures to be implemented to ensure compliance, indicating who would implement the measures, when by, and how the effectiveness of the measures would be measured and reported to the Director-General.		✓		Compliant	At the time of the 2013 IEA undertaken by Ramboll Environ, site personnel had provided a copy of the last construction noise audit (for Stage 3) and correspondence from the then Department of Planning approving the consultant to be used, Acoustic Dynamics Pty Ltd, for the Construction Noise Audit for Stage 3. The Construction Noise Audit report (Minto Storage and Distribution Centre, Stage 3 Construction Noise Audit, 29 September 2008 by Acoustic Dynamics) noted that noise emission levels at the nearby receivers were below the relevant criteria and that no special noise mitigation measures were required for the Stage 3 construction works. For this audit, Ramboll Environ has not re-checked compliance with this condition based on the previous audit findings and that no further significant construction activities have occurred since 2008 (i.e. Stage 3).	
5.5	Redox may seek the Director-General's approval, in consultation with the EPA, to dispense with the requirement to undertake a Construction Noise Audit for stage 2, 3 and/or 4 of the development.		✓		Not triggered	Stage 4 of the development has not yet been constructed and Redox has not sought dispensation for this condition.	
Operational Noise							
5.6	Within 90 days of the commencement of operation of each stage of the development, Redox shall conduct an Operational Noise Audit of its operations.			✓	Compliant	The site is currently operating Stage 3 (of 4) of the development. As noted for the Independent Environmental Audit conducted by Ramboll Environ in 2013, an operational noise audit was undertaken in May 2009 (Redox Pty Ltd – Minto Storage and Distribution Centre, Stage 3 Operational	



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		General	Construction	Operation		
						Noise Audit, 10 June 2009, by Acoustic Dynamics). At the time of the 2013 IEA, Ramboll Environ reviewed the audit report which concluded that the site operations complied with the relevant noise criteria and that no additional noise mitigation measures were required for the operation of Stage 3. In addition, Redox advised that correspondence from the Department approving the consultant to be used for the operational noise audit was not available. However, as the consultant, Acoustic Dynamics Pty Ltd, was previously approved for the construction noise audit in 2008, Ramboll Environ had assumed approval would have been granted as a suitably qualified and experienced person. For this audit, Ramboll Environ has not re-checked compliance with this condition based on the previous audit findings and that no further significant construction activities have occurred since 2008 (i.e. Stage 3).
5.7	Within 28 days of conducting the Audit, Redox shall provide the Director-General and EPA with a copy of the Noise Audit report.			✓	Compliant	At the time of the 2013 IEA undertaken by Ramboll Environ, site personnel provided a copy of the Operational Noise Audit report for the operation of Stage 3 (prepared in June 2009), and were informed that the audit report was submitted to the Department, although no record was available to confirm this. Ramboll Environ has assumed that Redox had submitted the audit report to the Department and complied with this condition based on Redox's responsive to other historical DP&E requests associated with the development.
Stormwater Quality Monitoring						
5.8	Prior to commencement of operations, the Applicant shall submit for the approval of the Director-General, in consultation with Council, a Stormwater Quality Monitoring Program. The Program shall form part of the Stormwater Operational Environmental Management Plan (per condition 7.5(c)). The Program shall include, but not limited to: a) Identification of contaminants to be tested, including those required under the Clean Water			✓	Compliant	The Stormwater Quality Monitoring Program (i.e. Procedure 3405 Water Release from Retention Basin) is referenced in the site's Stormwater Management Plan within the Operational Environmental Management Plan. At the time of the 2013 IEA undertaken by Ramboll Environ, site personnel advised the Director-General had approved the Stormwater Quality Monitoring Program, and had provided a copy of the correspondence from the Department approving the OEMP (which contains the Stormwater Monitoring Plan). Ramboll Environ has not re-checked compliance with this



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		General	Construction	Operation		
	Regulation (Class R classification) b) Monitoring frequencies c) Methodologies for stormwater quality monitoring The Stormwater Quality Monitoring Program shall be submitted to Director-General for approval prior to commencement of operations.					condition based on the previous review findings. Ramboll Environ notes that the latest version of the Operational Environmental Management Plan (Rev 3, November 2011) refers to Procedure 3405 as the 'Stormwater Monitoring and Release' however, the title of this procedure is 'Water Release from Retention Basin'. Observation: It is recommended that Redox review the OEMP to ensure the document content correctly reflects the situation at the site and is correctly aligned with/referenced to information in related documents.
Air Quality Monitoring and Auditing						
Acetic Acid Scrubber						
5.9	The Applicant shall periodically determine the pollutant concentrations discharged from the acetic acid scrubber, per performance guarantee in condition 4.37 and at the frequency in Table 3. All monitoring carried out in accordance with Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (NSW EPA 2001). Table 3 – Pollutant and Parameter Monitoring (Air)				✓	Not triggered
	Pollutant	Units of Measures	Frequency	Method		
	Acetic Acid	mg/m3	Quarterly	As determined by the EPA		
5.10	Within 90 days of commencing acetic acid decanting activities at the site ... Redox shall conduct an Air Quality Audit of its operations to confirm the air emission performance of the acetic acid scrubber.				✓	Not triggered
5.11	Within 28 days of conducting the Audit referred to under condition 5.10 of this consent, Redox shall provide the Director-General and EPA with a copy of the Air Quality Audit report.				✓	Not triggered



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			General	Construction	Operation		
Independent Hazard Auditing							
5.12	Twelve months after the commencement of operation of Stage 1 of the development ... Redox shall commission an independent, qualified person or team to undertake a Hazard Audit of the development. Further Hazard Audits shall be undertaken every three years or within 12 months of commissioning Stages 2, 3 and 4 of the development.			✓	Compliant	Site personnel advised that Independent Hazard Audits have been undertaken for the site in 2006 and 2010. Ramboll Environ (formerly ENVIRON) conducted the Independent Environmental Audit in 2013 and were provided at the time, copies of correspondence with the Department confirming that the 2006 and 2010 IHAs had been undertaken. In 2013, the IEA was undertaken by Moore Management and Ramboll Environ had sighted the Department's approval of this consultant to conduct the audit. Ramboll Environ has not re-checked compliance with this condition based on the previous audit findings. Ramboll Environ is currently undertaking the IHA for the site, and has been approved by the DP&E to conduct the audit. Ramboll Environ notes that a 2015 DP&E Hazard Compliance Audit (Exec Summary) report makes a recommendation that the frequency of independent hazard audits be increased to annually until Redox can demonstrate the satisfactory commitment to implementing the recommendations of both the ongoing independent hazard audits and the recommendations arising from the Department's 2013-2015 Potentially Hazardous Industries compliance audit campaign. Ramboll Environ discussed this recommendation with Redox and were advised that no further communications with DP&E have been held or received regarding an annual audit requirement.	
Independent Environmental Auditing							
5.13	Twelve months after the commencement of operation of each stage of the development, and every three years thereafter, Redox shall commission an independent, qualified person or team to undertake an Environmental Audit of the development.			✓	Compliant	Site personnel advised that Independent Environmental Audits have been undertaken for the site in 2006 and 2010. Ramboll Environ (formerly ENVIRON) conducted the IEA in November/December 2013 and were provided at the time, copies of correspondence with the Department confirming that the 2006 and 2010 audits had been undertaken. Ramboll Environ has not re-checked compliance with this condition based on the previous audit findings.	



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		General	Construction	Operation		
						Ramboll Environ is currently undertaking the IEA for the site, which is within the three yearly audit timeframe, and has been approved by the DP&E to conduct the audit.
5	ENVIRONMENTAL MONITORING AND AUDITING					
6.1	Subject to confidentiality, Redox shall make all documents required under this consent available for public inspection on request.	✓			Compliant	Redox subscribes to the Plastics and Chemical Industries Association (PACIA) Community Right to Know code of conduct and has in place a Community Right to Know procedure (Procedure 3104) that commits to providing information to the community on activities, products and health, safety and environmental performance, amongst other information and listening and responding to their concerns. On the Redox website information is available for example on emergency response, processes for: risk identification and management, waste management, environmental licences, transport/heavy vehicle routes.
Complaints Procedure						
6.2	Prior to the commencement of construction of the development, Redox shall ensure that the following are available: (a) a 24-hour, toll-free telephone number on which complaints about the development may be registered; (b) a postal address to which written complaints may be sent; and (c) an email address to which complaints may be transmitted.		✓ ✓ ✓		Compliant	At the time of the 2013 IEA undertaken by Ramboll Environ, site personnel advised that a 24-hour toll free telephone number, a postal address and email address were available during construction of the development for registering complaints. Ramboll Environ notes that the current Redox website has provided a postal address, a toll free telephone number (within and outside Australia) and an on-line contact form for registering complaints associated with the operations.



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
	The telephone number, postal address and email address shall be advertised on at least one occasion prior to the commencement of construction of each stage of the development, through a medium approved by the Director-General.		✓			
6.3	Redox shall record details of all complaints received ... in an up-to-date Complaints Register. The Complaints Register shall be made available upon request.	✓			Compliant	Complaints would be recorded on either an Incident Report form or a Pollution Incident Response Management Plan (PIRMP) Notification form (e.g. for pollution incidents) depending on the nature of the complaint. The complaint would then be entered as a Quality Problem (QP) within the Redebiz system, where the details a) to f) would be recorded, mostly within the general text box. To produce a summary log of all complaints in Redebiz would require the user to search under specific categories depending on the nature of the complaint, and appears to require the user to have some prior knowledge of the complaint to ensure the correct category is searched. There is no one specific category for complaints. Ramboll Environ were advised by site personnel that there have been no complaints between 2014 and 2016. Observation: Whilst it is recognised that Redox has received no complaints in the past few years, it is recommended that the Redebiz system be modified to allow a 'complaint' category to be included so that complaints can be easily classified within this group and allow for easier searching and reporting of complaints.
Community Communication Strategy						
6.4	Prior to the commencement of operations at the site, Redox shall prepare and implement a Community Communication Strategy for the development. The Strategy shall be approved by the Director-General prior to the commencement of any operations on the site.			✓	Compliant	At the time of the 2013 IEA undertaken by Ramboll Environ, site personnel provided documentation confirming the Director-General's approval of the Community Communication Strategy. Ramboll has not re-checked compliance with this condition based on the previous audit findings. Redox has in place a Community Right to Know procedure (Procedure 3104 that addresses requirements a) to c).



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Consent Condition		Compliance Requirements	Requirement			Status	Findings
			General	Construction	Operation		
7		ENVIRONMENTAL MANAGEMENT					
Environmental Representative							
7.1	Prior to the commencement of construction of the development, Redox shall notify the Director-General of the name and contact details of a suitably qualified and experienced Environmental Representative, and any changes to that appointment that may occur from time to time.		✓			Compliant	At the time of the 2013 IEA undertaken by Ramboll Environ, site personnel advised that during construction, commissioning and operation of the development, an Environmental Representative was and continues to be employed on a full-time basis. The current Environmental Representative has the responsibilities noted in this condition and Redox has advised the DP&E of the Environmental Representative's contact details.
Construction Environmental Management Plan							
7.2	Redox shall prepare and implement a Construction Environmental Management Plan to outline environmental management practices to be followed during site preparation and construction activities during each stage of the development.			✓		Not verified	This condition is not applicable to the current operations as construction of the development was completed in 2008 and no further construction works have occurred since then. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010.
	The plan shall be submitted for the approval of the Director-General no later than one month prior to the commencement of any site preparation and construction works associated with the development.			✓			
	Preparation and construction works associated with any stage of the development shall not commence until written approval has been received from the Director-General.			✓		Noted	
7.3	As part of the Construction Environmental Management Plan for the development, Redox shall prepare and implement the following Management Plans:			✓		Not verified	This condition is not applicable to the current operations as construction of the development was completed in 2008 and no further construction works have occurred since then. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010.
	(a) Noise Management Plan						



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
	(b) Transport Management Plan (c) Erosion and Sediment Management Plan (d) Vegetation Management Plan		✓ ✓ ✓			
Operation Environmental Management Plan						
7.4	The Applicant shall prepare and implement an Operational Environmental Management Plan to detail an environmental management framework, practices and procedures to be followed during the operation of the development. The Plan shall include, but not necessarily limited to: i) Identification of all statutory & other obligations required to fulfil in relation to operation of phase 1 of the development, including all consents, licences, approvals and consultations ii) A description of the roles and responsibilities for all relevant employees involved in the operation of the development iii) Overall environmental policies and principles to be applied to be applied to the operation of the development iv) Standards and performance measures to be applied to the development, and a means by which environmental performance can be periodically reviewed and improved, where appropriate v) Management policies to ensure that environmental performance goals are met and to comply with the conditions of this			✓	Non-compliant (refer to Action Plan table)	Redox has prepared and implemented an Operational Environmental Management Plan (OEMP) (Rev 3, November 2011) that considers the requirements i) to vii) of this condition. At the time of the 2013 IEA undertaken by Ramboll Environ had been provided a copy of correspondence from the Department approving the OEMP. Ramboll Environ had also recommended that the OEMP could be improved by including other environmental obligations/approvals that apply to the site, other than just the development consent and Environment Protection Licence. These other obligations/approvals include the Sydney Water Consent to Discharge Industrial Trade Wastewater and the SafeWork NSW Notification of Hazardous Chemicals on Premises. Ramboll Environ's review of the OEMP indicates that this recommendation has not been implemented (as noted by the same revision number and document date). This recommendation still applies for the current audit (i.e. the OEMP should include mention of other environmental obligations and approvals such as the Trade Wastewater Consent and Notification of Hazardous Chemicals on Premises).



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
	consent vi) The Management Plans listed under Condition 7.5 of this consent vii) The environmental monitoring requirements under conditions 5.8 (stormwater quality monitoring) and 5.9 (pollutant concentrations at acetic acid scrubber) of this consent, inclusive. The Plan shall be submitted for the approval of the Director-General no later than one month prior to commencement of operation of stage 1, or such period agreed by the Director-General. Operation shall not commence until written approval received from Director-General.					
7.5	As part of the Operational Environmental Management Plan for the development, required under condition 7.4 of this consent, the Applicant shall prepare and implement the following Management Plans: a) A Noise Management Plan to outline measures to manage noise impacts associated with the operation of the development. The Plan shall be submitted to the EPA and address the requirements of Council. The Plan shall include, but not necessarily limited to: i) Identification of the potential sources of			✓	Non-Compliant (refer to Action Plan Act)	The OEMP contains each of the Management Plans a) to e) listed in this condition. At the time of the 2013 IEA undertaken by Ramboll Environ, site personnel provided a copy of correspondence from the Department approving the prepared OEMP (and the Management Plans) and acknowledging that Campbelltown City Council and the then Department of Environment and Conservation (i.e. EPA) had been consulted with respect to the OEMP. Ramboll Environ has not re-checked compliance with this part of the condition for this audit based on the previous audit findings. During the site walk over and review of documentation, Ramboll Environ considers the Management Plans are generally being implemented as supported by the following observations:



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
	noise during the site operations; ii) Specification of the noise criteria for these operations; iii) A detailed description of what actions and measures would be implemented to ensure that operations would comply with specified noise criteria; iv) A description of how the effectiveness of actions and measures would be monitored over time; and v) If any non-compliance is detected what procedures would be followed to ensure compliance. b) A Transport Management Plan to outline measures to ensure minimal amenity impacts on the locality through appropriate management of heavy vehicles accessing and departing the development. The Plan shall be submitted to the EPA and prepared in consultation with Council. The Plan shall include, but not necessarily limited to: i) Details of measures that would be implemented to minimise noise and amenity impacts on residential areas resulting from heavy vehicle movements, including those required by condition 4.9 and condition 4.12; ii) Consideration of all possibilities for					- There were no activities that generated excessive levels of noise - Traffic movement within the site generally followed traffic signage - Regular inspections of the routes taken by heavy vehicles leaving the site were conducted to ensure local amenity was not impacted - Landscaped areas appeared maintained with no overgrown plantings Ramboll Environ notes aspects of the Stormwater Management Plan and Waste Management Plan are not being implemented: - Stormwater quality monitoring, prior to release to Bow Bowling Canal, has not been conducted since at least mid-2014. Redox had sent a query to the DP&E in mid-2014 as to this requirement given the Clean Waters Regulation 1972 was repealed in 1999 and this legislation was considered by Redox to no longer be relevant. Since that time Redox has made subsequent follow up communication to the DP&E seeking a response but to date has not received confirmation whether continued stormwater quality monitoring is required. It is recommended that Redox resolve this issue with the DP&E as a priority. The Auditor notes that Redox is required to demonstrate compliance with Section 120 of the Protection of the Environment Operations Act 1997 NSW in relation to pollution of waters. The Waste Management Plan notes a waste log is maintained



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
	reducing the required daily heavy vehicle movements and movements during peak or night-time periods; iii) Procedures for monitoring the effectiveness and suitability of these measures, particularly the periodic and random monitoring of heavy vehicle routes; and iv) Details of additional measures that would be implemented should a non-compliance be detected. c) A Stormwater Management Plan to outline measures to mitigate impacts of stormwater run-off from and within the premises. The Plan shall be submitted to the EPA, and prepared in consultation with Council. The Plan shall include, but not necessarily limited to: i) Details of all relevant stormwater control infrastructure and how that infrastructure minimise stormwater peak flows and peak pollutant concentrations; ii) Procedures for the installation and maintenance of gross pollutant traps to screen stormwater from the site; iii) A demonstration of consistency with the stormwater management plan for the catchment and any relevant stormwater guidelines prepared by Council;					to record waste types, quantities, and disposal methods for all waste streams to better manage waste minimisation. Redox advised this waste log has not been maintained as Redox has not submitted an AEMR to the DP&E since late 2013 (where a summary of the waste log is included). It is noted though that this waste information can be extracted from the Redebiz system. Observation: As noted for item 4.32, it is recommended that Redox consider preparing a waste log for all waste generated, stored and disposed, similar to Table 5.4 in the last Annual Environmental Management Report dated December 2012 to maintain an easily available record of waste materials on site. If possible, the Redebiz system could be programmed to produce a summary waste report that contains information such as the product name/waste description, dangerous goods class, waste code, waste quantity, waste contractor, disposal date.



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
	iv) Amendment - Details of the monitoring program, as required by condition 5.8, to monitor stormwater flows from the site to meet discharge requirements for Class R (Restricted) Waters under <i>the Clean Waters Regulations</i>; and v) Details of contingency measures that would be followed to ensure the protection of Bow Bowing Canal, should an accident or emergency occur at the site. d) A Waste Management Plan to outline measures to ensure the appropriate handling, storage & disposal of wastes generated during operations at site. The Plan shall be prepared in consultation with Council, and shall include, but not necessarily limited to: i) Identification of the types and quantities of waste that would be generated during operations, and the areas in which waste will be stored prior to removal; ii) Standards and performance measures for dealing with this waste; iii) A detailed description of how this waste would be reused, recycled and, if necessary, appropriately treated and disposed of in accordance with the EPA's guidelines on the <i>Assessment, Classification and Management of Liquid</i>					



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
	<i>and Non-Liquid Waste;</i> iv) A description of how the effectiveness of these actions and measures would be monitored over time; and v) A description of what procedures would be followed to ensure compliance if any non-conformance is detected. e) A Landscape Management Plan to outline measures to ensure appropriate development and maintenance of landscaping on the site. The Plan shall include, but not necessarily limited to: i) Details of all landscaping to be undertaken on the site with specific reference to revegetation along the riparian zone (condition 4.28); ii) Maximisation of flora species endemic to the locality in landscaping the site; iii) A program to ensure that all landscaped areas on the site are maintained in a tidy, healthy state.			✓ ✓ ✓ ✓		



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Consent Condition		Compliance Requirements	Requirement			Status	Findings
			General	Construction	Operation		
	7.6	At least one month prior to the operation of Stage 2, Stage 3 and Stage 4 of the development, Redox shall update and submit for the approval of the Director-General, the Operation Environmental Management Plan. Operation of Stage 2, Stage 3 and Stage 4 shall not commence until the Director-General has approved the updated Plans.			✓	Compliant	As noted in item 7.5, Ramboll Environ was advised by site personnel during the 2013 IEA, that the Director-General's approval for the OEMP was obtained (for Stages 1 to 3). For this audit, Ramboll Environ has not re-checked compliance with condition based on the previous audit findings.
8		ENVIRONMENTAL REPORTING					
Incident Reporting							
	8.1	Redox shall notify the EPA and the Director-General of any incident with actual or potential significant off-site impacts on people or the biophysical environment as soon as practicable after the occurrence of the incident.	✓			Not triggered	Site personnel advised there have been no incidents with off-site impacts between 2014 and 2016 requiring notification to the EPA and Director-General. Ramboll Environ's review of the incident register (between 2014 and 2016) showed one to seven incidents per year with approximately half related to injuries and no significant environmental issues reported.
		The Applicant shall provide written details of the incident to the EPA and the Director-General within seven days of the date on which the incident occurred.					
	8.2	Redox shall meet the requirements of the Director-General to address the cause or impact of any incident, as it relates to this consent, reported in accordance with 8.1, within such period as the Director-General may require.	✓			N/A	Refer item 8.1
Annual Performance Reporting							
	8.3	The Applicant shall, throughout the life of the development, prepare & submit for the approval of the Director-General, an Annual Environmental Management Report (AEMR). The AEMR shall review the performance of the development against the Operation Environmental Management Plan (refer to condition 7.4 of this consent), the	✓			Non-Compliant (Refer to Action Plan Table)	2012. Redox advised that the AEMR for 2013 was completed however not submitted at the time due to Redox identifying the repealed Clean Waters Regulation 1972 and subsequent queries to the DP&E in 2014 as to whether continued stormwater quality monitoring was required (with subsequent reporting of stormwater testing results included in the AEMR). This query remains open as no response has been



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
	conditions of this consent and other licences and approvals relating to this development. The AEMR shall include, but not necessarily be limited to: a) Details of compliance with the conditions of this consent; b) A copy of the Complaints Register (refer to condition 6.3 of this consent) for the preceding twelve-month period (exclusive of personal details), and details of how these complaints were addressed and resolved; c) A comparison of the environmental impacts and performance of the development against the environmental impacts and performance predicted in those documents listed under condition 1.2 of this consent; d) Results of all environmental monitoring required under this consent and other approvals, including interpretations and discussion by a suitably qualified person; and e) A list of all occasions in the preceding twelve month period when environmental performance goals for the development have not been achieved, indicating the reason for failure to meet the goals and the action taken to prevent recurrence of that type of incident. The Applicant shall submit a copy of the AEMR to the Director-General every year, with the first AEMR to be submitted no later than twelve months after the commencement of operation. The Director-General may require the Applicant to address certain matters in relation the environmental performance of the development in response to review of the Annual Environmental Report. Any action required					received from the DP&E to confirm that stormwater quality monitoring is still required or to acknowledge that Redox has not submitted an AEMR since 2013. Due to the lack of response from the DP&E, Redox has subsequently not undertaken stormwater quality monitoring and has not prepared its AEMR. As noted in item 7.5, It is recommended that Redox continue the preparation and submission of the Annual Environmental Management Report (AEMR) to ensure continuing compliance with this condition, and make reference in the AEMR to the queries/correspondence made regarding the stormwater quality monitoring requirements.



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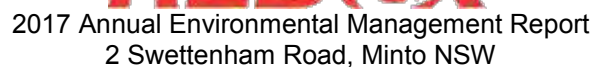
Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
	shall be completed within such period as the Director-General may require.					

2.2 Compliance with Environmental Protection Licence 12041, Licence version date: 21/12/2012

Table 2.2: Compliance with EPL 12041

Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence								
		Gen.	Con.	Op.											
1	ADMINISTRATIVE CONDITIONS														
A1	What the licence authorises and regulates														
A1.1	N/A					N/A									
A1.2	This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation. Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.					Not verified	According to the Dangerous Goods manifest (on 15 December 2016), the total quantities of hazardous materials stored at the site on that day and the quantities noted on the Hazardous Materials Notification are shown in the table below. Assuming the weight of the materials stored (i.e. in kg) is approximately the equivalent of the volume of the material (i.e. in L), the total quantity of materials stored on site was approximately 937.5 kL. This total quantity is below the maximum allowable quantity of 5,000 kL.								
							<table><tr><th rowspan="2">Class / Division</th><th colspan="2">Quantity Stored</th><th rowspan="2">Within Maximum Storage Capacity of</th></tr><tr><th>Kg</th><th>Litres</th></tr></table>			Class / Division	Quantity Stored		Within Maximum Storage Capacity of	Kg	Litres
Class / Division	Quantity Stored		Within Maximum Storage Capacity of												
	Kg	Litres													

Class / Division	Quantity Stored		Within Maximum Storage Capacity of
	Kg	Litres	



At the time of the site visit, Redox did not have a readily available record (e.g. waste log) of all waste types generated and stored at the site (e.g. waste type, quantities). Information on waste disposed off-site must be collated from purchase orders issued to waste contractors for waste disposal, which are recorded in the Redebiz system. The Auditor was therefore not able to confirm whether the waste types, including waste quantities generated and stored at the site complied with this condition. However, the last waste log prepared in 2012 indicated that the total waste stored at any one time did not exceed the 50 tonnes limit, and it is considered by the Auditor that this limit is unlikely to be exceeded.

Observation: It is recommended that Redox consider preparing a waste log for all waste generated, stored and disposed, similar to Table 5.4 in the last Annual Environmental Management Report dated December 2012 to maintain an easily available record of waste materials on site. If possible, the Redebiz system could be programmed to produce a summary waste report that contains information such as the product name/waste description, dangerous goods class,



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
	Fee Based Activity: Scale General chemicals storage: 0-5000 kL of active storage capacity. Chemical storage waste generation: >5-100 T.			✓ ✓	Procedure 3801 – Warehouse Limitations. Procedure 3402 – Waste Management & Disposal.		waste code, waste quantity, waste contractor, disposal date.
A2	Premises to which this licence applies						
A2.1	Premises details.	✓				Noted	
A3	Other activities						
A3.1	N/A					N/A	
A4	Information supplied to the EPA						
2	DISCHARGES TO AIR & WATER & APPLICATIONS TO LAND						
P1	Location of Monitoring/Discharge Points and Areas						



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Item	Licence Condition				Development Stage			Redox Procedure	Compliance	Evidence
					Gen.	Con.	Op.			
P1.1	The following points referred to in the table are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.						✓		Not triggered	As decanting activities and the acetic acid scrubber are not yet operational (or been constructed as part of the proposed Stage 4 development), there is no current requirement for air emission monitoring.
	Air									
	EPA ID.	Type of Monitoring Point	Type of Discharge Point	Location						
	1	Discharge to air Air emissions monitoring	Discharge to air Air emissions monitoring	Acetic Acid Scrubber “Area A”						
P1.2	N/A								N/A	
P1.3	N/A								N/A	
3	LIMIT CONDITIONS									
L1	Pollution of Waters									
L1.1	Pollution of Waters - Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.				✓			OEMP; Procedure 3405 – Water Release from Retention Basin.	Compliant	The paved areas surrounding the operational areas (i.e. of the chemical storage and distribution warehouses) direct on-site stormwater to three oil and silt arrestor (OSA) pits. These three OSA pits use stormwater isolation valves to manage the discharge of on-site stormwater to Bow Bowing Canal. The isolation valves are in a permanently closed position to prevent potentially contaminated stormwater from being released to the canal. These measures are considered by the Auditor to assist in preventing the pollution of waters. Observation: The Auditor notes that Redox has a procedure in place, as required under consent conditions 5.8 and 7.5 to monitor the quality of stormwater flows from the site. Since approximately early 2014, Redox has not conducted stormwater quality monitoring and testing (or submitted the



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
							required Annual Environmental Management Report (AEMR)) as required under the Stormwater Quality Monitoring program. Redox had queried the DP&E in June 2014 regarding the requirement to continue stormwater monitoring given the Clean Waters Act and Regulation (to which the condition refers to) were repealed in 1999 and to present date have not received confirmation from DP&E as to whether stormwater quality monitoring is still required and no communication regarding the lack of submission of the AEMR by Redox since 2013. Trade waste water generated at the site is discharged under a Sydney Water Consent to Discharge Industrial Trade Wastewater. Trade wastewater is discharged to sewer.
	Load Limits						
L2	Waste – The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled “Waste” and meeting the definition, if any, in the column titled “Description” in the table below. Note: Refer to EPL for Table.					Compliant	Site personnel advised that waste from off-site sources are not received at the site. During the site visit, the Auditor did not observe significant quantities of stored waste materials or waste types that would be considered unusual for the site activities.
L3	Concentration Limits						



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence																									
		Gen.	Con.	Op.																												
L3.1	Noise Limits – Noise from the premises must not exceed the sound pressure level (noise) limits at the nominated receiver locations in the below table. <table><thead><tr><th>ocation</th><th>Day</th><th>Evening</th><th>Night</th><th>Night</th></tr></thead><tbody><tr><td></td><td>LAeq(15 minute)</td><td>LAeq(15 minute)</td><td>LAeq(15 minute)</td><td>LA1(1 minute)</td></tr><tr><td>St Andrews Residences</td><td>36</td><td>36</td><td>36</td><td>50</td></tr><tr><td>Minto Residences</td><td>36</td><td>36</td><td>36</td><td>50</td></tr><tr><td>Child Care Centre (30 Swettenham Road)</td><td>44</td><td>N/A</td><td>N/A</td><td>N/A</td></tr></tbody></table>	ocation	Day	Evening	Night	Night		LAeq(15 minute)	LAeq(15 minute)	LAeq(15 minute)	LA1(1 minute)	St Andrews Residences	36	36	36	50	Minto Residences	36	36	36	50	Child Care Centre (30 Swettenham Road)	44	N/A	N/A	N/A					Compliant	As noted for the Independent Environmental Audit conducted by Ramboll Environ in 2013, an operational noise audit was undertaken in May 2009 (Redox Pty Ltd – Minto Storage and Distribution Centre, Stage 3 Operational Noise Audit, 10 June 2009, by Acoustic Dynamics). At the time of the 2013 IEA, Ramboll Environ reviewed the audit report which concluded that the site operations complied with the relevant noise criteria and that no additional noise mitigation measures were required for the operation of Stage 3. For this audit, Ramboll Environ has not re-checked compliance with this condition based on the previous audit findings and that no further significant construction activities have occurred since 2008 (i.e. Stage 3).
ocation	Day	Evening	Night	Night																												
	LAeq(15 minute)	LAeq(15 minute)	LAeq(15 minute)	LA1(1 minute)																												
St Andrews Residences	36	36	36	50																												
Minto Residences	36	36	36	50																												
Child Care Centre (30 Swettenham Road)	44	N/A	N/A	N/A																												
L3.2	Noise from the premises is to be measured at the most affected point on or within the residential boundary to determine compliance with the LAeq (15 minute) noise limits in L3.1.					Compliant	Refer item L3.1																									
L3.3						Compliant	Refer item L3.1																									
L4	Volume and Mass Limits																															



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
L4.1	Potentially offensive odour - No condition of this licence identifies a potentially offensive odour for the purposes of section 129 of the Protection of the Environment Operations Act 1997. Section 129 of the POEO Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour. Confirm whether any potentially offensive odour has been emitted and if any complaints received.					Compliant	Redox has a procedure in place to manage the emission of offensive odours, which are likely to only occur through damaged packaging. Redox advised during the site visit that there have been no complaints regarding odour emissions since the 2013 audit.
L5	Waste						
L5.1	Polychlorinated Biphenyls (PCBs) – the licensee must comply with the conditions as specified in this licence or where no specific conditions are outlined in this licence, the licensee must comply with the “Chemical Control Order in Relation to Materials and Waste Containing Polychlorinated Biphenyl, 1997.”			✓	Waste Management Plan (OEMP); Procedure 3402 – Waste Management & Disposal.	Note	The development was initially constructed in 2005 and given the age of the development Ramboll Environ considers it unlikely that PCB materials would be present on the site.
4	Operating Conditions						
O1	Activities must be carried out in a competent manner						
O1.1	Licensed activities must be carried out in a competent manner. This includes: (a) the processing, handling, movement & storage of materials and substances; and (b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.			✓ ✓	Procedure 3009 – Handling, Storage, Packing, Pres. & Del. Procedure 3402 – Waste Management & Disposal.	Compliant	Redox has an environmental management system (EMS) in place comprising management plans, processes and procedures to manage risks to the environment. Procedures (e.g. spill management, hazardous materials handling and storage, stormwater management) were observed by the Auditor to be prepared and being followed, to the



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
							extent observations could be made at the time of the site visit. A dedicated resource has been assigned responsibility for environmental management although in practice it is a shared role amongst two primary employees (i.e. Regulatory Affairs Coordinator, Quality Assurance Manager). The EMS and environmental management practices seemed appropriate to the nature of the operations.
O2	Maintenance of Plant and Equipment						
O2.1	All plant and equipment installed at the premises or used in connection with the licensed activity: (a) must be maintained in a proper and efficient condition; & (b) must be operated in a proper and efficient manner.			✓ ✓	Procedure 3901 – Equipment Service. Equipment Procedures: 3902, 3903, 3904, 3906, 3917, 3918, 3919.	Compliant	The main maintenance activities on site related to minor repairs of building fixtures and maintenance of the landscaped/ grassed areas. Redox does not have a dedicated maintenance department although does employ one permanent employee to carry out the noted minor maintenance activities. Regular servicing or repair of larger equipment (e.g. self-opening/closing roller doors at Store entrances, forklifts, storage racking, fire protection system) is conducted by specialist contractors on a regular maintenance schedule. During the site walk over, the Auditor observed that plant and equipment was maintained and appeared in good condition. Ramboll Environ did not audit the maintenance program.
O3	Emergency Response						



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
O3.1	The licensee must maintain, and implement as necessary, a current emergency response plan for the premises. The licensee must keep the emergency response plan on the premises at all times. The emergency response plan must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment. If a current emergency response plan does not exist at the date on which this condition is attached to the licence, the licensee must develop an emergency response plan within three months of that date.	✓			Procedure 3403 – Emergency Procedure.	Compliant.	Redox has implemented a dust control management procedure (Procedure 3110) to minimise dust emissions from the site. Dust control measures include regular sweeping and vacuuming of warehouses (e.g. daily) and hardstand areas and internal driveways (e.g. weekly) and weekly inspections of warehouse and external hardstand areas for spilled materials and accumulated dust. During the site visit, the Auditor observed that the site was maintained in a clean and tidy state and that a street sweeper was being used on the external hardstand areas.
O4	Process and management						
O4.1	The licensee must ensure that any liquid and/or non liquid waste generated and/or stored at the premises is assessed and classified in accordance with the DECC Waste Classification Guidelines as in force from time to time.	✓			Waste Management Plan (CEMP & OEMP); Procedure 3402 – Waste Management & Disposal.	Compliant	Redox has an Emergency Plan (Procedure 3403, 6 October 2015) and an Emergency Management Plan. The former document is a complementary document to the Emergency Management Plan. The following observations are made in relation to the Emergency Plan (procedure 3403): The Emergency Plan is considered thorough containing realistic emergency scenarios and response actions. Emergency scenarios considered in the Procedure/Plan are representative of the hazards on the site although consideration of sabotage, vandalism and arson (to buildings, equipment or vehicles) could also be included. The emergency scenarios included information on control measures, response actions for staff and/or key emergency response personnel (i.e. Chief Warden, Deputy Chief Warden, Wardens and Communications Officer) for the scenarios:



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
							• Fire/ Explosion with details of fire control measures available • Severe Storms with details of resulting impacts (e.g. destructive winds, flooding etc.) • Gas Release due to the formation of toxic gases from the chemical reaction of incompatible substances • Dangerous Goods Emergency due to a major release or spill of a hazardous material in an uncontrolled or unconfined space, including details of the control measures available • Bomb Threat/ Suspect Package • Medical Emergency such as a heart attack, respiratory failure or broken limb including details on controls measures available Observation: It is recommended that other emergency scenarios involving sabotage, vandalism and arson to buildings, equipment or vehicles are included in the Emergency Procedure/Plan. The site has also recently developed and implemented a Pollution Incident Response Management Plan (PIRMP) to address pollution incidents. The PIRMP was prepared in consultation with the NSW EPA and a final version provided to the EPA in October 2016.
O5	Dust						
O5.1, O5.2	The licensee must ensure that any liquid and/or non-liquid waste generated and/or stored at the premises is assessed and classified in accordance with the DECC Waste Classification Guidelines as in force from time to time. The licensee must ensure that waste identified for recycling is stored separately from other waste.	✓			Significant Environmental Aspects & Potential Impacts: Dust Emissions (OEMP); Procedure 3110 – Dust Control	Compliant	Redox assess and classify waste types prior to off-site disposal and record this information in Redebiz (as part of a purchase order issued to waste disposal contractors). During the site walk over the Auditor observed that waste for recycling was stored separately from other waste materials.



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
					Management.		
5	MONITORING & RECORDING CONDITIONS						
M1	Monitoring Records						
M1.1	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.	✓				Not triggered	Stage 4 of the development (including the acetic acid decanting facility and scrubber) have not yet been construction and this condition is not currently applicable.
M1.2	All records required to be kept by this licence must be: a) in a legible form, or in a form that can readily be reduced to a legible form; b) kept for at least 4 years after the monitoring or event to which they relate took place; and c) produced in a legible form to any authorised officer of the EPA who asks to see them.	✓				Note	There are currently no monitoring records for the acetic acid decanting facility as this has not yet been constructed.
M1.3	The following records must be kept in respect of any samples required to be collected for the purposes of this licence: a) the date(s) on which the sample was taken; b) the time(s) at which the sample was collected; c) the point at which the sample was taken; and d) the name of the person who collected the sample.	✓				Note	There are currently no monitoring records for the acetic acid decanting facility as this has not yet been constructed.



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
M2.1, M2.2	The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies. The record must include details of the following: a) The date and time of the complaint; b) The method by which the complaint was made; c) Any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; d) The nature of the complaint; e) The action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and f) If no action was taken by the licensee, the reasons why no action was taken.	✓				Compliant	As noted in item 6.3, complaints would be recorded on either an Incident Report form or a Pollution Incident Response Management Plan (PIRMP) Notification form (e.g. for pollution incidents) depending on the nature of the complaint. The complaint would then be entered as a Quality Problem (QP) within the Redebiz system, where the details a) to f) would be recorded, mostly within the general text/non-compliance description box. To produce a summary log of all complaints in Redebiz would require the user to search under specific categories depending on the nature of the complaint, and appears to require the user to have some prior knowledge of the complaint to ensure the correct category is searched. There is no one specific category for complaints. The Auditor was advised by site personnel that there have been no complaints between 2014 and 2016. Observation: Whilst it is recognised that Redox has received no complaints in the past few years, it is recommended that the Redebiz system be modified to allow a 'complaint' category to be included so that complaints can be easily classified within this group and allow for easier searching and reporting of complaints.
M2.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	✓				Compliant	Information in Redebiz is available for this time period.
M3.1, M3.2	The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence. The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.					Compliant	Ramboll Environ notes that the current Redox website has provided a postal address, a toll free telephone number (within and outside Australia) and an on-line contact form for registering complaints associated with the operations



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
6	REPORTING CONDITIONS						
R1	Annual return documents						
R1.1	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: (a) a Statement of Compliance; and (b) a Monitoring and Complaints Summary. A copy of the form in which the Annual Return must be supplied to the EPA accompanies this licence. Before the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.	✓			Procedure 3118 – Environmental Management System.	Compliant	Redox advised that an Annual Return is completed and submitted to the EPA each year. Ramboll Environ was provided a copy of the 2014 and 2015 Annual Returns to confirm these had been prepared and submitted. The Auditor has confirmed that the Annual Returns have been received by the EPA as indicated on the EPA website.
R2	The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act. Notifications must be made by telephoning the Environment Line service on 131 555. The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.	✓				Compliant	Site personnel advised there have been no incidents requiring notification to the EPA. Ramboll Environ's review of the incident register (between 2014 and 2016) showed one to seven incidents per year with approximately half related to injuries and no significant environmental issues reported.
R3.1	Where an authorised officer of the EPA suspects on reasonable grounds that: a) where this licence applies to premises, an event has occurred at the premises; or b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.					Not triggered	Redox advised there have been no events that have resulted in the EPA requesting a written report.



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence								
		Gen.	Con.	Op.											
Special Conditions															
E1	Construction Activities														
E1.1 E1.2	Construction Activities - Noise from the construction of the plant must not exceed the sound pressure level (noise) limits presented in the table below. <table><tr><th>Locations</th><th>Day L_{Aeq}(15min) (dB(A))</th></tr><tr><td>St Andrews Residences</td><td>46</td></tr><tr><td>Minto Residences</td><td>46</td></tr><tr><td>Childcare Centre (30 Swettenham Rd)</td><td>62</td></tr></table> All construction activities, including transportation of fill and spoil, must be restricted to the hours of 7am to 6pm Monday to Friday, 8am to 1pm Saturday and at no time on Sundays and public holidays.	Locations	Day L _{Aeq} (15min) (dB(A))	St Andrews Residences	46	Minto Residences	46	Childcare Centre (30 Swettenham Rd)	62		✓		Construction Noise Management Plan (CEMP).	Not verified	There have been no construction activities since 2008 (i.e. completion of Stage 3) and it is assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010.
Locations	Day L _{Aeq} (15min) (dB(A))														
St Andrews Residences	46														
Minto Residences	46														
Childcare Centre (30 Swettenham Rd)	62														
E2	Noise compliance monitoring														
E2.2	After the commencement of all operations at the premises, the licensee must submit a noise compliance assessment report to the DEC's Manager Metro Illawarra, to demonstrate compliance with the limits specified in condition L6.1. The assessment must be prepared by a suitably qualified acoustical consultant.			✓	Noise Management Plan (OEMP); Procedure 3116 - Noise Management.	Not verified	There have been no construction activities since 2008 (i.e. completion of stage 3) and it is assumed compliance with this condition was confirmed by the previous Independent Audit undertaken in 2010. In addition refer to item L3.1.								
E3	Acetic Acid Scrubber														
E3.1	The objective of this condition is to develop emission concentration limits to ensure that the premises can comply with Section 129 of the POEO Act 1997.	✓				Not triggered	Stage 4 of the development (including the acetic acid decanting facility and scrubber) have not yet been construction and this condition is not currently applicable.								
E3.2	Prior to the commencement of construction of the plant, the licensee must submit a report to the EPA's Manager Illawarra, on the development of a site specific emission concentration limit for the acetic acid scrubber.		✓			Not triggered									



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
E3.3	Prior to the commencement of construction of the plant, the licensee must provide to the EPA's Manager Illawarra, the manufacturer's performance guarantees for the acetic acid scrubber, demonstrating that emissions will comply with the ground level concentration specified in the EPA's <i>Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW, August 2001</i> .		✓			Not triggered	

Action Plan Table

Item No.	Reference	Time-Frame	Responsible Person	Action Taken OR response to recommendation	Completed Date
Condition 4.32	Redox should consider preparing a waste log for all waste generated, stored and disposed, similar to Table 5.4 in the last Annual Environmental Management Report dated December 2012 to maintain an easily available record of waste materials on site. If possible, the Redebiz system could be programmed to produce a summary waste report that contains information such as the product name/waste description, dangerous goods class, waste code, waste quantity, waste contractor, disposal date.	31 March 2017	Trami	It is not a requirement for us to keep a manual Waste log because we already have more efficient tracking method for all our disposals, that is, via our Redebiz system through CHEDIS product code which we can use to extract information for AEM report. Furthermore, Redox does not "generate, store and dispose wastes". Our products are classified as either goods or reject stock. Most reject stock could still be sold under discounted rates so they are not considered as wastes ready for disposals. Most of disposals are arranged off Minto's site, that is, at the customers' sites where they detected the goods not confirming to their specifications, therefore, these disposals are not subject to Condition 4.32. The only disposal we have arranged at Minto's site are food grade ingredients but they are also not subject to Condition 4.32. Previously we kept a waste log which contains waste disposed from all Redox facilities including contractors' warehouses, however, these	N/A



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				warehouses are not part of Consent Condition and therefore we do not want to continue keeping a manual log.	
5.1	Redox to resolve with the DP&E as a priority whether continued stormwater testing is required.	1 March 2017		Responded to DP&E show cause letter dated 27 April 2017	27 April 2017
7.4	The OEMP should be amended to include mention of other environmental obligations and approvals in place as the site such as the Trade Wastewater Consent and Notification of Hazardous Chemicals on Premises).	1 March	Trami Tran Michael Sims	Responded to DP&E show cause letter dated 27 April 2017	27 April 2017
7.5	- As noted in condition 5.1, Redox should resolve with the DP&E as a priority whether continued stormwater testing is required as specified by the Stormwater Management Plan (and Water Release from Retention Basin procedure) to ensure continuing compliance with this condition. - As noted in condition 4.32, Redox should consider preparing a waste log for all waste generated, stored and disposed, similar to Table 5.4 in the last Annual Environmental Management Report dated December 2012 to maintain an easily available record of waste materials on site.	1 March 2017 31 March 2017	Trami Tran	- Responded to DP&E show cause Letter dated 27 April 2017. - Please note item #1, Condition 4.32 above.	27 April 2017
8.3	Redox should continue the preparation and submission of the Annual Environmental Management Report (AEMR) to ensure continuing compliance with this condition, and make reference in the AEMR to the queries/correspondence made regarding the stormwater quality monitoring requirements.	1 December 2017	Trami	AEMR2014 to be submitted by 7 July AEMR2015 to be submitted by 7 July AEMR2016 to be submitted by 4 August	14 August 2017
Observations					
Compliance (Condition 2.1)	1. Environmental Policy - Review the policy to ensure it is contemporary (e.g. language), sign and date the policy, and make it publicly available	31 March 2017	Trami	Environmental Policy (Procedure 3109) has been placed in queue for review.	TBA



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	(e.g. on website). 2. Training - provide basic environmental awareness training to employees, in addition to the reading material provided/available, to ensure employees are aware of and understand environmental management requirements and obligations.			Redox has 500-600 Procedures and forms, some of which have been updated but lots are still pending for review.	
Compliance (Condition 4.23)	As noted in Condition 7.5, Redox should resolve with the DP&E as a priority whether continued storm water quality monitoring is required. The Annual Environmental Management Report (AEMR) should continue to be prepared and submitted to ensure compliance with the consent.	1 March 2017 & 1 December 2017	Trami	Refer to above Condition 8.3	August 2017
Emergency Plan (Condition 4.6)	Redox to consider including other emergency scenarios involving sabotage, vandalism and arson to buildings, equipment or vehicles in the Emergency Procedure/Plan.	1 June 2017	Trami	We already have these scenarios added in our Procedure 3802 (Dry Creek Major Incident Identification & Risk Assessment) for our facility in South Australia which we have been using as a guide for all other Redox warehouses. Furthermore, these incidences are unlikely to occur given that Redox's security is in compliance to all regulatory and insurance requirements. Our Minto office and warehouse surrounded by high electrical fences, gate passes, cameras, alarm systems all in place.	N/A
Documentation (Condition 5.8)	Redox should review the OEMP to ensure the document content correctly reflects the situation at the site and is correctly aligned with/referenced to information in related documents (e.g. reference to procedure 3405 should reflect the correct title of this document).	1 June 2017	Trami	The Director-General already approved Redox's OEMP prior to the commencement of operations at the site. We have not had any new developments after the approval and therefore, no requirement to vary the OEMP.	N/A
Complaints (Condition 6.3)	The Redebiz system should be modified to allow a 'complaint' category to be included so that complaints can be easily classified within this group and allow for easier searching and reporting of complaints.	1 June 2017	IT	QP90628 was created for IT to work on.	19 June 2017
Environment Protection Licence (No. 12041)					



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Observations					
Waste management (Condition A1.2)	As noted for Condition 4.32 of the Development Consent, Redox should consider preparing a waste log for all waste generated, stored and disposed, similar to Table 5.4 in the last Annual Environmental Management Report dated December 2012 to maintain an easily available record of waste materials on site and to ensure waste quantities are below the maximum limit allowable.	31 March 2017	Trami	Refer to above response to condition 4.32	N/A
Complaints (Condition M2.1, M2.2)	As noted for Condition 6.3 of the Development Consent, the Redebiz system be modified to allow a 'complaint' category to be included so that complaints can be easily classified within this group and allow for easier searching and reporting of complaints.	1 June 2017	IT	QP90628 was created for IT to work on.	19 June 2017
Emergency Plan (Condition O4.1)	As noted for Condition 4.6 of the Development Consent, Redox to consider including other emergency scenarios involving sabotage, vandalism and arson to buildings, equipment or vehicles in the Emergency Procedure/Plan.	1 June 2017		Please refer to response Emergency Plan (Condition 4.6)	N/A

Consent to Discharge Industrial Trade Wastewater (No. 29981)

Observations					
Wastewater monitoring (Condition 1a)	Redox to monitor future sample analysis results for total Iron and pH to assess whether there is a recurring issue with these parameters that may require further investigation and rectification.	1 March 2017	Trami	Environmental Policy (Procedure 3109) has been placed in queue for review. Redox has 500-600 Procedures and forms, some of which have been updated but lots are still pending for review.	TBA

Compliance with Consent to Discharge Industrial Trade Wastewater

Table 5. Compliance with Consent to Discharge Industrial Wastewater (No.29981)			
Item No.	Requirement and Reference	Compliant	Ramboll Comments
Schedule 1, 1a	The customer may discharge trade wastewater into the sewer in a manner	Compliant	Trade wastewater generated at the site is discharged under a Sydney



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whereby the substance characteristics of the trade wastewater are of a type and discharged at a rate, level or concentration equal to or less than that described in this schedule.

Water Consent to Discharge Industrial Trade Wastewater to the sewer. Redox advised that regular sampling of trade wastewater discharges is undertaken by an external laboratory (LabPoint Pty Ltd) and the sample analysis reports are sent to Sydney Water as required. Sydney Water will also carry out their own sampling but Redox do not receive copies of these analysis reports.

The Auditor reviewed a selection of LabPoint sample analysis reports and noted the following:

- For a sample taken on 19/9/2014, the TSS calculated mass was 0.183 kg/day exceeding the 0.09 kg/day maximum daily limit
- For a sample taken on 12/5/2016, the total Iron measured concentration was 128 mg/L and calculated mass was 0.179 kg/day exceeding the 50 mg/L and 0.009 kg/day limits, respectively
- For a sample taken on 14/9/2016, the total Iron measured concentration was 82 mg/L and calculated mass was 0.0492 kg/day exceeding the 50 mg/L and 0.009 kg/day limits, respectively, and the pH at the start and end of sampling (i.e. 5.6 and 5.0) was outside of the acceptable 7-10 range.

Redox reported that there has only been one issue raised with Sydney Water although the details could not be provided to Ramboll Environ at the time of the audit and there have been no notices/ penalties issued by Sydney Water.

Observation: It is recommended that Redox monitor future sample analysis results for total Iron and pH to assess whether there is a recurring issue with these parameters that may require further investigation and rectification.

Compliance with Notification of Dangerous Goods on Premises

Table 6. Compliance with Notification of Dangerous Goods on Premises (No. NDG037356)

Item No.	Requirement and Reference	Compliant?	Findings
-	The Notification details maximum storage capacities for each storage facility	yes	A review of the stock manifest at 1 November 2013 indicates the quantities stored at each storage facility (i.e. depot), are below the specified maximum storage quantities notified to WorkCover.



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			It should be noted that at the time of the audit, the Notification had expired and was in the process of being renewed by NSW WorkCover. ENVIRON was provided with copies of correspondence from WorkCover indicating that due to the WorkCover's delayed invitation to renotify, Redox were granted an extension on their Notification. The extended expiry date for their Notification was to 28 September 2013. A copy of a tax invoice from WorkCover, dated 2 October 2013, for receipt of payment for the renewal of the Notification indicates that Redox's renewal is in progress.



3 Community & Environmental Complaints

No community, environmental or pollution complaints were received during 2015 relating to the operation of the Minto facility.

Procedure 3022 – Problems & Complaints describes the method by which all problems, non-conformances, customer and community complaints would be recorded and actioned, including recording of pollution complaints in accordance with EPL 12041 Condition M4.

4 Environmental Impacts & Performance

Table 5.0: Environmental Impacts & Performance

Environmental Aspect (Operational Pathway)	Potential Environmental Impacts	Potential Risk of Impact	Duration of Potential Impact	Operational Procedure to prevent & control Impacts	Environmental Performance 2016
1. Transportation - Transport of goods to the site; - Delivery of goods to customers; and - Unloading/loading of trucks and shipping containers into transit storage areas.	Noise Emissions	Low	Intermittent	3109, 3116, 3412, 3715	Noise emissions effectively prevented and controlled. No complaints received regarding noise emissions.
	Air Emissions	Low	Intermittent	3109, 3412, 3715	Air emissions not required to be monitored. No complaints received regarding air emissions.
	Spillage of product(s) causing contamination of stormwater, soil or groundwater.	Low-Moderate	Infrequent	3022, 3109, 3114, 3412, 3702	No spillages of product during transportation causing contamination of stormwater, soil or groundwater.
	Operational Traffic Impacts	Moderate	Regular	3109, 3412, 3715	The system put in place to monitor that the routes utilised by heavy vehicles is working effectively and is substantially as it was when approved, its ongoing use is recommended". No complaints received regarding operational traffic impacts.
	Community Health	Low	Infrequent	3109, 3412	Community Health not required to be monitored. No Community Complaints received.
	Use of resources	Low-Moderate	Intermittent	3109	Use of resources not monitored with regards to the Transportation Pathway.
2. Storage & Handling - Movement of goods in and out of storage; and - Repackaging of	Spillage of goods	Low-Moderate	Infrequent	3022, 3109, 3401, 3402	No spillages of product during storage & handling causing contamination of stormwater.
	Spillage of goods causing contamination of soil/groundwater.	Low-Moderate	Infrequent	3022, 3109, 3401	No spillages of product during storage & handling causing contamination of soil or groundwater.



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Environmental Aspect (Operational Pathway)	Potential Environmental Impacts	Potential Risk of Impact	Duration of Potential Impact	Operational Procedure to prevent & control Impacts	Environmental Performance 2016
damaged goods and returned product.	Air Emissions – dust and particulate matter.	Low	Intermittent	3109, 3110	Air emissions of dust and particulate matter not required to be monitored. No complaints received regarding air emissions.
	Air Emissions - chemical reactions.	Moderate	Infrequent	3109	Air emissions caused by chemical reactions not monitored.
	Air Emissions from LPG forklifts.	Low	Constant	3109	Air emissions from LPG forklifts not monitored.
	Air Emissions from Greenhouse Gases.	Low- Moderate	Constant	3109	Greenhouse Gas emissions not required to be monitored.
	Operational Noise emissions.	Moderate	Intermittent	3022, 3109, 3116	Noise emissions effectively prevented and controlled. No complaints received regarding operational noise emissions.
	Waste – packaging (recyclable and non- recyclable).	Low	Intermittent	3109, 3401, 3402	Waste packaging not monitored with regards to storage and handling operations.
	Hazardous Waste – spillage and rejected products.	Moderate	Infrequent	3109, 3401, 3402	Refer 5.4 – In compliance with EPL (L5) waste conditions.
	Community Health	Low	Infrequent	3109, 3412	No community complaints received regarding community health impacts of storage & handling operations.
	Use of resources	Low- Moderate	Constant	3109	General use of resources not monitored for storage and handling operations.
3. Management & Administration	Waste – recyclable office waste	Low	Intermittent	3109, 3402	Paper/cardboard recycling only.
	Waste – non recyclable	Low	Intermittent	3109, 3402	Non-recyclable office waste not monitored.
	Waste – hazardous (samples)	Low	Infrequent	3109, 3402	As per hazardous waste – storage & handling above.
	Land & water pollution	Low- moderate	Intermittent	CEMP – Hazardous Materials Management Plan	No spillages of materials reported with potential for contamination of soil/ groundwater.
	Construction waste management	Low	Intermittent	CEMP – Construction Waste Management Plan	Not applicable to this report.



5 Environmental Monitoring

Aspect	Frequency	Process	Documentation	Procedure References	Responsibility
Noise Emissions	Within one month of commencement of construction activities associated with each stage of the development.	Construction Noise Audit	Construction Noise Audit report.	Procedure 3116.	Independent auditor
	Within 90 days of commencement of operation of each stage of development.	Operational Noise Audit	Operational Noise Audit Report	Procedure 3116	Independent auditor
Traffic Impacts	Monthly, four vehicles per period.	Random spot checks on routes taken.	Form 21085; QP records & Corrective Action Requests.	Procedure 3022 and 3715.	Redox Transport Coordinator
	Within 90 days of commissioning each stage of the development.	Independent Transport Audit	Independent Transport Audit report	Procedure 3715.	Independent auditor
Storm water Quality	Weekly & prior to discharge.	Visual and parameter analysis.	Form 2190 – Water Quality Inspection Form	Procedure 3405.	Redox Chemist
	Quarterly and following chemical contamination.	Parameter analysis	Parameter Analysis Report	Procedure 3405.	NATA Approved Laboratory
Waste	Continual	Continual log of waste generation.	Form 21152, 21157 and WasteLog.	Procedure 3402.	Redox Regulatory Affairs Coordinator
Incident/Near Miss Reporting	Continual	Record details of all incidents/near misses.	Form 21139 & 21140.	Procedure 3114 and 3401.	Redox Site Environmental Officer
Air emissions – dust and particulate matter	Daily	Regular sweeping. Weekly Inspection.	Form 21110 – Sydney Warehouse Inspection.	Procedure 3110 and 3521.	Redox Store Manager
Community Complaints	Continual.	Record details of all complaints received.	Complaints Register.	Procedure 3022 and 3412.	Redox Regulatory Affairs Coordinator
Environmental Management System	Annual reporting & triennial independent auditing.	Independent environmental audit.	Environmental Audit Report.	Procedure 2718.	Independent auditor
		Environmental performance review.	AEMR – Annual Environmental Management Report.	Procedure 2718.	Redox Regulatory Affairs Coordinator

5.1 Transport Monitoring & Auditing

5.1.1 Independent Transport Auditing

No independent transport auditing was conducted during 2017.

5.1.2 Monitoring Heavy Vehicle Routes/Requirements

Table 5.1.2: Heavy Vehicle Routes/Requirements: Non-Conformance Details

Date	Time	Carrier/ Customer Name	Vehicle Rego #	Route Travelled	Non- Conformance Details	QP Ref.	Corrective Action Summary
30/10/17	10.30am	ABS	CM89ME	Driver turned left onto Campbelltown Road and went past main office	Incorrect route	98098	Driver was given location map and transport routes. Driver was given "Non-conformance" document which outlines the problem and then completed section titled "proposed Corrective Action."
17/10/2017	8.30am	Coastal Transport Operations P/T	CTS 105	Coastal Transport semi and Midwest rigid truck that had turned from Ben Lomond Road left onto Campbelltown Road heading for Raby Road and the entry onto the M5.	Incorrect route	97620	Driver was given location map and transport routes. Driver was given "Non-conformance" document which outlines the problem and then completed section titled "proposed Corrective Action."
20/10/2017	9.15am	Burk Transport	BF39GD	Driver travelled from Campbelltown road in front of the main office to the lights where the truck then turn right into Ben Lomond Road then turn right into Holmes road then processed to the entry gates of the warehouse	Incorrect route	97863	Driver was given location map and transport routes. Driver was given "Non-conformance" document which outlines the problem and then completed section titled "proposed Corrective Action."

Discussion of Results:

12 Heavy vehicles were randomly audited during 2017 for compliance with Redox Procedure 3715 - NSW Heavy Vehicle Routes/Requirements. Of the 12 vehicles monitored three drivers found to have travelled by the incorrect route.



5.2 Noise Monitoring & Auditing

N/A - No operational noise auditing was required during this reporting period.

5.2.1 Construction Noise Auditing

No construction noise auditing was required during this reporting period.

5.2.2 Operational Noise Auditing

No operational noise auditing was required during this reporting period.



5.3 Stormwater Quality Monitoring

A three tiered monitoring program tests stormwater quality prior to release from the retention pits on site, including weekly internal analysis prior to discharge, quarterly external analysis, and external analysis in the event of a chemical spill.

Acceptable values for each parameter are taken to be those of:

- the *Clean Waters Regulations 1972*, Section 8 – Class R: Restricted Water;
- Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000* – “Default trigger values for physical and chemical stressors for south-east Australia”, for slightly disturbed ecosystems; and
- Baseline Contamination Assessment for Redox Chemicals Facility Swettenham Road, Minto* (Environmental Audits of Australia, January 2003).

5.3.1 Internal Stormwater Analysis

Redox personnel did not conduct any internal stormwater analysis nor did we send off stormwater samples to independent laboratory during the year 2015, reason being, we identified the *Clean Waters Regulations 1972* and *Clean Water Act* have been repealed for many years. We have notified the Department of Planning and also advised that we would cease all testings until we received further instructions from the Department.

Table 5.3.1: Results of Internal Stormwater Analysis: NIL

Date	Sample	Colour	Clarity			Odour		pH	Temp.	Specific Gravity	Dissolved oxygen	Suspended Solids	Turbidity	Pass/Fail	Tested by:
			SS visible?	Foam?	Visible Film?	Smell?	Oil/Petrol Smell?								
	LIMIT	Clear	No	No	No	No	No	6.5-8.5	15-35°C	0.99-1.01	Min. 6.5 mg/L	Max. 50 mg/L	Max. 50 NTU	Pass	Name
January	Blank		BLANK												
	PIT 1														



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2 Swettenham Road, Minto NSW

	PIT 2		BLANK
	PIT3		
February	PIT 1		
	PIT 2		
	PIT 3		
March	BLANK		
	PIT 1		
	PIT 2		
	PIT 3		



Discussion of Results for Internal Stormwater Analysis

As mentioned under 5.3.1 – we did not conduct any internal stormwater analysis.

The table below is left blank.

<u>Analyte</u>	<u>Results</u>
Colour	BLANK
Clarity	
Suspended Solids	
Foam	
Visible Film	
Odour - Smell	
Odour - Oil/Petrol	
pH	
Temperature	
Specific Gravity	
Dissolved Oxygen	
Suspended Solids	
Turbidity	
Pass/Fail	



5.3.2 External Stormwater Analysis

As mentioned under 5.3.1 – we did not send samples to external lab test to analyse the stormwater during the year 2017.

Date	Sample	Total suspended solids	Turbidity	Total Kjeldahl Nitrogen (TKN)	NOx-N	Total nitrogen	Total phosphorus
		mg/L	NTU	mg/L	mg/L	mg/L	mg/L
Nil							

Test	Western Retaining Wall	Methods
Nil		

5.3.3 External Stormwater Analysis (Chemical Spill)

N/A



5.4 Waste Management

Table 5.4: WasteLog 2017 – NSW

No hazardous and/or industrial and/or Group A substances listed under 4.32 of Condition were disposed during 2017.

QP	Product Code	Product Name	DG Class	Form	Waste Code	Tracking	Qty	DISPOSAL COMPANY	CAN	TC No.	SPO	Despatch Date	Disposal Method
	NIL												



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5.5 Independent Environmental Auditing

No environmental auditing was required during this reporting period.



6 Environmental Performance

Table 6.0 presents a list of all occasions in the preceding 12-month period when environmental performance goals for the development have not been achieved, indicating the reasons for failure to meet the goals, and the actions taken to prevent recurrence of that type of incident.

Table 6.0: Environmental Performance – Quality Problem Record

QP	Performance goal not achieved	Reason	Action	Status
Transport Management				
Nil				
Noise Monitoring & Auditing				
Nil				
Stormwater & Dust Management				
Nil				
Landscape Management				
Nil				
Waste Management				
Nil				
Environmental Reporting				
Nil				

2018 Annual Environmental Management Report



Redox Pty Ltd



**2 Swettenham Road
Minto NSW 2566**

Prepared by: Redox Pty Ltd

Trami Tran (Regulatory Affairs Coordinator)
Authorised by Malcolm Perrins (Director)

December 2018



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2 Swettenham Road, Minto NSW

Executive Summary

This Annual Environmental Management Report (AEMR) has been prepared by Redox Pty Ltd (Redox) to review the performance of the development at 2 Swettenham Road, Minto NSW against the Operational Environmental Management Plan (OEMP) and Construction Environmental Management Plan (CEMP), the conditions of consent, Environmental Protection Licence 12041 and Environmental Legislation pertaining to the site, during the period January to December 2018.

The AEMR is intended to meet the requirements of the NSW Department of Planning, under development consent condition 8.3 – Annual Performance Reporting.

Site environmental management procedures and monitoring systems are in place for noise, transport, stormwater, waste, landscape, dust and odour control, community communication and incident reporting, as per the Operational Environmental Management Plans.

Ultimate responsibility for site environmental performance rests with the Managing Director. Day-to-day environmental management is the combined responsibility of the Regulatory Affairs Coordinator and the Store Manager.

No community, environmental or pollution complaints were received during 2018 related to the Minto facility operations.



1 Introduction

This Annual Environmental Management Report (AEMR) has been prepared by Redox Pty Ltd (Redox) to review the performance of the development at 2 Swettenham Road, Minto NSW against the Operational Environmental Management Plan (OEMP), the conditions of consent, Environmental Protection Licence 12041 and Environmental Legislation pertaining to the site, during the period January to December 2018.

The AEMR is intended to meet the requirements of the NSW Department of Planning, under development consent condition 8.3 – Annual Performance Reporting.

Condition 8.3 requires that Redox, throughout the life of the development, prepare and submit for the approval of the Director-General, and Annual Environmental Management Report (AEMR). The AEMR shall review the performance of the development against the Operational Environmental Management Plan, the conditions of consent and other licences and approvals relating to the development. The AEMR shall include, but not necessarily be limited to:

- (a) Details of compliance with the conditions of consent;
- (b) A copy of the Complaints Register for the preceding twelve-month period, and details of how these complaints were addressed and resolved;
- (c) A comparison of the environmental impacts and performance of the development against the environmental impacts and performance predicted in those documents listed under Condition 1.2 of consent;
- (d) Results of all environmental monitoring required under this consent and other approvals, including interpretations and discussion by a suitably qualified person; and
- (e) A list of all occasions in the preceding twelve-month period when environmental performance goals for the development have not been achieved, indicating the reason for failure to meet the goals and the action taken to prevent recurrence of that type of incident.

Redox shall submit a copy of the AEMR to the Director-General every year.

The Director-General may require Redox to address certain matters in relation to the environmental performance of the development in response to review of the Annual Environmental Management Report. Any action required to be undertaken shall be completed within such period as the Director-General may require.

1.1 Site & Operational Overview

Redox is an importer and distributor of close to 1,000 different organic and inorganic chemicals and raw materials. Used in more than 140 different industries, including Agriculture, Detergent, Food & Beverage, Mining & Metal, Surface Coating and Chemical Manufacture, these products are supplied to all areas of industry throughout Australia and New Zealand.

Redox operates five sites in Australia and three in New Zealand. The Head Office site in Minto (this site) is the base for the company's Marketing and Administration functions for its Australian and New Zealand operations. This site consists of two office/Administration buildings and five warehouses for the storage of both dangerous and non-dangerous goods.

The 5.984ha Redox owned site is located within the Minto Industrial Estate and is surrounded predominantly by light industrial and commercial operations to the west, north and south. Bow Bowing Canal forms the eastern boundary to the site. The nearest sensitive land use is the New Generation Child Care Centre, situated on the site's northern boundary. The nearest residential properties are situated on the opposite side of Campbelltown Road.



Figure 1.1: Aerial view, Redox Minto Facility.



The Minto facility, operational since 5 December 2005, was officially opened on 26 April 2006. The construction of Stage 3 of the development, a 2935m² non-dangerous goods store, commenced August 2008 and was completed February 2009. The new store was occupied from 27 February 2009.

Operational and construction site environmental management procedures are in place for noise, transport, stormwater, waste, landscape, dust and odour control, community communication and incident reporting. Ultimate responsibility for site environmental performance rests with the Managing Director; day-to-day environmental management is the combined responsibility of the Regulatory Affairs Coordinator and the Store Manager.

1.2 Operational Environmental Management Plan

Prior to commencement of operations on the site, an Operational Environmental Management Plan (OEMP) was prepared by Redox, and approved by the Director-General of the Department of Infrastructure, Planning and Natural Resources (DIPNR). This OEMP details the environmental management framework, practices and procedures to be followed during the operation of the development. The OEMP includes:

- (a) Identification of all statutory and other obligations that Redox is required to fulfil in relation to operation of the development, including all consents, licences, approvals and consultations;
- (b) A description of the roles and responsibilities for all relevant employees involved in the operation of the development;
- (c) Overall environmental policies and principles to be applied to the operation of the development;
- (d) Standards and performance measures to be applied to the development, and a means by which environmental performance can be periodically reviewed and improved;
- (e) Management policies to ensure that environmental performance goals are met and to comply with the conditions of consent;
- (f) The listed Management Plans:
 - (i) Noise Management Plan;
 - (ii) Transport Management Plan;
 - (iii) Stormwater Management Plan;
 - (iv) Waste Management Plan;
 - (v) Landscape Management Plan; and
- (g) The environmental monitoring requirements outlined in the conditions of consent.



1.3 Development Consent Conditions

The Minister for Infrastructure and Planning, the Hon Craig Knowles MP, determined to approve the Chemical Storage and Distribution Facility, Lot 171 Swettenham Road, Minto, Campbelltown LGA (DA No: 367-11-2002-i) on 16 September 2003, subject to Development Consent Conditions.

The reason for the imposition of conditions is to:

- (a) Minimise any adverse environmental impacts associated with the development;
- (b) Ensure effective on-going environmental and safety management and monitoring;
- (c) Minimise potential safety impacts associated with the development; and
- (d) Implement the recommendations of the Commission of Inquiry into all environmental aspects of the development.

1.4 Environmental Protection Licence

Environmental Protection Licence 12041 authorises Redox to carry out Chemical Storage and Waste Activities at 2 Swettenham Road, Minto.

General obligations of the licensee under this licence, and as set out in the *Protection of the Environment Operations Act 1997* and the Regulations made under the Act, include to:

- (a) Ensure persons associated with Redox comply with this Licence,
- (b) Control the pollution of waters and the pollution of air, and
- (c) Report incidents causing or threatening material environmental harm.



2 Details of Compliance

On 14 and 15 December 2016, Ramboll Environ Ltd was engaged by Redox Pty Ltd (Redox) to conduct an Independent Environmental Audit and Hazard Audit of the Redox Chemical Storage and Distribution Centre at 2 Swettenham Road, Minto, New South Wales (NSW) 2566.

The Independent Audits are required to be undertaken every three years pursuant to Conditions 5.12 and 5.13 of the Project Consent, issued by the (now) NSW Department of Planning and Environment (DP&E).

2.1 Compliance with Development Consent Conditions

Table 2.1: Compliance with Development Consent Conditions

Table 2.1 is intended to address the findings and the recommendations issued by the abovementioned independent Hazard and Environmental Auditors.

Consent Condition		Compliance Requirements	Requirement			Status	Findings
			General	Construction	Operation		
1		GENERAL					
Obligation to Minimise Harm to the Environment							
1.1	Redox shall implement all practicable measures to prevent or minimise any harm to the environment that may result from the construction, commissioning, operation ... of the development.	✓			Compliant	Redox has an environmental management system (EMS) in place comprising management plans, process and procedures to manage risks to the environment. Procedures (e.g. spill management, hazardous materials handling and storage, stormwater management) were observed by the Auditor to be prepared and being followed, to the extent observations could be made at the time of the site visit. A dedicated resource has been assigned responsibility for environmental management although in practice it is a shared role amongst primary employees (i.e Regulatory Affairs Coordinator, Quality Assurance Manager). The EMS and environmental management practices appeared appropriate to the nature of the operations.	

Scope of Development



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
1.2	The Applicant shall carry out the development generally in accordance with requirements a) to s). Note, due to the large number of requirements these have not been replicated here. Refer to Appendix A for the full list of requirements.	✓			Not verified	Ramboll Environ notes that the Independent Environmental Audit conducted by Ramboll Environ (formally Environ) in 2013 had included a review of a selection of documents listed in this condition and that these documents had provided additional information in response to regulatory agency enquiries of EIS or associated studies. At the end of 2013 audit, Ramboll Environ had assumed compliance Audits undertaken in 2006 and 2010. This assumption by Ramboll Environ still applies for this current audit and for this reason Ramboll Environ has not conducted a review of compliance against all documents listed in a) to s) in this condition. No construction has been conducted since 2008.
1.3	In the event of any inconsistency between the conditions of consent and/or any scope document(s), the conditions of consent and/or the most recent document shall prevail to the extent of the inconsistency.	✓			Noted	N/A
Provision of Documents						
1.4	Where practicable, the Applicant shall provide all documents and reports required to be submitted to the Director-General under this consent in an appropriate electronic format. Provision of documents and reports to other parties, as required under this consent, shall be in a format acceptable to those parties and shall	✓			Noted	
1.5	Nothing in this consent prevents Redox from combining reporting requirements under this consent with reporting requirements for submission to another relevant party.	✓			Noted	
Statutory Requirements						
1.6	The Applicant shall ensure all licences, permits & approvals are obtained and kept up-to-date as required throughout the life of the development. No	✓			Compliant	The Regulatory Affairs Coordinator is responsible for identifying and maintaining the currency of environmental licences and permits. The Redebiz system and workflow



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
	condition of this consent removes the obligation for the Applicant to obtain, renew or comply with such licences, permits or approvals.					tasks are used to generate automatic reminders for licence renewal dates or other regulatory obligation requirements. An excel spreadsheet, with a column for "due date, is used to track when the Annual Environmental Return submission to the NSW EPA is required. As a member of the Plastics and Chemicals Industries Association (PACIA), Redox receives industry bulletins on regulatory matters, mainly safety related, for their industry. SafeWork NSW also provides information bulletins regarding dangerous goods to Redox. Redox do not subscribe to any other associations for legal/regulatory information.
1.7	In the event that a dispute arises between the Applicant and Council or a public authority, other than the Department, in relation to a specification or requirement under this consent, the matter shall be referred by either party to the Director-General, or if not resolved to the Minister, whose determination shall be final and binding on all parties.	✓			Noted	Site personnel advised that there have no disputes or issues requiring referral to the Department.
2	COMPLIANCE					
2.1	Redox shall ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.	✓			Compliant	Redox has established a number of procedures to ensure employees and contractors are aware of and comply with the sites' environmental obligations. Training on procedures and in environmental matters is provided to employees during induction and as required based on role requirements, usually through on-the-job training. Assessment of competency is undertaken and recorded in Redebiz. Refresher training requirements are also flagged to the responsible manager within the Redebiz system. Contractors employed to assist with loading/unloading



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
						activities are provided induction and relevant training (e.g. manual handling, dangerous goods handling etc.) by Redox personnel. An internal audit process operates at Redox with audits occurring usually annually. The last environmental compliance audit conducted was in September 2015. Observation: A number of non-conformances were identified that are still open related to: - Operational Environmental Management Plan - an Annual Environmental Management Report has not been prepared and submitted to the DP&E since 2013 due to an outstanding enquiry to the DP&E regarding stormwater quality testing. It is recommended that Redox resolve the stormwater quality testing issue as a priority and continue to submit their Annual Environmental Management Report. - Environmental Policy - the policy has not been updated since 2005. It is understood the last review of the policy was undertaken in May 2015. A copy of the policy provided to the Auditor was undated and unsigned. Redox should review the policy to ensure it is contemporary, sign and date the policy, and make it publicly available (e.g. on website). Training - training on basic environmental awareness has not been provided to employees. Redox provides general environmental information to employees through the environmental policy and Employee Introduction booklet provided at induction. It is recommended that in addition to the reading material provided/available, training is provided to ensure employees are made aware of and understand environmental management requirements



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
						and obligations.
2.2	Redox shall be responsible for environmental impacts resulting from the actions of all persons on site, including contractors, subcontractors and visitors.	✓			Noted	
2.3	Prior to each of the events listed below, Redox shall certify in writing to the satisfaction of the Director-General that it has complied with all conditions of this consent applicable prior to that event.				Not verified - Stage 1, 2 & 3 Not triggered - Stage 4	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 had noted that site personnel had advised the Director-General was notified in writing of the site's compliance with the relevant consent conditions prior to each of the events a) to c) for Stages 1, 2 and 3. Ramboll Environ has made no further enquiries regarding this condition given it applies to historical events related to construction and commencement of operations (as opposed to continuing operation of the facility). Stage 4 has not yet been constructed.
	(a) commencement of any physical works on the land subject to this consent; (b) commencement of construction of stages 1, 2, 3 and 4 of the development; and (c) commencement of operation of stages 1, 2, 3, and 4 of the development.		✓ ✓	✓		
2.4	Notwithstanding condition 2.3 of this consent, the Director-General may require an update report on compliance with all, or any part of the conditions of this consent.	✓			N/A	Noted.
2.5	The Applicant shall meet the requirements of the Director-General in respect of the implementation of any measure necessary to ensure compliance with the conditions of this consent, and general consistency with the documents listed in Condition 1.2. The Director-General may direct that such a measure be implemented in response to the information contained within any report, plan, correspondence or other document submitted in accordance with the conditions of this consent,	✓			Not verified	Facility personnel advised that to date there has been no additional Director-General requirements as outlined in condition 2.5.



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Consent Condition		Compliance Requirements	Requirement			Status	Findings
			General	Construction	Operation		
		within such time as the Director-General may require.					
3.1	In relation to the construction and occupation of the development, Redox shall provide the Director-General and Council with the following: (a) written notification of a Principal Certifying Authority; (b) copies of all construction certificates issued; (c) written notification of the intention to commence construction; (d) copies of all occupation certificates; (e) written notification of the intention to occupy.		✓ ✓ ✓	✓ ✓	Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 had noted that site personnel had advised that the last stage of construction occurred in 2008 and it was assumed at the time of the 2013 audit that compliance with this condition was confirmed by the previous Independent Environmental Audits undertaken in 2006 and 2010. This assumption continues to apply for this current audit.	
3.2	Prior to the commencement of any construction associated with the development, Redox shall erect at least one sign at the construction site. The sign shall be maintained for the duration of construction works, and shall be removed as soon as practicable after the conclusion of construction works.		✓		Not triggered	Refer comment to item 3.1	
4		ENVIRONMENTAL PERFORMANCE					
Hazards and Risk Impacts							
4.1	For each of the dangerous goods classes and materials listed in the table below, the Applicant shall not permit the materials listed as “prohibited” to be received, stored, or handled on the site. To avoid any doubt the Applicant shall only permit the materials listed as “permitted” to be received, stored or handled on the site. This condition does not apply to those materials that may be associated with office, laboratory, construction, maintenance or vehicular/ equipment components			✓	Compliant	The Redebiz system is the main system to manage inventory, quality problems and retain information, amongst other functions. Redox reported that the Redebiz system was modified so that prohibited materials (as noted in the Development Consent e.g. Class 1, Class 2, Class 6.2 etc.) could not be ordered through the purchasing system, by setting the allowable order quantity to zero for the prohibited materials. The Auditor sighted the order quantity restrictions for prohibited materials within the Redebiz system to confirm the required modifications had been made.	



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Consent Condition	Compliance Requirements	Requirement			Status	Findings																																
		General	Construction	Operation																																		
	(including forklifts) of the development, and are not purchased and sold as part of the principal commercial operations of the development. <table><tr><th>DG Class</th><th>Prohibited</th><th>Permitted</th></tr><tr><td>Class 1</td><td>All</td><td>None</td></tr><tr><td>Class 2</td><td>All</td><td>None</td></tr><tr><td>Class 3</td><td>PG I Subclass 6.1</td><td>PG II & III (unless otherwise prohibited)</td></tr><tr><td>Class 4</td><td>All</td><td>None</td></tr><tr><td>Class 5</td><td>All except those listed as permitted</td><td>Solids of Class 5.1, PG III</td></tr></table> <table><tr><td>Class 6</td><td>Subclass 3 All Class 6.2</td><td>All Class 6.1 (unless other, but not Class 6.1 with subclass 3)</td></tr><tr><td>Class 7</td><td>All</td><td>None</td></tr><tr><td>Class 8</td><td>None</td><td>All</td></tr><tr><td>Class 9</td><td>None</td><td>All</td></tr><tr><td>Non-DG</td><td>None</td><td>All</td></tr></table>	DG Class	Prohibited	Permitted	Class 1	All	None	Class 2	All	None	Class 3	PG I Subclass 6.1	PG II & III (unless otherwise prohibited)	Class 4	All	None	Class 5	All except those listed as permitted	Solids of Class 5.1, PG III	Class 6	Subclass 3 All Class 6.2	All Class 6.1 (unless other, but not Class 6.1 with subclass 3)	Class 7	All	None	Class 8	None	All	Class 9	None	All	Non-DG	None	All				A review of the DG manifest (as at 15/12/2016) for a selected prohibited material (e.g. Class 6.1 Subclass 3) showed that these prohibited materials were not present at the site, at the time of the audit. Other prohibited materials (e.g. Class 4, Class 5.1 PGII) were also present as “samples” which according to the Development Consent condition are permissible when not purchased and sold as part of the principal commercial operations of the site.
DG Class	Prohibited	Permitted																																				
Class 1	All	None																																				
Class 2	All	None																																				
Class 3	PG I Subclass 6.1	PG II & III (unless otherwise prohibited)																																				
Class 4	All	None																																				
Class 5	All except those listed as permitted	Solids of Class 5.1, PG III																																				
Class 6	Subclass 3 All Class 6.2	All Class 6.1 (unless other, but not Class 6.1 with subclass 3)																																				
Class 7	All	None																																				
Class 8	None	All																																				
Class 9	None	All																																				
Non-DG	None	All																																				
4.2	Redox shall only permit non-dangerous goods, and dangerous goods of class 8 to be stored or handled in bulk on the site.			✓	Compliant	A review of the DG manifest (as at 15/12/2016) showed that the following materials in bulk were present at the site: Code SOSSIL1100, Class 6.1, Packing Group III material (i.e. Sodium Silicofluoride) in two orders: 125 x 1,000kg bulkers and 1.9 x 1,000kg bulkers (as Reject) within Store D2. However, these ‘bulkiers’ (i.e. bulker bags/flexible IBCs) are exempt																																



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
						as bulk containers as defined in the Australian Code for the Transport of Dangerous Goods by Road & Rail (i.e. the ADG Code) section 1.2.1.2.2.2.
4.3	Prior to any dangerous goods being brought to the site, Redox shall demonstrate to the satisfaction of the Director-General that it has a system in place to track the quantities and locations of dangerous goods on the site at all times.			✓	Compliant	The Redebiz system is the inventory system for dangerous goods and hazardous materials stored at the site. Redebiz records the quantity, dangerous good type, packing group, hazard classification, storage location (including aisle number) amongst other information. Information was provided by Redox regarding an independent hazard audit conducted by the DP&E in 2013 and 2015, as part of the Departments 2013-2015 compliance audit campaign of potentially hazardous facilities to verify compliance with the status of Independent Hazard Audit recommendations (in this case made following the 2013 Independent Hazard Audit). A copy of the DP&E 2015 compliance audit report only was provided to the Auditor however, recommendations from the DP&E 2013 compliance audit were included in this 2015 report. The DP&E 2015 compliance audit identified five non-compliances and made one observation, with recommended actions to be undertaken. The observation related to the stock control system (i.e. Redebiz) with a recommendation made by the DP&E to modify the stock control system to more comprehensively prevent acceptance of prohibited materials. The Auditor sighted the order quantity restrictions for prohibited materials within the Redebiz system and confirms the required modifications had been made. A review of the DG manifest also confirmed that prohibited materials, as noted in item 4.1, were not present at the site at the time of the audit.

Bunding and Spill Management

4.4	Redox shall ensure that all bunding installed at the development site is constructed strictly in accordance with:				Compliant	The Auditor was advised that the warehouse buildings were constructed per design requirements and to the development consent conditions in relation to bunding.
	(a) all relevant Australian Standards;		✓			During the site walk over, the Auditor observed all warehouse buildings to be constructed with an angled ramp from the



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Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
	(b) a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; (c) the EPA's Environmental Protection Manual Technical Bulletin Bunding and Spill Management.		✓ ✓			exterior of the warehouse Store down into the Store which is at a slightly lower level than the loading area outside the Store. This provides bunding for each Store in the event of spills or leaks. Just before the entrance to each Store, except at Stores B1 and B2, blind sumps are present to collect potential spills of materials. The Auditor did not review documentation associated with the bunding design as it is assumed that compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010 or prior. The Auditor notes that chlorinated compounds (i.e. Class 6.1 Trichloroethylene and Dichloromethane) are permitted to be stored on-site, and that concrete paving may not be sufficient to contain and prevent land contamination.
4.5	At least one month prior to the commencement of construction of the development ... Redox shall prepare and submit for the approval of the Director-General the studies set out below. (a) A Fire Safety Study (b) A Final Hazard Analysis (c) A Construction Safety Study		✓ ✓ ✓		Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 had assumed that compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010 or prior. Site personnel advised that there has been no significant construction between 2013 and 2016, including no construction for the proposed Stage 4 development.
Pre-Commissioning Studies						
4.6	No later than two months prior to the commencement of commissioning of the development, Redox shall prepare and submit for the approval of the Director-General the studies set out below: (a) A Transport of Hazardous Materials Study for the development. (b) An Emergency Plan for the development. (c) A Safety management System.			✓ ✓ ✓	Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 had noted that site personnel had provided a copy of correspondence from the Department approving the study reports with the exception of the Safety Management System (SMS). The Department had provided comments on the SMS to Redox in August 2005 and whilst further correspondence from the Department could not be provided to confirm that the comments had been satisfactorily addressed, Ramboll Environ considered that Redox would have addressed any concerns and that the SMS would have met the Departments requirements. At the time of the 2013 audit Ramboll Environ had reviewed the three documents a) to c) and considered that they had



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						been prepared to substantially address the requirements of a) to c). With the exception of the Transport of Hazardous Materials study, Ramboll Environ reviewed the Emergency Plan and SMS, where revisions to these documents had been made since the 2013 audit. The Emergency Plan (Procedure 3403, 6 October 2015) is a complementary document to the Emergency Management Plan. The following observations are made in relation to the Emergency Plan (procedure 3403): - The Emergency Plan is considered thorough containing realistic emergency scenarios and response actions. Emergency scenarios considered in the Procedure/Plan are representative of the hazards on the site although consideration of sabotage, vandalism and arson (to buildings, equipment or vehicles) could also be included. The emergency scenarios included information on control measures, response actions for staff and/or key emergency response personnel (i.e. Chief Warden, Deputy Chief Warden, Wardens and Communications Officer) for the scenarios: - Fire/ Explosion with details of fire control measures available - Severe Storms with details of resulting impacts (e.g. destructive winds, flooding etc.) - Gas Release due to the formation of toxic gases from the chemical reaction of incompatible substances - Dangerous Goods Emergency due to a major release or spill of a hazardous material in an uncontrolled or unconfined space, including details



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						of the control measures available - Bomb Threat/ Suspect Package - Medical Emergency such as a heart attack, respiratory failure or broken limb including details on controls measures available Observation: It is recommended that other emergency scenarios involving sabotage, vandalism and arson to buildings, equipment or vehicles are included in the Emergency Procedure/Plan.
4.7	Prior to commencement of construction, the Applicant shall submit to the Director-General a Security Management Plan for the development. The Plan shall detail the specific security infrastructure to be installed at the site, including the operation of the security gates and video surveillance, procedures and protocols for tracking dangerous goods and a general program for identifying potential external risks and ensuring the security of the site. The Plan shall be prepared in consultation with Council, and with reference to the matters detailed in the Department's <i>document Crime Prevention and the Assessment of Development Applications</i> .		✓		Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 had noted that the last stage of construction occurred in 2008. Since that time, there has been no significant construction and Stage 4 has not yet been constructed. The nature of operations since the 2013 audit have remained predominantly the same. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010 or prior.

Traffic and Transport

Community Enhancement Program

4.8	Prior to the commencement of operation, or within such time as agreed by the Director-General, the Applicant shall negotiate an agreed outcome with Council for an appropriate level of contribution (financial or in-kind) and as applicable, towards mitigating any cumulative social and/or community impacts as a result of the proposed development.			✓	Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 noted that Redox had advised a contribution was made to Council for the construction of an off- or on-ramp to the M5 motorway. The contribution was understood to be negotiated between the then Department of Infrastructure, Planning and Natural Resources (now DP&E) and Redox. No other contributions



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						have been made to Council since that time.
Site Access, Internal Roads and Parking						
4.9	The Applicant shall ensure all heavy vehicles access the site in a forward direction via the Holmes Road entrance and not via Swettenham Rd entrance. Not applicable during emergencies or as directed by relevant authority (including the police and emergency services).			✓	Compliant	Redox has implemented a Traffic Management Plan and a Traffic Management and Heavy Vehicle Requirements procedure (Procedure 3715) to minimise amenity impacts to the local community from heavy vehicle access to and exits from the site. The Plan and procedure specify heavy vehicle movement to be in a forward direction from Holmes Road into the site, and that four inspections per month will be undertaken to monitor the routes taken by the heavy vehicles comply with the designated routes when leaving the site. Redox provided Heavy Vehicle Routes audit results to Ramboll Environ showing that for most months 2-3 audits per month were undertaken (rather than the four noted in documentation). During the site visit, Ramboll Environ observed that all heavy vehicles entering the site did so via the Holmes Road entrance and moved in a forward direction.



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4.10	The Applicant shall develop and implement, in consultation with Council, a road hierarchy for heavy vehicles travelling to and from the site, with the Holmes Rd, Ben Lomond Rd, Airds Rd, Rose Payten Drive, Campbelltown Rd, and M5 Motorway forming the principal route to and from the site. The Applicant shall submit details of the road hierarchy for the approval of the Director-General prior to commencement of operations on the site.			✓	Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 noted this condition had been complied with. At the time, Redox had provided to Ramboll Environ in 2013 correspondence from the then Department of Planning (dated 21 May 2009) confirming approval of the road hierarchy from the Department and Campbelltown City Council. The Heavy Vehicle Route map shown on Redox's website shows the heavy vehicle road hierarchy to include travel on Holmes Road, Ben Lomond Road, Airds Road, Rose Payten Drive, Campbelltown Road and the M5/M31 motorway, as specified in this condition.
4.11	Prior to the commencement of operations, Redox shall submit for the Director-General's approval a Transport Code of Conduct for the development.			✓	Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010 or prior, as the last stage of construction occurred in 2008 with the nature of operations remaining the same since that time.
4.12	Prior to the commencement of any B-double transport to the site, Redox shall demonstrate to the satisfaction of the Director-General that the B-double reclassification of Holmes Road has been approved by the RTA in association with Council.			✓	Not Verified	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010 or prior, as the last stage of construction occurred in 2008 with the nature of operations remaining the same since that time.
4.13	The use of landscaping shall not affect driver sight distance for vehicles entering and exiting the site.		✓		Compliant	During the site walk over, the Auditor observed that on-site landscaping did not affect vehicle driver's sight distance.
4.14	Redox shall design and construct all internal road works, including assoc. parking facilities and loading bays:				Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 confirmed compliance with this condition: • Through discussions with site personnel that internal road works and parking infrastructure complied with RTA (now RMS) and Council standards and codes. The design
	(a) In accordance with the relevant RTA and Council standards & codes, and Australian Standards including AS2890.1-1993 and AS2890.2-1989;		✓			



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	(b) With clearly marked visitor, disabled, ambulance and service vehicle parking areas; and (c) With signage to demarcate all vehicle movements within the site.		✓			engineers Certificate confirmed the internal driveway and parking area gradients and levels complied with AS2890.1 and AS2890.2. During the 2013 site walkover, Ramboll Environ observed that parking areas were clearly marked for visitor, disabled, ambulance and service vehicle use, and signage was in place to indicate vehicle movements and directions within the site.
Road Works						
4.15	The Applicant shall ensure that the deceleration lane at Swettenham Rd entrance is designed in accordance with Council's <i>Specification for Construction of Subdivisional Road and Drainage Works</i> and that the land is constructed to the satisfaction of Council. The Applicant shall submit detailed engineering plans of the deceleration lane for the approval of Council prior to the commencement of any construction activities associated with Stage 1 of the development.		✓		Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 confirmed compliance with this condition: Through discussions with site personnel who indicated the deceleration lane at the Swettenham Road entrance and the lane were constructed to Council's satisfaction. The Certificate issued by the design engineers, Algorry Zappia & Associates was understood to also apply to this condition.
4.16	The Applicant shall ensure that a compensatory pedestrian footpath is designed and constructed to the satisfaction of Council. The footpath shall be within the site boundaries along the length of Swettenham Rd deceleration lane. This footpath shall be dedicated to Council as a Public Road prior to commencement of operations.		✓		Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2006 and/or 2010, as the last stage of construction occurred in 2008 with the nature of operations remaining the same since that time.

Noise Impacts

Construction Noise



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4.17	The Applicant shall ensure that all site preparation and construction activities associated with the development do not exceed the criteria at the nominated locations specified in Table 1. For the purpose of this condition, construction noise shall be determined at the locations under the conditions specified for operational noise, as provided in conditions 4.21 and 4.22 of this consent.		✓		Compliant	The last construction works undertaken at the site (for Stage 3) were completed at the end of 2008. The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 noted that site personnel advised at the time that there were no non-compliance issues associated with construction noise limits during preparation and construction activities. As part of the 2013 IEA, Ramboll Environ reviewed the noise assessment report undertaken during Stage 3 construction works (Minto Storage and Distribution Centre, Stage 3 Construction Noise Audit, 29 September 2008 by Acoustic Dynamics Pty Ltd) which reported that predicted noise emission levels at nearby residential receivers (including the New Generation Childcare Centre) were below the relevant noise criteria. In addition, Ramboll Environ was provided a copy of correspondence from the Department of Planning (now Department of Planning and Environment), dated 24 October 2008 that confirmed the Stage 3 Construction Noise Audit met the requirements of the consent condition 5.4 and construction noise was below the required criteria. For this IEA, Ramboll Environ has not re-checked compliance with this condition, based on the previous 2013 review findings.
4.18	The Applicant shall ensure that site preparation and construction activities associated with the development do not exceed 62 dB(A) _{(LAeq(15 minute))} at the New Generation Childcare Centre, 30 Swettenham Road, St Andrews, during normal operating hours and/or occupation of the Childcare Centre.		✓		Compliant	Refer item 4.17



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4.19	The Applicant shall only undertake noisy site preparation works and noisy construction activities (including transportation of fill and spoil) associated with the development, between the following hours: a) 7:00 am to 6:00 pm Mondays to Fridays, inclusive; b) 8:00 am to 1:00 pm on Saturdays; and c) At no time on Sundays or public holidays.		✓		Compliant	The last construction works undertaken at the site (for Stage 3) were completed at the end of 2008. The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 noted that site personnel advised at the time that preparation and construction activities were only undertaken during the hours specified in this condition. Ramboll Environ has not re-checked compliance with this condition, based on the previous 2013 review findings. Construction of the proposed Stage 4 has not yet occurred.
4.20	The hours of site preparation works and construction activities specified under condition 4.17 of this consent may be varied with the prior written approval of the Director-General. Any request to alter the hours of site preparation works or construction activities specified under condition 4.17 shall be: a) considered on a case-by-case basis; b) accompanied by details of the nature and need for activities to be conducted during the varied site preparation and construction hours; c) details of how potentially affected members of the community will be consulted and informed of the proposed varied site preparation and construction hours; and d) accompanied by written evidence of the EPA's agreement with the proposed variation in construction times, after providing any information necessary for the EPA to reasonably determine that activities undertaken during the varied construction hours will not adversely impact on the acoustic amenity of receptors in the vicinity of the site.		✓		N/A	There have been no site preparation or construction works since 2008.

Operational Noise



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4.21	The Applicant shall design, construct, operate and maintain the development to ensure that the noise contributions from the development to the background acoustic environment do not exceed the maximum allowable noise contributions specified in Table 2, at those locations and during those periods indicated. The maximum allowable noise contributions apply under: a) Wind speeds up to 3ms ⁻¹ (measured at 10 metres above ground level); or b) Temperature inversion conditions up to 3°C per 100 metres and wind speeds up to 2 ms ⁻¹ (measured at 10 metres above ground level).	✓			Compliant	The last construction works undertaken at the site (for Stage 3) were completed at the end of 2008. The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 noted that Redox had conducted a noise assessment in May 2009 (Minto Storage and Distribution Centre, Stage 3 Operational Noise Audit, 10 June 2009 by Acoustic Dynamics) after the construction of Stage 3, during normal operational times. The report indicated that noise contributions from the development were measured to be below the maximum allowable noise contributions specified in Table 2. Site personnel advised during this audit that: - No noise monitoring had been undertaken in the past three years and the Auditor has assumed that the last monitoring was conducted in May 2009 (as noted above). - There have been no complaints from neighbours in relation to noise. - The site activities have not changed significantly since the last noise monitoring was undertaken in 2009. Based on the above information and observations of the activities occurring during the site visit (e.g. no loud activities) Ramboll Environ considers the site to be compliant with this condition.

Measurement of Noise Impacts

4.22	Noise from the development shall be: a) Measured at the most affected point on or within the residential boundary to determine compliance with LAeq(15minute) noise limits; or b) Measured at 1 metre from the dwelling façade to determine compliance with LA1(1 minute) noise limits.	✓			Compliant	At the time of the 2013 IEA undertaken by Ramboll Environ, the Stage 3 Operational Noise Report by Acoustic Dynamics, 10 June 2009, indicated that noise contribution readings were taken at the locations specified by this condition.

Soil and Water Impacts



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4.23	Redox shall comply with section 120 of the <i>Protection of the Environment Operations Act 1997</i> , which prohibits the pollution of waters.	✓			Compliant	The paved areas surrounding the operational areas (i.e. of the chemical storage and distribution warehouses) direct on-site stormwater to three oil and silt arrestor (OSA) pits. These three OSA pits use stormwater isolation valves to manage the discharge of on-site stormwater to Bow Bowing Canal. The isolation valves are in a permanently closed position to prevent potentially contaminated stormwater from being released to the canal. These measures are considered by the Auditor to assist in preventing the pollution of waters. Observation: The Auditor notes that Redox has a procedure in place, as required under consent conditions 5.8 and 7.5 to monitor the quality of stormwater flows from the site. Since approximately early 2014, Redox has not conducted stormwater quality monitoring and testing (or submitted the required Annual Environmental Management Report (AEMR)) as required under the Stormwater Quality Monitoring program. Redox had queried the DP&E in June 2014 regarding the requirement to continue stormwater monitoring given the Clean Waters Act and Regulation (to which the condition refers to) were repealed in 1999 and to present date have not received confirmation from DP&E as to whether stormwater quality monitoring is still required and no communication regarding the lack of submission of the AEMR by Redox since 2013. Recommendations to resolve this issue immediately consult with the DP&E are made in item 7.5.
Soil, Contamination and Geotechnics						
4.24	The Applicant shall ensure that all materials displaced during site preparation and construction works are stabilised or relocated and made secure so that these materials will not detrimentally affect any watercourse or riparian area.		✓		Note	Ramboll Environ notes this condition is not applicable to the current operations and has excluded this condition from Ramboll Environ's scope of work.



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4.25	Prior to the commencement of any site preparation or construction work, Redox shall submit for the approval of the Director-General, a geo-technical assessment of the site.		✓		Note	Ramboll Environ notes this condition is not applicable to the current operations and has excluded this condition from Ramboll Environ's scope of work. The proposed Stage 4 development has not yet been constructed.
4.26	Prior to the commencement of any site preparation of construction work on the site, the Applicant shall submit for the approval of the Director-General, a contamination review of the site to confirm the presence, or otherwise of any contamination on the site, and to demonstrate that any contamination on the site is not inconsistent with the development. The contamination review shall be prepared by a suitably qualified person(s) and shall detail any additional measures that shall be implemented to address contamination, if identified, and if required.		✓		Note	The Auditor notes this condition is not applicable to the current operations and has excluded this condition from Ramboll Environ's scope of work. The proposed Stage 4 development has not yet been constructed.
4.27	Depending on the outcome of the investigations required by Condition 4.26, the Director-General may require Redox to prepare and implement a Soil Contamination Protocol.		✓		Note	The Auditor notes this condition is not applicable to the current operations and has excluded this condition from Ramboll Environ's scope of work. The proposed Stage 4 development has not yet been constructed.
Bow Bowing Canal and Riparian Zone						
4.28	The Applicant shall establish and maintain a riparian zone, consisting of local native plant species, in the area between the development and the watercourse within the property boundary. The zone shall be designed to ensure bed and bank stability of this area, and to prevent any sedimentation and water quality impacts on Bow Bowing Canal resulting		✓		Compliant	The riparian zone was established in early 2006 with local native species. Maintenance of the riparian is zone and other landscaped site areas is undertaken by Redox's Maintenance Officer. The Auditor observed during the site visit that the riparian zone contained mature native plants.



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	from the development. The riparian zone shall be designed and constructed to meet the requirements of the Department and shall be addressed as part of the Vegetation Construction Environmental Management Plan (condition 7.2(d) – should be 7.2(c)(v)).					
4.29	The Applicant shall maintain the riparian zone, as required by condition 4.28, for a period of at least two years after final planting. Every six months during that period the Applicant shall submit to the satisfaction of the Department, a status detailing the progress of implementation of the Vegetation Construction Environmental Management Plan (condition 7.2d).			✓	Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 noted that site personnel had advised that progress reports were submitted to the Department every six months during the two year period after final planting of the riparian zone. At the time of the 2013 audit, Ramboll Environ was provided copies of the Vegetation Management Report - Progress/ Status Reports for two of the four reporting periods (August 2006 and February 2007) during the two year period and copies of correspondence from the Department of Planning confirming receipt of reports for three of the four reporting periods (including the final progress report). The Department correspondence indicated the progress reports were approved as satisfying the requirements of this condition. Ramboll Environ has not re-checked compliance with this condition, based on the previous 2013 review findings.
4.30	The Applicant shall design and construct any stormwater outlet structure located within 40 metres of Bow Bowing Canal to ensure that the structure does not compromise the stability or function of the riparian zone. The design of any outlet structure within the riparian zone, including pipelines and spillways, shall be in accordance with the Departments guideline <i>Stormwater Outlet Structures to Streams</i> and shall be approved by the Director-General prior to the commencement of any construction works within the riparian zone.		✓		Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 noted that stormwater outlets from the site discharge directly to Bow Bowing Canal. There are no outlet structures discharging into the riparian zone. The Redox Operational Environmental Management Plan dated November 2011 (Revision 3) notes that there are two stormwater outlets draining to Bow Bowing Canal and that these were designed in accordance with Council's Standard Design Requirements SD88.



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	Amendment - The Applicant shall design and construct any stormwater outlet associated with the development for Bow Bowing Canal in accordance with Council's guideline Standard Design Requirements SD88 – Standard Main Channel Outlet Design.					
Waste Generation and Management						
4.31	The Applicant shall not receive waste at the site for storage, treatment, processing or reprocessing, and shall not dispose of waste generated by the development on the site, except as may be expressly permitted by an EP Licence for the development under the <i>Protection of the Environment Operations Act 1997</i> .			✓	Compliant	Site personnel advised that wastes from off-site sources are not received, stored or treated at the site. Wastes generated by the site are disposed off-site either to landfill or for recycling by waste contractors. During the site visit, Ramboll Environ did not observe any waste transporters delivering waste material to the site for storage, treatment or processing.
4.32	Except as provided by any EP Licences issued for the development, the Applicant shall ensure that only the following hazardous &/or industrial and/or Group A waste listed below are generated &/or stored at the site: i) Acidic solutions or acids in solid form; ii) Basic solution or bases in solid form; iii) Non-toxic salts; iv) Zinc compounds; v) Waste oil/water, hydrocarbons/water mixtures or emulsions; vi) Containers that are contaminated with residues of substances referred to in the National Environment Protection (Movement of Controlled			✓	Not verified	Redox does not currently have a readily available record (e.g. waste log) of all waste types generated and stored at the site (e.g. waste type, quantities). Information on waste disposed off-site must be collated from purchase orders issued to waste contractors for waste disposal, which are recorded in the Redebiz system. The Auditor was therefore not able to confirm whether the waste types, including waste quantities generated and stored at the site complied with this condition. However, the last waste log prepared in 2012 indicated that the total waste stored at any one time did not exceed the 50 tonnes limit. Redox personnel advised that between 2014 and 2016 the only waste types generated were non-dangerous and non-hazardous wastes. Observation: It is recommended that Redox prepare a waste log for all waste generated, stored and disposed, similar to Table 5.4 in the last Annual Environmental Management



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	Wastes between States and Territories) Measure list of hazardous, industrial and liquid waste codes; vii) Surface active agents (surfactants), containing principally organic constituents and which may contain metals and inorganic materials; viii) Boron compounds; ix) Cadmium, cadmium compounds; x) Chromium compounds (hexavalent and trivalent); xi) Cobalt compounds; xii) Copper compounds; xiii) Ethers; xiv) Phenols, phenol compounds including chlorophenols; xv) Phosphorus compounds excluding mineral phosphates; xvi) Selenium, selenium compounds; xvii) Waste chemical substances arising from research and development or teaching activities including those which are not identified and/or new and whose effects on human health and/or the environment are not known; xviii) Fire debris and fire washwaters; xix) Halogenated organic solvents; xx) Inorganic fluorine compounds excluding calcium fluoride; xxi) Inorganic sulphides; xxii) Isocyanate compounds; xxiii) Lead, lead compounds; xxiv) Nickel compounds; xxv) Organic phosphorous compounds;					Report dated December 2012 to maintain an easily available record of waste materials on site. The waste log should contain information such as the product name/waste description, dangerous goods class, waste code, waste quantity, waste contractor, disposal date.
4.33	The quantity of hazardous and/or Industrial and/or Group A waste generated at the site per year shall not exceed 100 tonnes.			✓	Not verified	Refer item 4.32. However, based on the waste log from 2012 the total quantity of hazardous and/or industrial and/or Group A waste generated per year did not exceed 100 tonnes.



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4.34	The quantity of hazardous and/or Industrial and/or Group A waste stored at the sit shall not exceed 50 tonnes at any one time.			✓	Compliant	Refer item 4.32. However, based on the waste log from 2012 the total quantity of hazardous and/or industrial and/or Group A waste stored at any one time did not exceed 50 tonnes.
4.34A	Amendment – Prior to the commencement of construction of the truck wash facility at the site, the Applicant shall consult with Sydney Water with respect to the design of the facility to ensure that discharges to the sewer from the development can meet any relevant standards set by Sydney Water. Prior to the operational use of the truck wash facility, the Applicant shall demonstrate to the Director-General that a Trade Waste Agreement has been entered into with Sydney Water for the discharge of wastewater generated by that facility.				Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 noted site personnel advised at the time that Sydney Water was consulted during the design of the truck wash facility. Ramboll Environ was also provided a copy of correspondence from the Department acknowledging that Sydney Water had approved in-principle the truck wash facility. Compliance with this condition is also supported by the issue of a Sydney Water Consent to Discharge Industrial Trade Wastewater (Consent No. 29981, issued 25 August 2010) and continued recent correspondence with Sydney Water (e.g. March 2016 regarding annual testing of backflow prevention containment device).

Air Quality Impacts

Odour

4.35	Redox shall design, construct, operate and maintain the development to prevent the emission of any offensive odour from the site that is attributable to the operation of the development.	✓			Compliant	It is assumed the development was designed and constructed to prevent the emission of offensive odours and that compliance with this requirement was audited previously following completion of Stages 1 to 3. Redox advised there have been no significant changes to the activities undertaken at site since the completion of Stage 3 in 2008. Redox has a procedure in place to manage the emission of offensive odours, which are likely to only occur through damaged packaging. Redox advised during the site visit that there have been no complaints regarding odour emissions since the 2013 audit.

Acetic Acid Scrubber



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4.36	The Applicant shall design, construct, commission and operate the acetic acid scrubber to ensure that the emissions from the scrubber meet the requirements specified in the Environment Protection Licence.	✓			Not triggered	The acetic acid scrubber has not yet been constructed (associated with the proposed Stage 4 development) therefore compliance with this condition cannot be assessed for this audit.
4.37	Prior to the commencement of decanting activities involving acetic acid on the site, the Applicant shall submit to the Director-General and the EPA the manufacturer's performance guarantee and the detailed final design of the acetic acid scrubber.			✓	Not triggered	Decanting activities involving acetic acid (associated with the proposed Stage 4 development) have not yet commenced. Site personnel advised there is currently no confirmed timeframe for when Stage 4 will be constructed.
Dust Emissions						
4.38	Redox shall design, construct, commission, operate and maintain the development in a manner that minimises dust emissions.	✓			Compliant	Given the nature of activities at the site (i.e. storage and distribution of packaged chemicals and raw materials, with no opening or decanting of materials) Ramboll Environ considers the likelihood of large quantities of dust being generated from spilled material or damaged packaging to be low. Redox has implemented a dust control management procedure (Procedure 3110) to minimise dust emissions from the site. Dust control measures include regular sweeping and vacuuming of warehouses (e.g. daily) and hardstand areas and internal driveways (e.g. weekly) and weekly inspections of warehouse and external hardstand areas for spilled materials and accumulated dust. During the site visit, Ramboll Environ observed that the site was maintained in a clean and tidy state and that a street sweeper was being used on the external hardstand areas.
Visual Amenity Impacts						
4.39	Redox shall prepare an external design panel indicating the proposed external design finishes, materials and configuration, in consultation with Council. The Applicant shall submit the design panel to the Director-General for approval prior to the commencement of the construction.		✓		No triggered	This condition is not applicable to the current operations as construction of the development was completed in 2008 and no further construction works have occurred since then.



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4.40	The Applicant shall ensure that all external lighting associated with the development is mounted, screened and directed in such a manner so as not to create a nuisance to surrounding properties or roadways. The lighting must be the minimum level of illumination necessary and shall comply with AS4282 (INT) 1995 Control of Obtrusive Effects of Outdoor Lighting.	✓			Compliant	At the time of the 2013 IEA undertaken by Ramboll Environ, site personnel had advised that external lighting present on the site was used primarily for security purposes, and not for operational activities. The external lighting was reported by site personnel at the time of the 2013 IEA to be compliant with AS4282. Site personnel advised that there have been no complaints from neighbours relating to lighting issues.
4.41	This consent does not permit the display of any advertisement, or the erection of any advertising structure on the site. This does not apply to any advertisement or structure that cannot be seen from the nearest public space, nor any signage specified elsewhere in this consent (refer condition 3.2).	✓			Compliant	During the visit the Auditor did not observe any advertisement signs at the site.
5	ENVIRONMENTAL MONITORING AND AUDITING					
5.1	Redox shall undertake all monitoring, including recording and reporting of monitoring results, as required under this consent, and as may be specified under an Environmental Protection Licence.	✓			Non-compliant (please refer to Action Plan table"	For the current operations, the site is required to undertake monitoring of operational noise, stormwater quality and air quality. The status of compliance with the monitoring requirements are: - Construction and operational noise - refer item 5.4 to 5.7. - Stormwater quality - refer item 5.8 and 7.5 where the Auditor has noted Redox are have not been conducting stormwater testing. It is recommended that Redox resolve with the DP&E as a priority whether continued stormwater testing is required. - Air quality associated with the acetic acid scrubber - refer item 5.9 to 5.11. The EPL requires monitoring and reporting of air emissions from the acetic acid scrubber only. As decanting activities and the acetic acid scrubber are not yet operational (or been constructed), there is no current requirement for air emissions



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		General	Construction	Operation		
						monitoring and reporting (to the EPA).
Transport Auditing						
5.2	Within 90 days of commissioning each stage of the development, and then as may be required by the Director-General, the Applicant shall commission an independent Transport Audit of the development. This Audit shall: a) Be undertaken by a suitably qualified and experienced person, approved by the Director General prior to the commencement of the Audit; b) Assess whether the heavy vehicles associated with the development are complying with the measures detailed in Traffic Management Plan (condition 7.5(b)) and as required by this consent; and c) If any non-compliance is detected, identify what additional measures will be implemented to ensure compliance.			✓	Compliant	The Independent Environmental Audit conducted by Ramboll Environ (formerly ENVIRON) in 2013 noted that Redox had provided a copy of correspondence from the then Department of Planning showing approval of the consultant used for the Transport Audit for Stage 3 (i.e. the last stage of development to have occurred on the site). In addition, Ramboll Environ's review of the Transport Audit report in 2013, noted that one recommendation was made by the consultant that had been addressed and closed out. For this audit, Ramboll Environ has not re-audited compliance with this condition based on the previous audit findings and that no further significant construction activities have occurred since 2008 (i.e. Stage 3).
5.3	Within 28 days of conducting the Audit (for 5.2), the Applicant shall provide the Director-General and Council with a copy of the audit report. If the Audit identifies any non-compliance with the Transport Management Plan or any Consent conditions, the Applicant shall detail what additional measures would be implemented to ensure compliance, indicating who would implement these measures, when by and how effectiveness of the measures would be measured & reported to the Director-General.			✓	Compliant	At the time of the 2013 IEA undertaken by Ramboll Environ, site personnel had advised that the Transport Audit report for Stage 3 had been submitted to the then Department of Planning within the required timeframe, and that an action plan for addressing the transport auditors recommendation had been provided to the Department and implemented. Refer item 5.2 above.



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			General	Construction	Operation		
Noise Monitoring and Auditing							
Construction Noise							
5.4	Within one month of commencement of construction activities associated with each stage development, the Applicant shall submit to the Director-General and the EPA a Construction Noise Audit to demonstrate compliance with the construction noise limits specified in conditions 4.17 & 4.18. The Audit shall be completed by a suitably qualified acoustic consultant, approved by the Director-General prior to commencement of the Audit. Should the Audit indicate that construction activities are above the set noise criteria, the report shall identify additional measures to be implemented to ensure compliance, indicating who would implement the measures, when by, and how the effectiveness of the Audit. Should the Audit indicate that construction activities are above the set noise criteria, the report shall identify additional measures to be implemented to ensure compliance, indicating who would implement the measures, when by, and how the effectiveness of the measures would be measured and reported to the Director-General.		✓		Compliant	At the time of the 2013 IEA undertaken by Ramboll Environ, site personnel had provided a copy of the last construction noise audit (for Stage 3) and correspondence from the then Department of Planning approving the consultant to be used, Acoustic Dynamics Pty Ltd, for the Construction Noise Audit for Stage 3. The Construction Noise Audit report (Minto Storage and Distribution Centre, Stage 3 Construction Noise Audit, 29 September 2008 by Acoustic Dynamics) noted that noise emission levels at the nearby receivers were below the relevant criteria and that no special noise mitigation measures were required for the Stage 3 construction works. For this audit, Ramboll Environ has not re-checked compliance with this condition based on the previous audit findings and that no further significant construction activities have occurred since 2008 (i.e. Stage 3).	
5.5	Redox may seek the Director-General's approval, in consultation with the EPA, to dispense with the requirement to undertake a Construction Noise Audit for stage 2, 3 and/or 4 of the development.		✓		Not triggered	Stage 4 of the development has not yet been constructed and Redox has not sought dispensation for this condition.	
Operational Noise							
5.6	Within 90 days of the commencement of operation of each stage of the development, Redox shall conduct an Operational Noise Audit of its operations.			✓	Compliant	The site is currently operating Stage 3 (of 4) of the development. As noted for the Independent Environmental Audit conducted by Ramboll Environ in 2013, an operational noise audit was undertaken in May 2009 (Redox Pty Ltd – Minto Storage and Distribution Centre, Stage 3 Operational	



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						Noise Audit, 10 June 2009, by Acoustic Dynamics). At the time of the 2013 IEA, Ramboll Environ reviewed the audit report which concluded that the site operations complied with the relevant noise criteria and that no additional noise mitigation measures were required for the operation of Stage 3. In addition, Redox advised that correspondence from the Department approving the consultant to be used for the operational noise audit was not available. However, as the consultant, Acoustic Dynamics Pty Ltd, was previously approved for the construction noise audit in 2008, Ramboll Environ had assumed approval would have been granted as a suitably qualified and experienced person. For this audit, Ramboll Environ has not re-checked compliance with this condition based on the previous audit findings and that no further significant construction activities have occurred since 2008 (i.e. Stage 3).
5.7	Within 28 days of conducting the Audit, Redox shall provide the Director-General and EPA with a copy of the Noise Audit report.			✓	Compliant	At the time of the 2013 IEA undertaken by Ramboll Environ, site personnel provided a copy of the Operational Noise Audit report for the operation of Stage 3 (prepared in June 2009), and were informed that the audit report was submitted to the Department, although no record was available to confirm this. Ramboll Environ has assumed that Redox had submitted the audit report to the Department and complied with this condition based on Redox's responsive to other historical DP&E requests associated with the development.
Stormwater Quality Monitoring						
5.8	Prior to commencement of operations, the Applicant shall submit for the approval of the Director-General, in consultation with Council, a Stormwater Quality Monitoring Program. The Program shall form part of the Stormwater Operational Environmental Management Plan (per condition 7.5(c)). The Program shall include, but not limited to: a) Identification of contaminants to be tested, including those required under the Clean Water			✓	Compliant	The Stormwater Quality Monitoring Program (i.e. Procedure 3405 Water Release from Retention Basin) is referenced in the site's Stormwater Management Plan within the Operational Environmental Management Plan. At the time of the 2013 IEA undertaken by Ramboll Environ, site personnel advised the Director-General had approved the Stormwater Quality Monitoring Program, and had provided a copy of the correspondence from the Department approving the OEMP (which contains the Stormwater Monitoring Plan). Ramboll Environ has not re-checked compliance with this



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	Regulation (Class R classification) b) Monitoring frequencies c) Methodologies for stormwater quality monitoring The Stormwater Quality Monitoring Program shall be submitted to Director-General for approval prior to commencement of operations.					condition based on the previous review findings. Ramboll Environ notes that the latest version of the Operational Environmental Management Plan (Rev 3, November 2011) refers to Procedure 3405 as the 'Stormwater Monitoring and Release' however, the title of this procedure is 'Water Release from Retention Basin'. Observation: It is recommended that Redox review the OEMP to ensure the document content correctly reflects the situation at the site and is correctly aligned with/referenced to information in related documents.
Air Quality Monitoring and Auditing						
Acetic Acid Scrubber						
5.9	The Applicant shall periodically determine the pollutant concentrations discharged from the acetic acid scrubber, per performance guarantee in condition 4.37 and at the frequency in Table 3. All monitoring carried out in accordance with Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (NSW EPA 2001). Table 3 – Pollutant and Parameter Monitoring (Air)				✓	Not triggered
	Pollutant	Units of Measures	Frequency	Method		
	Acetic Acid	mg/m3	Quarterly	As determined by the EPA		
5.10	Within 90 days of commencing acetic acid decanting activities at the site ... Redox shall conduct an Air Quality Audit of its operations to confirm the air emission performance of the acetic acid scrubber.				✓	Not triggered
5.11	Within 28 days of conducting the Audit referred to under condition 5.10 of this consent, Redox shall provide the Director-General and EPA with a copy of the Air Quality Audit report.				✓	Not triggered



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			General	Construction	Operation		
Independent Hazard Auditing							
5.12	Twelve months after the commencement of operation of Stage 1 of the development ... Redox shall commission an independent, qualified person or team to undertake a Hazard Audit of the development. Further Hazard Audits shall be undertaken every three years or within 12 months of commissioning Stages 2, 3 and 4 of the development.			✓	Compliant	Site personnel advised that Independent Hazard Audits have been undertaken for the site in 2006 and 2010. Ramboll Environ (formerly ENVIRON) conducted the Independent Environmental Audit in 2013 and were provided at the time, copies of correspondence with the Department confirming that the 2006 and 2010 IHAs had been undertaken. In 2013, the IEA was undertaken by Moore Management and Ramboll Environ had sighted the Department's approval of this consultant to conduct the audit. Ramboll Environ has not re-checked compliance with this condition based on the previous audit findings. Ramboll Environ is currently undertaking the IHA for the site, and has been approved by the DP&E to conduct the audit. Ramboll Environ notes that a 2015 DP&E Hazard Compliance Audit (Exec Summary) report makes a recommendation that the frequency of independent hazard audits be increased to annually until Redox can demonstrate the satisfactory commitment to implementing the recommendations of both the ongoing independent hazard audits and the recommendations arising from the Department's 2013-2015 Potentially Hazardous Industries compliance audit campaign. Ramboll Environ discussed this recommendation with Redox and were advised that no further communications with DP&E have been held or received regarding an annual audit requirement.	
Independent Environmental Auditing							
5.13	Twelve months after the commencement of operation of each stage of the development, and every three years thereafter, Redox shall commission an independent, qualified person or team to undertake an Environmental Audit of the development.			✓	Compliant	Site personnel advised that Independent Environmental Audits have been undertaken for the site in 2006 and 2010. Ramboll Environ (formerly ENVIRON) conducted the IEA in November/December 2013 and were provided at the time, copies of correspondence with the Department confirming that the 2006 and 2010 audits had been undertaken. Ramboll Environ has not re-checked compliance with this condition based on the previous audit findings.	



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		General	Construction	Operation		
						Ramboll Environ is currently undertaking the IEA for the site, which is within the three yearly audit timeframe, and has been approved by the DP&E to conduct the audit.
5	ENVIRONMENTAL MONITORING AND AUDITING					
6.1	Subject to confidentiality, Redox shall make all documents required under this consent available for public inspection on request.	✓			Compliant	Redox subscribes to the Plastics and Chemical Industries Association (PACIA) Community Right to Know code of conduct and has in place a Community Right to Know procedure (Procedure 3104) that commits to providing information to the community on activities, products and health, safety and environmental performance, amongst other information and listening and responding to their concerns. On the Redox website information is available for example on emergency response, processes for: risk identification and management, waste management, environmental licences, transport/heavy vehicle routes.
Complaints Procedure						
6.2	Prior to the commencement of construction of the development, Redox shall ensure that the following are available: (a) a 24-hour, toll-free telephone number on which complaints about the development may be registered; (b) a postal address to which written complaints may be sent; and (c) an email address to which complaints may be transmitted.		✓ ✓ ✓		Compliant	At the time of the 2013 IEA undertaken by Ramboll Environ, site personnel advised that a 24-hour toll free telephone number, a postal address and email address were available during construction of the development for registering complaints. Ramboll Environ notes that the current Redox website has provided a postal address, a toll free telephone number (within and outside Australia) and an on-line contact form for registering complaints associated with the operations.



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		General	Construction	Operation		
	The telephone number, postal address and email address shall be advertised on at least one occasion prior to the commencement of construction of each stage of the development, through a medium approved by the Director-General.		✓			
6.3	Redox shall record details of all complaints received ... in an up-to-date Complaints Register. The Complaints Register shall be made available upon request.	✓			Compliant	Complaints would be recorded on either an Incident Report form or a Pollution Incident Response Management Plan (PIRMP) Notification form (e.g. for pollution incidents) depending on the nature of the complaint. The complaint would then be entered as a Quality Problem (QP) within the Redebiz system, where the details a) to f) would be recorded, mostly within the general text box. To produce a summary log of all complaints in Redebiz would require the user to search under specific categories depending on the nature of the complaint, and appears to require the user to have some prior knowledge of the complaint to ensure the correct category is searched. There is no one specific category for complaints. Ramboll Environ were advised by site personnel that there have been no complaints between 2014 and 2016. Observation: Whilst it is recognised that Redox has received no complaints in the past few years, it is recommended that the Redebiz system be modified to allow a 'complaint' category to be included so that complaints can be easily classified within this group and allow for easier searching and reporting of complaints.
Community Communication Strategy						
6.4	Prior to the commencement of operations at the site, Redox shall prepare and implement a Community Communication Strategy for the development. The Strategy shall be approved by the Director-General prior to the commencement of any operations on the site.			✓	Compliant	At the time of the 2013 IEA undertaken by Ramboll Environ, site personnel provided documentation confirming the Director-General's approval of the Community Communication Strategy. Ramboll has not re-checked compliance with this condition based on the previous audit findings. Redox has in place a Community Right to Know procedure (Procedure 3104 that addresses requirements a) to c).



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			General	Construction	Operation		
7		ENVIRONMENTAL MANAGEMENT					
Environmental Representative							
7.1	Prior to the commencement of construction of the development, Redox shall notify the Director-General of the name and contact details of a suitably qualified and experienced Environmental Representative, and any changes to that appointment that may occur from time to time.		✓			Compliant	At the time of the 2013 IEA undertaken by Ramboll Environ, site personnel advised that during construction, commissioning and operation of the development, an Environmental Representative was and continues to be employed on a full-time basis. The current Environmental Representative has the responsibilities noted in this condition and Redox has advised the DP&E of the Environmental Representative's contact details.
Construction Environmental Management Plan							
7.2	Redox shall prepare and implement a Construction Environmental Management Plan to outline environmental management practices to be followed during site preparation and construction activities during each stage of the development.			✓		Not verified	This condition is not applicable to the current operations as construction of the development was completed in 2008 and no further construction works have occurred since then. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010.
	The plan shall be submitted for the approval of the Director-General no later than one month prior to the commencement of any site preparation and construction works associated with the development.			✓			
	Preparation and construction works associated with any stage of the development shall not commence until written approval has been received from the Director-General.			✓		Noted	
7.3	As part of the Construction Environmental Management Plan for the development, Redox shall prepare and implement the following Management Plans:			✓		Not verified	This condition is not applicable to the current operations as construction of the development was completed in 2008 and no further construction works have occurred since then. It is assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010.
	(a) Noise Management Plan						



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	(b) Transport Management Plan (c) Erosion and Sediment Management Plan (d) Vegetation Management Plan		✓ ✓ ✓			
Operation Environmental Management Plan						
7.4	The Applicant shall prepare and implement an Operational Environmental Management Plan to detail an environmental management framework, practices and procedures to be followed during the operation of the development. The Plan shall include, but not necessarily limited to: i) Identification of all statutory & other obligations required to fulfil in relation to operation of phase 1 of the development, including all consents, licences, approvals and consultations ii) A description of the roles and responsibilities for all relevant employees involved in the operation of the development iii) Overall environmental policies and principles to be applied to be applied to the operation of the development iv) Standards and performance measures to be applied to the development, and a means by which environmental performance can be periodically reviewed and improved, where appropriate v) Management policies to ensure that environmental performance goals are met and to comply with the conditions of this			✓	Non-compliant (refer to Action Plan table)	Redox has prepared and implemented an Operational Environmental Management Plan (OEMP) (Rev 3, November 2011) that considers the requirements i) to vii) of this condition. At the time of the 2013 IEA undertaken by Ramboll Environ had been provided a copy of correspondence from the Department approving the OEMP. Ramboll Environ had also recommended that the OEMP could be improved by including other environmental obligations/approvals that apply to the site, other than just the development consent and Environment Protection Licence. These other obligations/approvals include the Sydney Water Consent to Discharge Industrial Trade Wastewater and the SafeWork NSW Notification of Hazardous Chemicals on Premises. Ramboll Environ's review of the OEMP indicates that this recommendation has not been implemented (as noted by the same revision number and document date). This recommendation still applies for the current audit (i.e. the OEMP should include mention of other environmental obligations and approvals such as the Trade Wastewater Consent and Notification of Hazardous Chemicals on Premises).



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	consent vi) The Management Plans listed under Condition 7.5 of this consent vii) The environmental monitoring requirements under conditions 5.8 (stormwater quality monitoring) and 5.9 (pollutant concentrations at acetic acid scrubber) of this consent, inclusive. The Plan shall be submitted for the approval of the Director-General no later than one month prior to commencement of operation of stage 1, or such period agreed by the Director-General. Operation shall not commence until written approval received from Director-General.					
7.5	As part of the Operational Environmental Management Plan for the development, required under condition 7.4 of this consent, the Applicant shall prepare and implement the following Management Plans: a) A Noise Management Plan to outline measures to manage noise impacts associated with the operation of the development. The Plan shall be submitted to the EPA and address the requirements of Council. The Plan shall include, but not necessarily limited to: i) Identification of the potential sources of			✓	Non-Compliant (refer to Action Plan Act)	The OEMP contains each of the Management Plans a) to e) listed in this condition. At the time of the 2013 IEA undertaken by Ramboll Environ, site personnel provided a copy of correspondence from the Department approving the prepared OEMP (and the Management Plans) and acknowledging that Campbelltown City Council and the then Department of Environment and Conservation (i.e. EPA) had been consulted with respect to the OEMP. Ramboll Environ has not re-checked compliance with this part of the condition for this audit based on the previous audit findings. During the site walk over and review of documentation, Ramboll Environ considers the Management Plans are generally being implemented as supported by the following observations:



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	noise during the site operations; ii) Specification of the noise criteria for these operations; iii) A detailed description of what actions and measures would be implemented to ensure that operations would comply with specified noise criteria; iv) A description of how the effectiveness of actions and measures would be monitored over time; and v) If any non-compliance is detected what procedures would be followed to ensure compliance. b) A Transport Management Plan to outline measures to ensure minimal amenity impacts on the locality through appropriate management of heavy vehicles accessing and departing the development. The Plan shall be submitted to the EPA and prepared in consultation with Council. The Plan shall include, but not necessarily limited to: i) Details of measures that would be implemented to minimise noise and amenity impacts on residential areas resulting from heavy vehicle movements, including those required by condition 4.9 and condition 4.12; ii) Consideration of all possibilities for					- There were no activities that generated excessive levels of noise - Traffic movement within the site generally followed traffic signage - Regular inspections of the routes taken by heavy vehicles leaving the site were conducted to ensure local amenity was not impacted - Landscaped areas appeared maintained with no overgrown plantings Ramboll Environ notes aspects of the Stormwater Management Plan and Waste Management Plan are not being implemented: - Stormwater quality monitoring, prior to release to Bow Bowling Canal, has not been conducted since at least mid-2014. Redox had sent a query to the DP&E in mid-2014 as to this requirement given the Clean Waters Regulation 1972 was repealed in 1999 and this legislation was considered by Redox to no longer be relevant. Since that time Redox has made subsequent follow up communication to the DP&E seeking a response but to date has not received confirmation whether continued stormwater quality monitoring is required. It is recommended that Redox resolve this issue with the DP&E as a priority. The Auditor notes that Redox is required to demonstrate compliance with Section 120 of the Protection of the Environment Operations Act 1997 NSW in relation to pollution of waters. The Waste Management Plan notes a waste log is maintained



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	reducing the required daily heavy vehicle movements and movements during peak or night-time periods; iii) Procedures for monitoring the effectiveness and suitability of these measures, particularly the periodic and random monitoring of heavy vehicle routes; and iv) Details of additional measures that would be implemented should a non-compliance be detected. c) A Stormwater Management Plan to outline measures to mitigate impacts of stormwater run-off from and within the premises. The Plan shall be submitted to the EPA, and prepared in consultation with Council. The Plan shall include, but not necessarily limited to: i) Details of all relevant stormwater control infrastructure and how that infrastructure minimise stormwater peak flows and peak pollutant concentrations; ii) Procedures for the installation and maintenance of gross pollutant traps to screen stormwater from the site; iii) A demonstration of consistency with the stormwater management plan for the catchment and any relevant stormwater guidelines prepared by Council;					to record waste types, quantities, and disposal methods for all waste streams to better manage waste minimisation. Redox advised this waste log has not been maintained as Redox has not submitted an AEMR to the DP&E since late 2013 (where a summary of the waste log is included). It is noted though that this waste information can be extracted from the Redebiz system. Observation: As noted for item 4.32, it is recommended that Redox consider preparing a waste log for all waste generated, stored and disposed, similar to Table 5.4 in the last Annual Environmental Management Report dated December 2012 to maintain an easily available record of waste materials on site. If possible, the Redebiz system could be programmed to produce a summary waste report that contains information such as the product name/waste description, dangerous goods class, waste code, waste quantity, waste contractor, disposal date.



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	iv) Amendment - Details of the monitoring program, as required by condition 5.8, to monitor stormwater flows from the site to meet discharge requirements for Class R (Restricted) Waters under <i>the Clean Waters Regulations</i>; and v) Details of contingency measures that would be followed to ensure the protection of Bow Bowing Canal, should an accident or emergency occur at the site. d) A Waste Management Plan to outline measures to ensure the appropriate handling, storage & disposal of wastes generated during operations at site. The Plan shall be prepared in consultation with Council, and shall include, but not necessarily limited to: i) Identification of the types and quantities of waste that would be generated during operations, and the areas in which waste will be stored prior to removal; ii) Standards and performance measures for dealing with this waste; iii) A detailed description of how this waste would be reused, recycled and, if necessary, appropriately treated and disposed of in accordance with the EPA's guidelines on the <i>Assessment, Classification and Management of Liquid</i>					



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	<i>and Non-Liquid Waste;</i> iv) A description of how the effectiveness of these actions and measures would be monitored over time; and v) A description of what procedures would be followed to ensure compliance if any non-conformance is detected. e) A Landscape Management Plan to outline measures to ensure appropriate development and maintenance of landscaping on the site. The Plan shall include, but not necessarily limited to: i) Details of all landscaping to be undertaken on the site with specific reference to revegetation along the riparian zone (condition 4.28); ii) Maximisation of flora species endemic to the locality in landscaping the site; iii) A program to ensure that all landscaped areas on the site are maintained in a tidy, healthy state.			✓ ✓ ✓ ✓		



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	7.6	At least one month prior to the operation of Stage 2, Stage 3 and Stage 4 of the development, Redox shall update and submit for the approval of the Director-General, the Operation Environmental Management Plan. Operation of Stage 2, Stage 3 and Stage 4 shall not commence until the Director-General has approved the updated Plans.			✓	Compliant	As noted in item 7.5, Ramboll Environ was advised by site personnel during the 2013 IEA, that the Director-General's approval for the OEMP was obtained (for Stages 1 to 3). For this audit, Ramboll Environ has not re-checked compliance with condition based on the previous audit findings.
8		ENVIRONMENTAL REPORTING					
Incident Reporting							
	8.1	Redox shall notify the EPA and the Director-General of any incident with actual or potential significant off-site impacts on people or the biophysical environment as soon as practicable after the occurrence of the incident.	✓			Not triggered	Site personnel advised there have been no incidents with off-site impacts between 2014 and 2016 requiring notification to the EPA and Director-General. Ramboll Environ's review of the incident register (between 2014 and 2016) showed one to seven incidents per year with approximately half related to injuries and no significant environmental issues reported.
		The Applicant shall provide written details of the incident to the EPA and the Director-General within seven days of the date on which the incident occurred.					
	8.2	Redox shall meet the requirements of the Director-General to address the cause or impact of any incident, as it relates to this consent, reported in accordance with 8.1, within such period as the Director-General may require.	✓			N/A	Refer item 8.1
Annual Performance Reporting							
	8.3	The Applicant shall, throughout the life of the development, prepare & submit for the approval of the Director-General, an Annual Environmental Management Report (AEMR). The AEMR shall review the performance of the development against the Operation Environmental Management Plan (refer to condition 7.4 of this consent), the	✓			Non-Compliant (Refer to Action Plan Table)	2012. Redox advised that the AEMR for 2013 was completed however not submitted at the time due to Redox identifying the repealed Clean Waters Regulation 1972 and subsequent queries to the DP&E in 2014 as to whether continued stormwater quality monitoring was required (with subsequent reporting of stormwater testing results included in the AEMR). This query remains open as no response has been



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	conditions of this consent and other licences and approvals relating to this development. The AEMR shall include, but not necessarily be limited to: a) Details of compliance with the conditions of this consent; b) A copy of the Complaints Register (refer to condition 6.3 of this consent) for the preceding twelve-month period (exclusive of personal details), and details of how these complaints were addressed and resolved; c) A comparison of the environmental impacts and performance of the development against the environmental impacts and performance predicted in those documents listed under condition 1.2 of this consent; d) Results of all environmental monitoring required under this consent and other approvals, including interpretations and discussion by a suitably qualified person; and e) A list of all occasions in the preceding twelve month period when environmental performance goals for the development have not been achieved, indicating the reason for failure to meet the goals and the action taken to prevent recurrence of that type of incident. The Applicant shall submit a copy of the AEMR to the Director-General every year, with the first AEMR to be submitted no later than twelve months after the commencement of operation. The Director-General may require the Applicant to address certain matters in relation the environmental performance of the development in response to review of the Annual Environmental Report. Any action required					received from the DP&E to confirm that stormwater quality monitoring is still required or to acknowledge that Redox has not submitted an AEMR since 2013. Due to the lack of response from the DP&E, Redox has subsequently not undertaken stormwater quality monitoring and has not prepared its AEMR. As noted in item 7.5, It is recommended that Redox continue the preparation and submission of the Annual Environmental Management Report (AEMR) to ensure continuing compliance with this condition, and make reference in the AEMR to the queries/correspondence made regarding the stormwater quality monitoring requirements.



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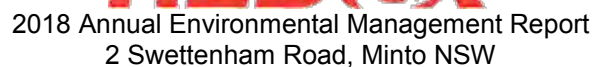
Consent Condition	Compliance Requirements	Requirement			Status	Findings
		General	Construction	Operation		
	shall be completed within such period as the Director-General may require.					

2.2 Compliance with Environmental Protection Licence 12041, Licence version date: 21/12/2012

Table 2.2: Compliance with EPL 12041

Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence								
		Gen.	Con.	Op.											
1	ADMINISTRATIVE CONDITIONS														
A1	What the licence authorises and regulates														
A1.1	N/A					N/A									
A1.2	This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation. Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.					Not verified	According to the Dangerous Goods manifest (on 15 December 2016), the total quantities of hazardous materials stored at the site on that day and the quantities noted on the Hazardous Materials Notification are shown in the table below. Assuming the weight of the materials stored (i.e. in kg) is approximately the equivalent of the volume of the material (i.e. in L), the total quantity of materials stored on site was approximately 937.5 kL. This total quantity is below the maximum allowable quantity of 5,000 kL.								
							<table><tr><th rowspan="2">Class / Division</th><th colspan="2">Quantity Stored</th><th rowspan="2">Within Maximum Storage Capacity of</th></tr><tr><th>Kg</th><th>Litres</th></tr></table>			Class / Division	Quantity Stored		Within Maximum Storage Capacity of	Kg	Litres
Class / Division	Quantity Stored		Within Maximum Storage Capacity of												
	Kg	Litres													

Class / Division	Quantity Stored		Within Maximum Storage Capacity of
	Kg	Litres	



At the time of the site visit, Redox did not have a readily available record (e.g. waste log) of all waste types generated and stored at the site (e.g. waste type, quantities). Information on waste disposed off-site must be collated from purchase orders issued to waste contractors for waste disposal, which are recorded in the Redebiz system. The Auditor was therefore not able to confirm whether the waste types, including waste quantities generated and stored at the site complied with this condition. However, the last waste log prepared in 2012 indicated that the total waste stored at any one time did not exceed the 50 tonnes limit, and it is considered by the Auditor that this limit is unlikely to be exceeded.

Observation: It is recommended that Redox consider preparing a waste log for all waste generated, stored and disposed, similar to Table 5.4 in the last Annual Environmental Management Report dated December 2012 to maintain an easily available record of waste materials on site. If possible, the Redebiz system could be programmed to produce a summary waste report that contains information such as the product name/waste description, dangerous goods class,



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	Fee Based Activity: Scale General chemicals storage: 0-5000 kL of active storage capacity. Chemical storage waste generation: >5-100 T.			✓ ✓	Procedure 3801 – Warehouse Limitations. Procedure 3402 – Waste Management & Disposal.		waste code, waste quantity, waste contractor, disposal date.
A2	Premises to which this licence applies						
A2.1	Premises details.	✓				Noted	
A3	Other activities						
A3.1	N/A					N/A	
A4	Information supplied to the EPA						
2	DISCHARGES TO AIR & WATER & APPLICATIONS TO LAND						
P1	Location of Monitoring/Discharge Points and Areas						



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					Gen.	Con.	Op.			
P1.1	The following points referred to in the table are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.									
	Air									
	EPA ID.	Type of Monitoring Point	Type of Discharge Point	Location			✓		Not triggered	As decanting activities and the acetic acid scrubber are not yet operational (or been constructed as part of the proposed Stage 4 development), there is no current requirement for air emission monitoring.
	1	Discharge to air Air emissions monitoring	Discharge to air Air emissions monitoring	Acetic Acid Scrubber "Area A"						
P1.2	N/A								N/A	
P1.3	N/A								N/A	
3	LIMIT CONDITIONS									
L1	Pollution of Waters									
L1.1	Pollution of Waters - Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.				✓			OEMP; Procedure 3405 – Water Release from Retention Basin.	Compliant	The paved areas surrounding the operational areas (i.e. of the chemical storage and distribution warehouses) direct on-site stormwater to three oil and silt arrestor (OSA) pits. These three OSA pits use stormwater isolation valves to manage the discharge of on-site stormwater to Bow Bowing Canal. The isolation valves are in a permanently closed position to prevent potentially contaminated stormwater from being released to the canal. These measures are considered by the Auditor to assist in preventing the pollution of waters. Observation: The Auditor notes that Redox has a procedure in place, as required under consent conditions 5.8 and 7.5 to monitor the quality of stormwater flows from the site. Since approximately early 2014, Redox has not conducted stormwater quality monitoring and testing (or submitted the



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							required Annual Environmental Management Report (AEMR)) as required under the Stormwater Quality Monitoring program. Redox had queried the DP&E in June 2014 regarding the requirement to continue stormwater monitoring given the Clean Waters Act and Regulation (to which the condition refers to) were repealed in 1999 and to present date have not received confirmation from DP&E as to whether stormwater quality monitoring is still required and no communication regarding the lack of submission of the AEMR by Redox since 2013. Trade waste water generated at the site is discharged under a Sydney Water Consent to Discharge Industrial Trade Wastewater. Trade wastewater is discharged to sewer.
	Load Limits						
L2	Waste – The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled “Waste” and meeting the definition, if any, in the column titled “Description” in the table below. Note: Refer to EPL for Table.					Compliant	Site personnel advised that waste from off-site sources are not received at the site. During the site visit, the Auditor did not observe significant quantities of stored waste materials or waste types that would be considered unusual for the site activities.
L3	Concentration Limits						



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		Gen.	Con.	Op.																												
L3.1	Noise Limits – Noise from the premises must not exceed the sound pressure level (noise) limits at the nominated receiver locations in the below table. <table><thead><tr><th>ocation</th><th>Day</th><th>Evening</th><th>Night</th><th>Night</th></tr></thead><tbody><tr><td></td><td>LAeq(15 minute)</td><td>LAeq(15 minute)</td><td>LAeq(15 minute)</td><td>LA1(1 minute)</td></tr><tr><td>St Andrews Residences</td><td>36</td><td>36</td><td>36</td><td>50</td></tr><tr><td>Minto Residences</td><td>36</td><td>36</td><td>36</td><td>50</td></tr><tr><td>Child Care Centre (30 Swettenham Road)</td><td>44</td><td>N/A</td><td>N/A</td><td>N/A</td></tr></tbody></table>	ocation	Day	Evening	Night	Night		LAeq(15 minute)	LAeq(15 minute)	LAeq(15 minute)	LA1(1 minute)	St Andrews Residences	36	36	36	50	Minto Residences	36	36	36	50	Child Care Centre (30 Swettenham Road)	44	N/A	N/A	N/A					Compliant	As noted for the Independent Environmental Audit conducted by Ramboll Environ in 2013, an operational noise audit was undertaken in May 2009 (Redox Pty Ltd – Minto Storage and Distribution Centre, Stage 3 Operational Noise Audit, 10 June 2009, by Acoustic Dynamics). At the time of the 2013 IEA, Ramboll Environ reviewed the audit report which concluded that the site operations complied with the relevant noise criteria and that no additional noise mitigation measures were required for the operation of Stage 3. For this audit, Ramboll Environ has not re-checked compliance with this condition based on the previous audit findings and that no further significant construction activities have occurred since 2008 (i.e. Stage 3).
ocation	Day	Evening	Night	Night																												
	LAeq(15 minute)	LAeq(15 minute)	LAeq(15 minute)	LA1(1 minute)																												
St Andrews Residences	36	36	36	50																												
Minto Residences	36	36	36	50																												
Child Care Centre (30 Swettenham Road)	44	N/A	N/A	N/A																												
L3.2	Noise from the premises is to be measured at the most affected point on or within the residential boundary to determine compliance with the LAeq (15 minute) noise limits in L3.1.					Compliant	Refer item L3.1																									
L3.3						Compliant	Refer item L3.1																									
L4	Volume and Mass Limits																															



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
L4.1	Potentially offensive odour - No condition of this licence identifies a potentially offensive odour for the purposes of section 129 of the Protection of the Environment Operations Act 1997. Section 129 of the POEO Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour. Confirm whether any potentially offensive odour has been emitted and if any complaints received.					Compliant	Redox has a procedure in place to manage the emission of offensive odours, which are likely to only occur through damaged packaging. Redox advised during the site visit that there have been no complaints regarding odour emissions since the 2013 audit.
L5	Waste						
L5.1	Polychlorinated Biphenyls (PCBs) – the licensee must comply with the conditions as specified in this licence or where no specific conditions are outlined in this licence, the licensee must comply with the “Chemical Control Order in Relation to Materials and Waste Containing Polychlorinated Biphenyl, 1997.”			✓	Waste Management Plan (OEMP); Procedure 3402 – Waste Management & Disposal.	Note	The development was initially constructed in 2005 and given the age of the development Ramboll Environ considers it unlikely that PCB materials would be present on the site.
4	Operating Conditions						
O1	Activities must be carried out in a competent manner						
O1.1	Licensed activities must be carried out in a competent manner. This includes: (a) the processing, handling, movement & storage of materials and substances; and (b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.			✓ ✓	Procedure 3009 – Handling, Storage, Packing, Pres. & Del. Procedure 3402 – Waste Management & Disposal.	Compliant	Redox has an environmental management system (EMS) in place comprising management plans, processes and procedures to manage risks to the environment. Procedures (e.g. spill management, hazardous materials handling and storage, stormwater management) were observed by the Auditor to be prepared and being followed, to the



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							extent observations could be made at the time of the site visit. A dedicated resource has been assigned responsibility for environmental management although in practice it is a shared role amongst two primary employees (i.e. Regulatory Affairs Coordinator, Quality Assurance Manager). The EMS and environmental management practices seemed appropriate to the nature of the operations.
O2	Maintenance of Plant and Equipment						
O2.1	All plant and equipment installed at the premises or used in connection with the licensed activity: (a) must be maintained in a proper and efficient condition; & (b) must be operated in a proper and efficient manner.			✓ ✓	Procedure 3901 – Equipment Service. Equipment Procedures: 3902, 3903, 3904, 3906, 3917, 3918, 3919.	Compliant	The main maintenance activities on site related to minor repairs of building fixtures and maintenance of the landscaped/ grassed areas. Redox does not have a dedicated maintenance department although does employ one permanent employee to carry out the noted minor maintenance activities. Regular servicing or repair of larger equipment (e.g. self-opening/closing roller doors at Store entrances, forklifts, storage racking, fire protection system) is conducted by specialist contractors on a regular maintenance schedule. During the site walk over, the Auditor observed that plant and equipment was maintained and appeared in good condition. Ramboll Environ did not audit the maintenance program.
O3	Emergency Response						



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O3.1	The licensee must maintain, and implement as necessary, a current emergency response plan for the premises. The licensee must keep the emergency response plan on the premises at all times. The emergency response plan must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment. If a current emergency response plan does not exist at the date on which this condition is attached to the licence, the licensee must develop an emergency response plan within three months of that date.	✓			Procedure 3403 – Emergency Procedure.	Compliant.	Redox has implemented a dust control management procedure (Procedure 3110) to minimise dust emissions from the site. Dust control measures include regular sweeping and vacuuming of warehouses (e.g. daily) and hardstand areas and internal driveways (e.g. weekly) and weekly inspections of warehouse and external hardstand areas for spilled materials and accumulated dust. During the site visit, the Auditor observed that the site was maintained in a clean and tidy state and that a street sweeper was being used on the external hardstand areas.
O4	Process and management						
O4.1	The licensee must ensure that any liquid and/or non liquid waste generated and/or stored at the premises is assessed and classified in accordance with the DECC Waste Classification Guidelines as in force from time to time.	✓			Waste Management Plan (CEMP & OEMP); Procedure 3402 – Waste Management & Disposal.	Compliant	Redox has an Emergency Plan (Procedure 3403, 6 October 2015) and an Emergency Management Plan. The former document is a complementary document to the Emergency Management Plan. The following observations are made in relation to the Emergency Plan (procedure 3403): The Emergency Plan is considered thorough containing realistic emergency scenarios and response actions. Emergency scenarios considered in the Procedure/Plan are representative of the hazards on the site although consideration of sabotage, vandalism and arson (to buildings, equipment or vehicles) could also be included. The emergency scenarios included information on control measures, response actions for staff and/or key emergency response personnel (i.e. Chief Warden, Deputy Chief Warden, Wardens and Communications Officer) for the scenarios:



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							• Fire/ Explosion with details of fire control measures available • Severe Storms with details of resulting impacts (e.g. destructive winds, flooding etc.) • Gas Release due to the formation of toxic gases from the chemical reaction of incompatible substances • Dangerous Goods Emergency due to a major release or spill of a hazardous material in an uncontrolled or unconfined space, including details of the control measures available • Bomb Threat/ Suspect Package • Medical Emergency such as a heart attack, respiratory failure or broken limb including details on controls measures available Observation: It is recommended that other emergency scenarios involving sabotage, vandalism and arson to buildings, equipment or vehicles are included in the Emergency Procedure/Plan. The site has also recently developed and implemented a Pollution Incident Response Management Plan (PIRMP) to address pollution incidents. The PIRMP was prepared in consultation with the NSW EPA and a final version provided to the EPA in October 2016.
O5	Dust						
O5.1, O5.2	The licensee must ensure that any liquid and/or non-liquid waste generated and/or stored at the premises is assessed and classified in accordance with the DECC Waste Classification Guidelines as in force from time to time. The licensee must ensure that waste identified for recycling is stored separately from other waste.	✓			Significant Environmental Aspects & Potential Impacts: Dust Emissions (OEMP); Procedure 3110 – Dust Control	Compliant	Redox assess and classify waste types prior to off-site disposal and record this information in Redebiz (as part of a purchase order issued to waste disposal contractors). During the site walk over the Auditor observed that waste for recycling was stored separately from other waste materials.



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence
		Gen.	Con.	Op.			
					Management.		
5	MONITORING & RECORDING CONDITIONS						
M1	Monitoring Records						
M1.1	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.	✓				Not triggered	Stage 4 of the development (including the acetic acid decanting facility and scrubber) have not yet been construction and this condition is not currently applicable.
M1.2	All records required to be kept by this licence must be: a) in a legible form, or in a form that can readily be reduced to a legible form; b) kept for at least 4 years after the monitoring or event to which they relate took place; and c) produced in a legible form to any authorised officer of the EPA who asks to see them.	✓				Note	There are currently no monitoring records for the acetic acid decanting facility as this has not yet been constructed.
M1.3	The following records must be kept in respect of any samples required to be collected for the purposes of this licence: a) the date(s) on which the sample was taken; b) the time(s) at which the sample was collected; c) the point at which the sample was taken; and d) the name of the person who collected the sample.	✓				Note	There are currently no monitoring records for the acetic acid decanting facility as this has not yet been constructed.



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M2.1, M2.2	The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies. The record must include details of the following: a) The date and time of the complaint; b) The method by which the complaint was made; c) Any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; d) The nature of the complaint; e) The action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and f) If no action was taken by the licensee, the reasons why no action was taken.	✓				Compliant	As noted in item 6.3, complaints would be recorded on either an Incident Report form or a Pollution Incident Response Management Plan (PIRMP) Notification form (e.g. for pollution incidents) depending on the nature of the complaint. The complaint would then be entered as a Quality Problem (QP) within the Redebiz system, where the details a) to f) would be recorded, mostly within the general text/non-compliance description box. To produce a summary log of all complaints in Redebiz would require the user to search under specific categories depending on the nature of the complaint, and appears to require the user to have some prior knowledge of the complaint to ensure the correct category is searched. There is no one specific category for complaints. The Auditor was advised by site personnel that there have been no complaints between 2014 and 2016. Observation: Whilst it is recognised that Redox has received no complaints in the past few years, it is recommended that the Redebiz system be modified to allow a 'complaint' category to be included so that complaints can be easily classified within this group and allow for easier searching and reporting of complaints.
M2.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	✓				Compliant	Information in Redebiz is available for this time period.
M3.1, M3.2	The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence. The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.					Compliant	Ramboll Environ notes that the current Redox website has provided a postal address, a toll free telephone number (within and outside Australia) and an on-line contact form for registering complaints associated with the operations



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6	REPORTING CONDITIONS						
R1	Annual return documents						
R1.1	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: (a) a Statement of Compliance; and (b) a Monitoring and Complaints Summary. A copy of the form in which the Annual Return must be supplied to the EPA accompanies this licence. Before the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.	✓			Procedure 3118 – Environmental Management System.	Compliant	Redox advised that an Annual Return is completed and submitted to the EPA each year. Ramboll Environ was provided a copy of the 2014 and 2015 Annual Returns to confirm these had been prepared and submitted. The Auditor has confirmed that the Annual Returns have been received by the EPA as indicated on the EPA website.
R2	The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act. Notifications must be made by telephoning the Environment Line service on 131 555. The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.	✓				Compliant	Site personnel advised there have been no incidents requiring notification to the EPA. Ramboll Environ’s review of the incident register (between 2014 and 2016) showed one to seven incidents per year with approximately half related to injuries and no significant environmental issues reported.
R3.1	Where an authorised officer of the EPA suspects on reasonable grounds that: a) where this licence applies to premises, an event has occurred at the premises; or b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.					Not triggered	Redox advised there have been no events that have resulted in the EPA requesting a written report.



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Item	Licence Condition	Development Stage			Redox Procedure	Compliance	Evidence								
		Gen.	Con.	Op.											
Special Conditions															
E1	Construction Activities														
E1.1 E1.2	Construction Activities - Noise from the construction of the plant must not exceed the sound pressure level (noise) limits presented in the table below. <table><tr><th>Locations</th><th>Day L_{Aeq}(15min) (dB(A))</th></tr><tr><td>St Andrews Residences</td><td>46</td></tr><tr><td>Minto Residences</td><td>46</td></tr><tr><td>Childcare Centre (30 Swettenham Rd)</td><td>62</td></tr></table> All construction activities, including transportation of fill and spoil, must be restricted to the hours of 7am to 6pm Monday to Friday, 8am to 1pm Saturday and at no time on Sundays and public holidays.	Locations	Day L _{Aeq} (15min) (dB(A))	St Andrews Residences	46	Minto Residences	46	Childcare Centre (30 Swettenham Rd)	62		✓		Construction Noise Management Plan (CEMP).	Not verified	There have been no construction activities since 2008 (i.e. completion of Stage 3) and it is assumed compliance with this condition was confirmed by the previous Independent Environmental Audit undertaken in 2010.
Locations	Day L _{Aeq} (15min) (dB(A))														
St Andrews Residences	46														
Minto Residences	46														
Childcare Centre (30 Swettenham Rd)	62														
E2	Noise compliance monitoring														
E2.2	After the commencement of all operations at the premises, the licensee must submit a noise compliance assessment report to the DEC's Manager Metro Illawarra, to demonstrate compliance with the limits specified in condition L6.1. The assessment must be prepared by a suitably qualified acoustical consultant.			✓	Noise Management Plan (OEMP); Procedure 3116 - Noise Management.	Not verified	There have been no construction activities since 2008 (i.e. completion of stage 3) and it is assumed compliance with this condition was confirmed by the previous Independent Audit undertaken in 2010. In addition refer to item L3.1.								
E3	Acetic Acid Scrubber														
E3.1	The objective of this condition is to develop emission concentration limits to ensure that the premises can comply with Section 129 of the POEO Act 1997.	✓				Not triggered	Stage 4 of the development (including the acetic acid decanting facility and scrubber) have not yet been construction and this condition is not currently applicable.								
E3.2	Prior to the commencement of construction of the plant, the licensee must submit a report to the EPA's Manager Illawarra, on the development of a site specific emission concentration limit for the acetic acid scrubber.		✓			Not triggered									

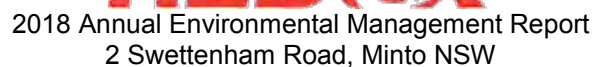


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E3.3	Prior to the commencement of construction of the plant, the licensee must provide to the EPA's Manager Illawarra, the manufacturer's performance guarantees for the acetic acid scrubber, demonstrating that emissions will comply with the ground level concentration specified in the EPA's <i>Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW, August 2001</i> .		✓			Not triggered	

Action Plan Table

Item No.	Reference	Time-Frame	Responsible Person	Action Taken OR response to recommendation	Completed Date
Condition 4.32	Redox should consider preparing a waste log for all waste generated, stored and disposed, similar to Table 5.4 in the last Annual Environmental Management Report dated December 2012 to maintain an easily available record of waste materials on site. If possible, the Redebiz system could be programmed to produce a summary waste report that contains information such as the product name/waste description, dangerous goods class, waste code, waste quantity, waste contractor, disposal date.	31 March 2017	Trami	It is not a requirement for us to keep a manual Waste log because we already have more efficient tracking method for all our disposals, that is, via our Redebiz system through CHEDIS product code which we can use to extract information for AEM report. Furthermore, Redox does not "generate, store and dispose wastes". Our products are classified as either goods or reject stock. Most reject stock could still be sold under discounted rates so they are not considered as wastes ready for disposals. Most of disposals are arranged off Minto's site, that is, at the customers' sites where they detected the goods not confirming to their specifications, therefore, these disposals are not subject to Condition 4.32. The only disposal we have arranged at Minto's site are food grade ingredients but they are also not subject to Condition 4.32. Previously we kept a waste log which contains waste disposed from all Redox facilities including contractors' warehouses, however, these	N/A



Observations



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	(e.g. on website). 2. Training - provide basic environmental awareness training to employees, in addition to the reading material provided/available, to ensure employees are aware of and understand environmental management requirements and obligations.			<u>Upload onto webpage:</u> There is no legislative requirement imposing chemical storage warehouses/distributors to upload their Environmental Policy on their webpage for the public to access. Training: There is also no legislative requirement requiring chemical distributor to give basic environmental awareness training to staff. None of Redox licence/s contain such condition.	
Compliance (Condition 4.23)	As noted in Condition 7.5, Redox should resolve with the DP&E as a priority whether continued storm water quality monitoring is required. The Annual Environmental Management Report (AEMR) should continue to be prepared and submitted to ensure compliance with the consent.	1 March 2017 & 1 December 2017	Trami	Refer to above Condition 8.3	August 2017
Emergency Plan (Condition 4.6)	Redox to consider including other emergency scenarios involving sabotage, vandalism and arson to buildings, equipment or vehicles in the Emergency Procedure/Plan.	1 June 2017	Trami	We already have these scenarios added in our Procedure 3802 (Dry Creek Major Incident Identification & Risk Assessment) for our facility in South Australia which we have been using as a guide for all other Redox warehouses. Furthermore, these incidences are unlikely to occur given that Redox's security is in compliance to all regulatory and insurance requirements. Our Minto office and warehouse surrounded by high electrical fences, gate passes, cameras, alarm systems all in place.	N/A
Documentation (Condition 5.8)	Redox should review the OEMP to ensure the document content correctly reflects the situation at the site and is correctly aligned with/referenced to information in related documents (e.g. reference to procedure 3405 should reflect the correct title of this document).	1 June 2017	Trami	The Director-General already approved Redox's OEMP prior to the commencement of operations at the site. We have not had any new developments after the approval and therefore, no requirement to vary the OEMP.	N/A
Complaints (Condition 6.3)	The Redebiz system should be modified to allow a 'complaint' category to be included so that complaints can be easily classified within this group and allow for easier searching and reporting of complaints.	1 June 2017	IT	QP90628 was created for IT to work on.	19 June 2017
Environment Protection Licence (No. 12041)					



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Observations					
Waste management (Condition A1.2)	As noted for Condition 4.32 of the Development Consent, Redox should consider preparing a waste log for all waste generated, stored and disposed, similar to Table 5.4 in the last Annual Environmental Management Report dated December 2012 to maintain an easily available record of waste materials on site and to ensure waste quantities are below the maximum limit allowable.	31 March 2017	Trami	Refer to above response to condition 4.32	N/A
Complaints (Condition M2.1, M2.2)	As noted for Condition 6.3 of the Development Consent, the Redebiz system be modified to allow a 'complaint' category to be included so that complaints can be easily classified within this group and allow for easier searching and reporting of complaints.	1 June 2017	IT	QP90628 was created for IT to work on.	19 June 2017
Emergency Plan (Condition O4.1)	As noted for Condition 4.6 of the Development Consent, Redox to consider including other emergency scenarios involving sabotage, vandalism and arson to buildings, equipment or vehicles in the Emergency Procedure/Plan.	1 June 2017		Please refer to response Emergency Plan (Condition 4.6)	N/A

Consent to Discharge Industrial Trade Wastewater (No. 29981)

Observations					
Wastewater monitoring (Condition 1a)	Redox to monitor future sample analysis results for total Iron and pH to assess whether there is a recurring issue with these parameters that may require further investigation and rectification.	1 March 2017	Michael Sims	Redox to monitor sample analysis as required under Licence No. 29981.	N/A

Compliance with Consent to Discharge Industrial Trade Wastewater

Table 5. Compliance with Consent to Discharge Industrial Wastewater (No.29981)			
Item No.	Requirement and Reference	Compliant	Ramboll Comments
Schedule 1, 1a	The customer may discharge trade wastewater into the sewer in a manner	Compliant	Trade wastewater generated at the site is discharged under a Sydney



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whereby the substance characteristics of the trade wastewater are of a type and discharged at a rate, level or concentration equal to or less than that described in this schedule.

Water Consent to Discharge Industrial Trade Wastewater to the sewer. Redox advised that regular sampling of trade wastewater discharges is undertaken by an external laboratory (LabPoint Pty Ltd) and the sample analysis reports are sent to Sydney Water as required. Sydney Water will also carry out their own sampling but Redox do not receive copies of these analysis reports.

The Auditor reviewed a selection of LabPoint sample analysis reports and noted the following:

- For a sample taken on 19/9/2014, the TSS calculated mass was 0.183 kg/day exceeding the 0.09 kg/day maximum daily limit
- For a sample taken on 12/5/2016, the total Iron measured concentration was 128 mg/L and calculated mass was 0.179 kg/day exceeding the 50 mg/L and 0.009 kg/day limits, respectively
- For a sample taken on 14/9/2016, the total Iron measured concentration was 82 mg/L and calculated mass was 0.0492 kg/day exceeding the 50 mg/L and 0.009 kg/day limits, respectively, and the pH at the start and end of sampling (i.e. 5.6 and 5.0) was outside of the acceptable 7-10 range.

Redox reported that there has only been one issue raised with Sydney Water although the details could not be provided to Ramboll Environ at the time of the audit and there have been no notices/ penalties issued by Sydney Water.

Observation: It is recommended that Redox monitor future sample analysis results for total Iron and pH to assess whether there is a recurring issue with these parameters that may require further investigation and rectification.

Compliance with Notification of Dangerous Goods on Premises

Table 6. Compliance with Notification of Dangerous Goods on Premises (No. NDG037356)

Item No.	Requirement and Reference	Compliant?	Findings
-	The Notification details maximum storage capacities for each storage facility	yes	A review of the stock manifest at 1 November 2013 indicates the quantities stored at each storage facility (i.e. depot), are below the specified maximum storage quantities notified to WorkCover.



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			It should be noted that at the time of the audit, the Notification had expired and was in the process of being renewed by NSW WorkCover. ENVIRON was provided with copies of correspondence from WorkCover indicating that due to the WorkCover's delayed invitation to renotify, Redox were granted an extension on their Notification. The extended expiry date for their Notification was to 28 September 2013. A copy of a tax invoice from WorkCover, dated 2 October 2013, for receipt of payment for the renewal of the Notification Indicates that Redox's renewal is in progress.



3 Community & Environmental Complaints

No community, environmental or pollution complaints were received during 2018 relating to the operation of the Minto facility.

Procedure 3022 – Problems & Complaints describes the method by which all problems, non-conformances, customer and community complaints would be recorded and actioned, including recording of pollution complaints in accordance with EPL 12041 Condition M4.

4 Environmental Impacts & Performance

Table 5.0: Environmental Impacts & Performance

Environmental Aspect (Operational Pathway)	Potential Environmental Impacts	Potential Risk of Impact	Duration of Potential Impact	Operational Procedure to prevent & control Impacts	Environmental Performance 2016
1. Transportation - Transport of goods to the site; - Delivery of goods to customers; and - Unloading/loading of trucks and shipping containers into transit storage areas.	Noise Emissions	Low	Intermittent	3109, 3116, 3412, 3715	Noise emissions effectively prevented and controlled. No complaints received regarding noise emissions.
	Air Emissions	Low	Intermittent	3109, 3412, 3715	Air emissions not required to be monitored. No complaints received regarding air emissions.
	Spillage of product(s) causing contamination of stormwater, soil or groundwater.	Low-Moderate	Infrequent	3022, 3109, 3114, 3412, 3702	No spillages of product during transportation causing contamination of stormwater, soil or groundwater.
	Operational Traffic Impacts	Moderate	Regular	3109, 3412, 3715	The system put in place to monitor that the routes utilised by heavy vehicles is working effectively and is substantially as it was when approved, its ongoing use is recommended". No complaints received regarding operational traffic impacts.
	Community Health	Low	Infrequent	3109, 3412	Community Health not required to be monitored. No Community Complaints received.
	Use of resources	Low-Moderate	Intermittent	3109	Use of resources not monitored with regards to the Transportation Pathway.
2. Storage & Handling - Movement of goods in and out of storage; and - Repackaging of	Spillage of goods	Low-Moderate	Infrequent	3022, 3109, 3401, 3402	No spillages of product during storage & handling causing contamination of stormwater.
	Spillage of goods causing contamination of soil/groundwater.	Low-Moderate	Infrequent	3022, 3109, 3401	No spillages of product during storage & handling causing contamination of soil or groundwater.



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Environmental Aspect (Operational Pathway)	Potential Environmental Impacts	Potential Risk of Impact	Duration of Potential Impact	Operational Procedure to prevent & control Impacts	Environmental Performance 2016
damaged goods and returned product.	Air Emissions – dust and particulate matter.	Low	Intermittent	3109, 3110	Air emissions of dust and particulate matter not required to be monitored. No complaints received regarding air emissions.
	Air Emissions - chemical reactions.	Moderate	Infrequent	3109	Air emissions caused by chemical reactions not monitored.
	Air Emissions from LPG forklifts.	Low	Constant	3109	Air emissions from LPG forklifts not monitored.
	Air Emissions from Greenhouse Gases.	Low- Moderate	Constant	3109	Greenhouse Gas emissions not required to be monitored.
	Operational Noise emissions.	Moderate	Intermittent	3022, 3109, 3116	Noise emissions effectively prevented and controlled. No complaints received regarding operational noise emissions.
	Waste – packaging (recyclable and non- recyclable).	Low	Intermittent	3109, 3401, 3402	Waste packaging not monitored with regards to storage and handling operations.
	Hazardous Waste – spillage and rejected products.	Moderate	Infrequent	3109, 3401, 3402	Refer 5.4 – In compliance with EPL (L5) waste conditions.
	Community Health	Low	Infrequent	3109, 3412	No community complaints received regarding community health impacts of storage & handling operations.
	Use of resources	Low- Moderate	Constant	3109	General use of resources not monitored for storage and handling operations.
3. Management & Administration	Waste – recyclable office waste	Low	Intermittent	3109, 3402	Paper/cardboard recycling only.
	Waste – non recyclable	Low	Intermittent	3109, 3402	Non-recyclable office waste not monitored.
	Waste – hazardous (samples)	Low	Infrequent	3109, 3402	As per hazardous waste – storage & handling above.
	Land & water pollution	Low- moderate	Intermittent	CEMP – Hazardous Materials Management Plan	No spillages of materials reported with potential for contamination of soil/ groundwater.
	Construction waste management	Low	Intermittent	CEMP – Construction Waste Management Plan	Not applicable to this report.



5 Environmental Monitoring

Aspect	Frequency	Process	Documentation	Procedure References	Responsibility
Noise Emissions	Within one month of commencement of construction activities associated with each stage of the development.	Construction Noise Audit	Construction Noise Audit report.	Procedure 3116.	Independent auditor
	Within 90 days of commencement of operation of each stage of development.	Operational Noise Audit	Operational Noise Audit Report	Procedure 3116	Independent auditor
Traffic Impacts	Monthly, four vehicles per period.	Random spot checks on routes taken.	Form 21085; QP records & Corrective Action Requests.	Procedure 3022 and 3715.	Redox Transport Coordinator
	Within 90 days of commissioning each stage of the development.	Independent Transport Audit	Independent Transport Audit report	Procedure 3715.	Independent auditor
Storm water Quality	Weekly & prior to discharge.	Visual and parameter analysis.	Form 2190 – Water Quality Inspection Form	Procedure 3405.	Redox Chemist
	Quarterly and following chemical contamination.	Parameter analysis	Parameter Analysis Report	Procedure 3405.	NATA Approved Laboratory
Waste	Continual	Continual log of waste generation.	Form 21152, 21157 and WasteLog.	Procedure 3402.	Redox Regulatory Affairs Coordinator
Incident/Near Miss Reporting	Continual	Record details of all incidents/near misses.	Form 21139 & 21140.	Procedure 3114 and 3401.	Redox Site Environmental Officer
Air emissions – dust and particulate matter	Daily	Regular sweeping. Weekly Inspection.	Form 21110 – Sydney Warehouse Inspection.	Procedure 3110 and 3521.	Redox Store Manager
Community Complaints	Continual.	Record details of all complaints received.	Complaints Register.	Procedure 3022 and 3412.	Redox Regulatory Affairs Coordinator
Environmental Management System	Annual reporting & triennial independent auditing.	Independent environmental audit.	Environmental Audit Report.	Procedure 2718.	Independent auditor
		Environmental performance review.	AEMR – Annual Environmental Management Report.	Procedure 2718.	Redox Regulatory Affairs Coordinator

5.1 Transport Monitoring & Auditing

5.1.1 Independent Transport Auditing

No independent transport auditing was conducted during 2018.

5.1.2 Monitoring Heavy Vehicle Routes/Requirements

Table 5.1.2: Heavy Vehicle Routes/Requirements: Non-Conformance Details

Date	Time	Carrier/ Customer Name	Vehicle Rego #	Route Travelled	Non- Conformance Details	QP Ref.	Corrective Action Summary
7/9/2018	9.30am	Coastal	CJ09JA	Driver turned left onto Campbelltown Road (freeway) passing the main office then right onto Ben Lomond Rd to warehouse gate followed by Gio	Incorrect route	104024	Driver was given location map and transport routes. Driver was given "Non-conformance" document which outlines the problem and then completed section titled "proposed Corrective Action."
7/8/2018	8.06am	Sustainable Liquid Technology	CEZ24KO	Incorrect route to Redox Minto, pass main office then right to Ben Lomond Rd.	Incorrect route	103456	Driver was given location map and transport routes. Driver was given "Non-conformance" document which outlines the problem and then completed section titled "proposed Corrective Action."
20/08/2018	5.35am	Freight Assist	VT46NX	Driver travelled from Campbelltown road in front of the main office to the lights where the truck then turn right into Ben Lomond Road then turn right into Holmes road then processed to the entry gates of the warehouse	Incorrect route	103699	Driver was given location map and transport routes. Driver was given "Non-conformance" document which outlines the problem and then completed section titled "proposed Corrective Action."
26/7/2018	2.00pm	Rapid Spray	JM013	Driver turn left on Campbelltown Road passing the main office seen by Robert Coneliano	Incorrect route	103297	Driver was given location map and transport routes. Driver was given "Non-conformance" document which



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							outlines the problem and then completed section titled "proposed Corrective Action."
		Transconnect logistics Pty Ltd	1LO7KP	Driver turn left on campbelltown Road passing the main office	Incorrect route	101915	Driver was given location map and transport routes. Driver was given "Non-conformance" document which outlines the problem and then completed section titled "proposed Corrective Action."

Discussion of Results:

48 Heavy vehicles were randomly audited during 2018 for compliance with Redox Procedure 3715 - NSW Heavy Vehicle Routes/Requirements. Of the 48 vehicles monitored five drivers found to have travelled by the incorrect route.

5.2 Noise Monitoring & Auditing

N/A - No operational noise auditing was required during this reporting period.

5.2.1 Construction Noise Auditing

No construction noise auditing was required during this reporting period.

5.2.2 Operational Noise Auditing

No operational noise auditing was required during this reporting period.



5.3 Stormwater Quality Monitoring

A three tiered monitoring program tests stormwater quality prior to release from the retention pits on site, including weekly internal analysis prior to discharge, quarterly external analysis, and external analysis in the event of a chemical spill.

Acceptable values for each parameter are taken to be those of:

- the *Clean Waters Regulations 1972*, Section 8 – Class R: Restricted Water;
- Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000* – “Default trigger values for physical and chemical stressors for south-east Australia”, for slightly disturbed ecosystems; and
- Baseline Contamination Assessment for Redox Chemicals Facility Swettenham Road, Minto* (Environmental Audits of Australia, January 2003).

5.3.1 Internal Stormwater Analysis

Redox personnel did not conduct any internal stormwater analysis nor did we send off stormwater samples to independent laboratory during the year 2018, reason being, we identified the *Clean Waters Regulations 1972* and *Clean Water Act* have been repealed for many years. In 2014, we have notified the Department of Planning (on numerous occasions, QP74588) and also advised that we would cease all testings until we received further instructions from the Department. To date, the Department has not provided Redox any further instructions regarding the testing of storm water.

Table 5.3.1: Results of Internal Stormwater Analysis: NIL

Date	Sample	Colour	Clarity			Odour		pH	Temp.	Specific Gravity	Dissolved oxygen	Suspended Solids	Turbidity	Pass/Fail	Tested by:
			SS visible?	Foam?	Visible Film?	Smell?	Oil/Petrol Smell?								
	LIMIT	Clear	No	No	No	No	No	6.5-8.5	15-35°C	0.99-1.01	Min. 6.5 mg/L	Max. 50 mg/L	Max. 50 NTU	Pass	Name
January	Blank		BLANK												
	PIT 1														



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	PIT 2		BLANK
	PIT3		
February	PIT 1		
	PIT 2		
	PIT 3		
March	BLANK		
	PIT 1		
	PIT 2		
	PIT 3		



Discussion of Results for Internal Stormwater Analysis

As mentioned under 5.3.1 – we did not conduct any internal stormwater analysis.

The table below is left blank.

<u>Analyte</u>	<u>Results</u>
Colour	BLANK
Clarity	
Suspended Solids	
Foam	
Visible Film	
Odour - Smell	
Odour - Oil/Petrol	
pH	
Temperature	
Specific Gravity	
Dissolved Oxygen	
Suspended Solids	
Turbidity	
Pass/Fail	



5.3.2 External Stormwater Analysis

As mentioned under 5.3.1 – we did not send samples to external lab test to analyse the stormwater during the year 2018.

Date	Sample	Total suspended solids	Turbidity	Total Kjeldahl Nitrogen (TKN)	NOx-N	Total nitrogen	Total phosphorus
		mg/L	NTU	mg/L	mg/L	mg/L	mg/L
Nil							

Test	Western Retaining Wall	Methods
Nil		

5.3.3 External Stormwater Analysis (Chemical Spill)

N/A



5.4 Waste Management

Table 5.4: WasteLog 2018 – NSW

No hazardous and/or industrial and/or Group A substances listed under 4.32 of Condition were disposed during 2018.

QP	Product Code	Product Name	DG Class	Form	Waste Code	Tracking	Qty	DISPOSAL COMPANY	CAN	TC No.	SPO	Despatch Date	Disposal Method
	NIL												



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5.5 Independent Environmental Auditing

No environmental auditing was required during this reporting period.



6 Environmental Performance

Table 6.0 presents a list of all occasions in the preceding 12-month period when environmental performance goals for the development have not been achieved, indicating the reasons for failure to meet the goals, and the actions taken to prevent recurrence of that type of incident.

Table 6.0: Environmental Performance – Quality Problem Record

QP	Performance goal not achieved	Reason	Action	Status
Transport Management				
Nil				
Noise Monitoring & Auditing				
Nil				
Stormwater & Dust Management				
Nil				
Landscape Management				
Nil				
Waste Management				
Nil				
Environmental Reporting				
Nil				