JBS 40913 – 51384

10 August 2012

ATT: John Dawson /Bryan Kidd
Savills Australia
Level 7, 50 Bridge Street
SYDNEY NSW 2000

Sent via email: jdawson@incoll.com.au, bkidd@incoll.com.au

Former Macdonaldtown Gasworks: Response to Environmental Assessment Exhibition Submissions

Dear John/Bryan,

JBS Environmental Pty Ltd (JBS) has reviewed the consolidated submissions list to the Environment Assessment exhibited for the Former Macdonaldtown Gasworks Remediation Project, as provided by Savills Australia (Savills). This letter provides our responses to the issues raised in the submissions.

The responses relate to information provided in the following documents prepared by JBS:

- '*Remedial Strategy, Former Macdonaldtown Gasworks*, *Revision 8'*, October 2011 JBS 40913-15505 (JBS 2011a);
- *'Environmental Management Plan, Demolition and Remediation, Former Macdonaldtown Gasworks – Chullora Material Receipt Facility'*, Reference 40913- 15164 (EMP, JBS 2011b);
- *'Air Quality Management Plan, Remediation of Former Macdonaldtown Gasworks'*, Reference 40913- 15972 (Macdonaldtown AQMP), dated August 2011 (JBS 2011c); and
- '*Air Quality Management Plan, Remediation of Former Macdonaldtown Gasworks – Chullora Material Receipt Facility'*, Reference 40913- 16613 (Chullora AQMP), dated August 2011 (JBS 2011d).

It is noted that JBS (2011a) was completed and submitted to the independently appointed NSW EPA accredited Site Auditor for review and endorsement. A requirement of JBS (2011a) is that a Remediation Works and Validation Plan (RWVP) be prepared which details succinctly the remedial and validation works and methods proposed. The remedial works will not commence at the site until the RWVP is endorsed by the Site Auditor.

Submission by EPA

The list of comments from the submission by EPA includes a number of items in regards to soil and water management, noise and vibration, community engagement and water. Concerns relating to soil and water management are responded to below.

<u>Soil and Water Management</u>

The EPA has made comment that the controls implemented on site should focus in preventing erosion, rather than sediment management. The EPA has recommended the following recommendations be adopted in the Draft Statement of Commitments and as Conditions of Approval:

'• Water used at heavy vehicle wash down points (EMP09) will be treated as contaminated water and decontaminated in the same manner as other contaminated water generated at site prior to discharge;

• The principal contractor will create an Erosion and Sediment Control Plan (ESCP) which forms part of the CEMP and is consistent with principles and practices of the Blue Book;

• All sediment and erosion controls will be carried out in accordance with Managing Urban Storm water: Soils and Construction - the Blue Book (LandCom, 2004).'

JBS has no objection to the inclusion of these items as recommended.

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Submission by Department of Planning and Infrastructure (DoPI)

The list of comments from the submission by DoPI includes a number of items in regards to air quality, noise and vibration, water, contamination, health and safety and general staging. Concerns relating to air quality, water, contamination and general staging are responded to below.

Air Quality

The DoPI has requested that an emission limit for benzo(a)pyrene from the water treatment plant be developed and demonstrated that it will enable compliance with the impact assessment criteria. Details were also requested of a monitoring regime which will be used to demonstrate compliance with the emission limit, the actions that will be taken if the monitoring indicates the criteria are being exceeded.

As discussed in JBS (2011c) benzo(a)pyrene concentrations in air at two receptor locations marginally exceeded the air quality criterion (for a 1 hour averaging period). However consideration of the overall risk to the exposed populations was assessed to be acceptable when considered in a health risk assessment as presented in JBS (2011c).

In providing the comment on benzo(a)pyrene levels, DoPI have stated that the two exceedance values relate to the water treatment plant. This appears to be a misinterpretation of the modelling results as the reported results for water in JBS (2011c) are the sum of potential emissions from splash filling of the treatment plant AND emissions from groundwater pooled in excavations. Additionally the modelled results are based on some extremely conservative assumptions, including:

- Benzo(a)pyrene concentrations in all groundwater on site being equal to the historical maximum value reported for tar impacted water on the site of 0.277 mg/L; and
- Benzo(a)pyrene assumed to be volatile despite low volatility of this compound.

Re-evaluation of the modelling results to allow for use of the historical mean benzo(a)pyrene concentration in tar impacted groundwater of 0.093 mg/L, yields the following results:

Stage 2 Remediation Works

Pollutant	Concentration at Receptor (µg/m^3 unless otherwise specified)						Criteria
	1	2	3	4	5	6	
Benzo(a)pyrene -northern gasholder	1.71E-04	1.52E-03	6.40E-04	8.05E-05	3.76E-04	1.01E-03	
Benzo(a)pyrene - former gasholder	9.38E-04	5.49E-03	3.40E-03	5.32E-04	2.48E-03	4.35E-03	
Benzo(a)pyrene - groundwater and water treatment	2.42E-02	2.16E-01	9.10E-02	1.14E-02	5.34E-02	1.43E-01	
Sum of Combined Emissions	**0.03**	**0.22**	**0.10**	**0.01**	**0.06**	**0.15**	**0.4**

Stage 3 Remediation Works

Pollutant	Concentration at Receptor (µg/m^3 unless otherwise specified)						Criteria
	1	2	3	4	5	6	
Benzo(a)pyrene - bioremediation	3.64E-05	8.02E-05	5.75E-05	5.12E-05	5.52E-05	6.00E-05	
Benzo(a)pyrene - groundwater and water treatment	2.42E-02	2.16E-01	9.10E-02	1.14E-02	5.34E-02	1.43E-01	
Sum of Combined Emissions	**0.02**	**0.22**	**0.09**	**0.01**	**0.05**	**0.14**	**0.4**

All values are compliant with the criterion for benzo(a)pyrene of 0.4 µg/m^3.

Benzo(a)pyrene Monitoring

To ensure the benzo(a)pryene emissions are compliant DoPI has requested a limit be set for emissions from water during the remediation program. Currently no 'on the spot' methods exist for emissions monitoring of benzo(a)pyrene, as such chemical specific sample collection and analytical testing will be required. Monitoring will require sample collection with glass fibre-filters in polystyrene cassettes in accordance with OSHA Sampling and Analytical Method 58. Samples will need to be collected over an 8 hour period. Noting the limited number of methods available for monitoring of benzo(a)pyrene in air Method 58 has been selected as the most appropriate means on the basis that:

- The glass fibre filters are readily available;
- The glass fibre filters are able to measure concentrations of benzo(a)pyrene only, reducing likelihood of false positives;
- The glass fibre filter samples are simple to collect; and

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- Able to provide data within a short timeframe (i.e. results 2 days after sample collection) to allow remedial / management actions to be readily implemented on site.

An action level of **0.4 µg/m^3** has been nominated, as applicable to a sample collected within areas where groundwater remains ponded overnight and in the vicinity of the water treatment plant. This limit has been set based on the detection limit and the assessment criterion. This level is considered sufficiently protective of residents on adjoining land and for the remediation workforce. Daily monitoring of benzo(a)pyrene is recommended while the water treatment plant is in use and/or groundwater is to remain ponded in excavations overnight.

Water

The DoPI has requested that further information be provided on the handling of groundwater in excavations, specifically information on the means by which groundwater will be transferred to the treatment plant.

It is proposed that a series of plastic above ground storage tanks are installed on the site next to the treatment plant for containment of treated and untreated groundwater. The tanks will be capable of being closed when not in active use.

Noting that JBS (2011c) places several restrictions on the size of the excavation that can remain open at any one time, it is unlikely that dewatering will be undertaken by use of spearpoints. Rather it is likely that temporary sumps will be installed in the base of the excavations as required, with a pump inlet point fixed within this low point. Large diameter rubber tubing will then be used to pump the pooled groundwater at regular intervals from the excavation into the storage tanks. In this manner there will be minimal potential for personnel to contact groundwater and minimal opportunity for the stored water to be exposed to the atmosphere once pumped out of the excavation. Similar large diameter tubing will be used to transfer groundwater from the holding tanks into the treatment system.

Contamination

The DoPI has requested more details regarding the management of asbestos. How will asbestos containing materials be separated from other contaminated material?

Asbestos impacted fill material has been restricted to two main areas on the site – the former Northern Gasholder and the northern retaining wall. Within each of these two general areas, positive identification of asbestos has only occurred at two former sampling locations.

The RAP (CH2M Hill 2007) requires that all asbestos remediation work conducted must be undertaken by a WorkCover Licensed AS1 Asbestos Removal Contractor (now known as a Class A licensed contractor). The AQMP (JBS 2011c) requires that airborne asbestos monitoring be completed during excavation and disturbance of fill materials on the site.

During remediation it is proposed that excavation of these asbestos impacted areas will be completed separately and validated as required in accordance with the RAP (CH2M Hill 2007). As treatment of asbestos will not be possible, these materials where possible will be transferred directly from the excavation to trucks for disposal off-site to an appropriately licensed landfill. In the event that the material cannot be directly disposed, it will be managed on site by the licensed contractors and placed in separate stockpiles on the site until off site disposal is possible.

Any additional occurrences of asbestos impacted fill outside the two known areas will be dealt with as an unexpected find by the contractor, in accordance with the RAP (CH2M Hill 2007) and any additional unexpected finds protocols that may be included in subsequent work plans.

Health & Safety

DoPI has questions whether the requirements for a Remediation Health and Safety Plan have already been covered in the Human Health Risk Assessment presented in JBS (2011c).

The human health risk assessment was prepared for exposures that may occur by inhalation only, and assessed potential exposures that may occur to the surrounding population and the remediation workforce.

The remediation workforce may also be exposed to contamination by direct contact and potential ingestion of impacted soil and groundwater. The Remediation Health and Safety Plan will therefore need to address management controls for these additional pathways. Additionally the Remediation Safety and Health Plan will need to address compliance with occupational health & safety regulations for the proposed works, which includes training requirements, controls for potential physical and biological hazards, in addition to potential exposure to contaminants (i.e. chemical hazards).

General

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DoPI requests clarity on the information provided on Pages 41 and 46 of the EA regarding the timeline and indicative staging of works.

The indicative program has been revised (**Attachment 2**) and as stated in JBS (2011a) is based on the following assumptions:

- Excavation of 350 m^3 of soil on average per day from the site to the designated Chullora Treatment Area or directly to landfill over an initial three month period;
- Treatment of excavated soil at Chullora as received, and for a further month after all remedial excavations completed at Macdonaldtown; and
- Site reinstatement occurring once validation of excavations completed, and continuing for a further three months after completion of treatment works.

Noting that excavation of the site will be staged and source areas are likely to be remediated first, allowance has been made in the program for treatment by bioremediation, if required, to occur anytime over a twelve month period. This does not infer that bioremediation will occur consistently over this time interval, only that the program allows for bioremediation to be completed on batches of suitable material as needed within this timeframe.

The actual time required for completion will be dependent on the specifics of the remedial program adopted by the appointed remediation contractor in agreement with RailCorp and other stakeholders, conditions outside anyone's control such as unfavourable weather, and time required for any additional administrative requirements specified by RailCorp or other stakeholders.

JBS (2011a) has been revised to reflect the updated program shown in **Attachment 2**.

Submission by NSW Health

The list of comments from the submission by NSW Health includes an item in regards to general safety of the temporary enclosures and procedures for notification. Concerns relating to this comment are responded to below.

Temporary enclosure and notification

NSW Health requests that the EMP Procedures are updated to reflect a need for the enclosure to be compliant with building and WorkCover requirements, and for EMP incident reporting sheets to include the requirement for immediate notification of pollution incidents in accordance with the POEO Act Amendment 2011.

Procedures EMP 10 and EMP 24 have been updated to note requirements for the tented enclosures to be designed by appropriately trained professionals, and for the structure to be compliant with relevant building and safety codes and regulations for such structures.

Procedures EMP25 and EMP35 have been updated to note requirement for immediate notification of environmental incidents by the Contractor to RailCorp, for formal notification to the relevant regulatory authority.

Submission by City of Sydney (CoS)

The list of comments from the submission by CoS includes a number of items in regards to noise, air quality, dust, heritage, trees, flora and fauna, traffic and community consultation, including a list of recommended conditions for each. Comments relating to air quality and dust are responded to below.

Air Quality and Dust

CoS has made comments that monitoring, mitigating and abating odour and gas emissions should form a critical part of the site management to ensure odour abatement technology is properly used and maintained throughout the life of the project. Also it was commented that to ensure that dust is contained and controlled during demolition, excavation and construction, a condition should be included as a commitment and as a condition of any approval. Accordingly CoS has recommended the following be adopted in the Draft Statement of Commitments and as Conditions of Approval:

(a) The use of the premises must not give rise to the emission of gases, vapours, dusts or other impurities which are a nuisance, injurious or prejudicial to health.

(b) Gaseous emissions from the development must comply with the requirements of the Protection of the Environment Operations Act, 1997 and Regulations. Uses that produce airborne particulate matter must incorporate a dust collection system.

The AQIA (JBS 2011c) has previously assessed the proposed emissions and devised the controls and daily monitoring required to prevent exceedances of NSW EPA endorsed air quality criteria. A human health risk assessment (JBS 2011c) has also been completed to confirm the proposed works will not present an

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unacceptable risk to the proposed workforce and surrounding community. As such JBS has no objection to the inclusion of these items in the consent conditions as recommended on the basis that these conditions are already accounted for in previous assessments and management plans.

Submission by Strathfield Municipal Council (SMC)

The list of comments from the submission by SMC includes a number of items in regards to the potential for land contamination, water contamination, treatment rates, exposure to residents and community consultation. JBS has prepared a separate letter response to SMC which is provided as **Attachment 3**.

Should you have any queries or require further clarification, please feel free to contact the undersigned on (02) 8338 1011.

Prepared by:

Sumi Dorairaj
Environmental Consultant
JBS Environmental Pty Ltd

Reviewed/Approved by:

Matthew Bennett
Principal – Contaminated Land
JBS Environmental Pty Ltd

Attachments: (1) Limitations
(2) Revised Indicative Program Timeline
(3) Letter Response to SMC

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Attachment 1 – Limitations

This letter has been prepared for use by the client who commissioned the works in accordance with the project brief only and has been based in part on information obtained from other parties. The advice herein relates only to this project and all results conclusions and recommendations made should be reviewed by a competent person with experience in environmental management, before being used for any other purpose.

JBS Environmental Pty Ltd accepts no liability for use or interpretation by any person or body other than the client. This report should not be reproduced without prior approval by the client, or amended in any way without prior approval by JBS Environmental Pty Ltd, and should not be relied upon by other parties, who should make their own enquires.

This report does not constitute legal advice. Legal advice can only be provided by qualified legal practitioners. It should be noted that the conditions of development consent may impose additional restrictions on the site and the Client should satisfy themselves with these and other regulatory requirements prior to undertaking activities on the site.

Sampling and chemical analysis of environmental media is based on appropriate guidance documents made and approved by the relevant regulatory authorities. Conclusions arising from the review and assessment of environmental data are based on the sampling and analysis considered appropriate based on the regulatory guidelines and site history, not on sampling and analysis of all media at all locations for all potential contaminants.

Changes to the environmental conditions may occur subsequent to the investigations described herein, through natural processes or through the intentional or accidental addition of contaminants. The conclusions and recommendations reached in this report are based on the information obtained at the time of the investigations.

This report does not provide a complete assessment of the environmental status of the site, and it is limited to the scope defined herein. Should information become available regarding conditions at the site including previously unknown sources of contamination, JBS Environmental Pty Ltd reserves the right to review the report in the context of the additional information.

Attachment 2: Revised Indicative Program

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Table 1 – Anticipated Program of Remediation Works

	Month Number																								
Stage	1	2	3	4	5	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Pre-Remedial works[1]																										
Planning and site Establishment																										
Excavation of Contaminated soil (up to 23 000 m^3)																										
Validation of excavations, review of interim results by RailCorp + Site Auditor																										
Disposal to landfill of untreated material (estimate up to 5300 m^3)																										
Treatment of soils by stabilization (assume up to 9800 m^3)																										
Treatment of soils by bioremediation (assume 50% of up to 5300 m^3)																										
Reinstatement to pre remediation levels[3]																										
Post remediation studies and monitoring[3]																										

Notes: 1 includes time for site preparation of project site specific management plans including occupation health and safety
2 includes all heritage surveys, vegetations management plans and structural surveys required
3 includes landscaping and revegetation, completion of validation reports and post remediation EMP for the site
4 duration of groundwater monitoring to be determined in the post remediation EMP for the site

Attachment 3: Letter Response to SMC

Our Ref: JBS40913-50138 Revision 1

10 August 2012

ATT: John Dawson /Bryan Kidd
Savills Australia
Level 7, 50 Bridge Street
SYDNEY NSW 2000

Sent via email: jdawson@incoll.com.au, bkidd@incoll.com.au
CC: Daniel Wedgwood (RailCorp), Luke Speechley (RailCorp)

Revised Response to Strathfield Municipal Council Letter '*Submission to the Proposed Macdonaldtown Gasworks Remediation Project*' dated 18 June 2012, Revision 1

Dear John/Bryan,

JBS Environmental Pty Ltd (JBS) has reviewed the Strathfield Municipal Council (SMC) letter 'Submission to the Proposed Macdonaldtown Gasworks Remediation Project' dated 18 June 2012, provided by Savills Australia (Savills), on behalf of the site owner, Rail Corporation New South Wales (RailCorp). Three items have been raised and relate to the reports prepared by JBS on the project. The following responses are provided:

Comment 1: Council is of the view that the stockpiling of excavated materials from Macdonaldtown on the Chullora site would contaminate land, groundwater, and surface water.

Prior to discussing the operational details relating to the above concerns, it is worthwhile revisiting the framework within which the proposed remediation will take place, including the treatment works at Chullora, and the regulatory instruments that RailCorp are committed to as part of the project:

- Completion of the Environmental Assessment (EA) under Part3A of the Environmental Planning and Assessment Act 1979 for project consent prior to the commencement of any project tendering works;
- Completion of a statutory Site Audit Statement (SAS) under the *Contaminated Land Management Act 1997,* which will require an independent NSW Environment Protection Authority (EPA) accredited Auditor to provide endorsement that on completion of the proposed works that both the Chullora treatment area and the Macdonaldtown site are suitable for commercial land use. In order to meet this requirement RailCorp has engaged a number of appropriately qualified professionals to develop and approve a feasible remediation strategy. This includes: Andrew Kohlrusch of GHD Australia Pty Ltd as the independent EPA-accredited Auditor to review relevant assessment reports, remedial action plan (RAP), work plans, management plans and validation reports, and ultimately to certify the suitability of the sites; CH2M Hill to prepare the RAP for the works including validation requirements following remediation works at each site; and JBS Environmental to design the program of environmental controls required to execute the RAP.
- Engaging a suitably experienced remediation contractor to implement remediation works and to obtain validation at the sites in accordance with the Auditor-endorsed RAP and all other relevant statutory requirements including any project approval conditions;
- Obtaining an Environment Protection Licence (EPL) from the EPA for the proposed treatment works at Chullora. All technical studies completed as part of the EA have been provided to the EPA, and where uncertainties exist in relation to managing exposures to human health or the environment, including air emissions, licence limits will be included in the EPL along with monitoring and reporting frequencies.
- Compliance with the existing EPL for the RailCorp Chullora Rail Yards site (**Attachment 2**) which includes management requirements for dust, water and odour.
- Completion of the proposed works at both Chullora and Macdonaldtown within the RailCorp's *Environmental Management Specification for Contractors*, and in accordance with requirements of the Auditor-endorsed RAP which includes a range of environmental management controls.

Prior to engaging any contractor to undertake the proposed remediation and treatment program, the tendering organisations will need to demonstrate their understanding of the requirements of the RAP, the EPL and the Environmental Management Plan (EMP) for the works discussed below. The successful contractor will also need to agree to monitoring of their treatment works by an appropriately qualified

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contaminated land consultant and interrogation of the works and compliance documentation by Auditor, EPA and potentially the Department of Planning and Infrastructure.
The framework described above is will be all encompassing and will therefore ensure any works undertaken on the Chullora treatment area are undertaken in a systematic manner, will have checks in placed for each stage of works and will be strictly controlled.

The works proposed for the designated treatment area involve handling of soil excavated from the Macdonaldtown site and transported to Chullora. A thorough assessment has been conducted for the potential impacts to air, soil and water that may occur as part of the proposed works. This assessment has resulted in a program of environmental controls designed for mitigation of these impacts during treatment works at the site.

- The controls required to minimise emissions to air have been designed around compliance with DEC (2006) '*Assessment and management of odour from stationary sources in NSW*';
- The controls required for surface water and groundwater have been designed around compliance with *Australia and New Zealand Guidelines for Fresh and Marine Water Quality* (ANZECC/ARMCANZ 2000) trigger values for fresh water in the Cooks River; and
- The controls required for land contamination have been designed around compliance with NSW EPA (2006) criteria for commercial / industrial land use, consistent with the zoning of the Chullora Rail Yards, or at the very least around restoration of the area to its condition prior to completion of the treatment works, based on completion of detailed pre- and post-treatment contamination assessments.

The full program of controls required to meet these criteria are and detailed in '*Environmental Management Plan, Demolition and Remediation, Former Macdonaldtown Gasworks – Chullora Material Receipt Facility'*, Reference 40913- 15164 (EMP). These are briefly summarised in **Table 1** below and presented diagrammatically on **Figure 1** (**Attachment 3**).

Table 1: Response to Comment 1

Concern	Nominated controls	Results
Land contamination	Baseline assessment of treatment area prior to works + post treatment assessment (Remedial Strategy Section 3.4.3). Restrictions on the area of soil external to the enclosure that can remain uncovered (AQMP01). *The controls required to prevent land contamination have been designed around the requirement for the treatment area to be restored to its original condition on completion for the works. As such they require the absolute minimum ground disturbance and covering of all soil stockpiled external to enclosure, apart from that material undergoing active works.*	- Soil stockpiles outside of the enclosure will not be exposed to rain. - The pathway for infiltration of rain through the stockpiles and into the ground is not complete. Additionally the chemicals under consideration are very slow moving the in the ground, would take decades to impact ground water / soils at depth. Any potential impact would be at the surface only, and which would be addressed prior to full demobilisation from the site by the contractor, as noted below. There is a requirement for restoration of the area to its condition prior to treatment works. This would trigger remediation of any surface impacts. This would also trigger remediation of any deeper impacts in the very unlikely scenario that they have occurred. A separate ongoing groundwater monitoring program is currently being implemented across the Chullora Railway Workshops facility.
Groundwater contamination	Restrictions on the area of soil external to the enclosure that can remain uncovered (AQMP01). *The controls required to prevent water contamination have been designed around preventing leaching from stockpiles into the ground.*	
Surface water contamination	Sediment controls as specified in EMP30 Procedure 30 – use of dish drains and sediment fencing and water storage tanks. *The controls required to prevent water contamination have been designed around diverting surface water runoff from entering the treatment area, and preventing surface water generated within the treatment area from migrating onto the other areas of the Chullora Rail Yards.*	Eliminates surface water migrating off the treatment area. Eliminates potential for discharge into the Cooks River. It is noted the Cooks River is some 500 m north and across the rail corridor from the treatment area. Given the controls to be implemented there is a low risk of impact to the River.

Comment 2: It is unknown whether the stockpiles will be combustible.

The stockpiles will not be combustible, as the material to be received at Chullora will be impacted soil, closer in nature to common bitumen rather than fuel, with minimal if any 'free tar'. Free tar, or material

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containing substantial free tar, identified at the Macdonaldtown site will not be transported to the Chullora treatment site. Minor 'free tar' may be present in soil pores in impacted soil requiring treatment, however the overall soil mass will not be combustible. Additionally for soils to be transported from the Macdonaldtown site they cannot be in a condition that may result in the material having a classification as liquid waste. As such, it will be necessary for the soil be in a 'spadable' condition at the very least and not 'free-flowing' (i.e. not wet or saturated) due to during transport, reducing the likelihood of any potentially combustible quantities of liquid waste being transported to the Chullora site.

Comment 3: Residents in Marlene Crescent being affected by offensive odours .

A through assessment of potential air quality impacts has been conducted that included residents at Marlene Crescent. A program of air quality controls has been designed for mitigation of these impacts during treatment works at the site and detailed in '*Air Quality Management Plan, Remediation of Former Macdonaldtown Gasworks – Chullora Material Receipt Facility*', Reference 40913- 16613 (Chullora AQMP), dated August 2011 (JBS 2011d). The required controls are summarised in **Table 2** below (as extracted from JBS 2011c), with full details of the requirements documented in the Chullora AQMP (JBS 2011d).

Table 2: Summary of Required Air Quality Controls, Chullora

Site Area / Activity	Proposed Air Quality Control
Soil Handling and Stockpiling	Reduction of exposed untreated materials to 150m^2 for all activities. Dust suppression by hourly watering of all exposed soil surfaces.
Soil treatment – cement stabilisation	Reduction of exposed untreated materials to 150m^2 for all activities. Reduction of area of likely to generate cement emissions to 100m^2.
Soil treatment - bioremediation	Reduction of exposed untreated materials to 150m^2 for all activities. Dust suppression by hourly watering of all exposed soil surfaces.
Haulage Road use	Dust suppression by hourly watering of all surfaces.
Incident Management	Work stoppage where non-compliances are identified during routine monitoring, in implementation of management controls, where complaints are received. Resolution of incident or non-compliance prior to recommencement of works

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We trust this information satisfies the concerns expressed about the proposed treatment works. Should you have any queries or require further clarification, please feel free to contact the undersigned on (02) 8338 1011.

Prepared by:

Sumi Dorairaj
Environmental Consultant
JBS Environmental Pty Ltd

Reviewed/Approved by:

Matthew Bennett
Principal – Contaminated Land
JBS Environmental Pty Ltd

Attachments: (1) Limitations
(2) Chullora Rail Yard EPL
(3) Figures

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Attachment 1 – Limitations

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This report does not constitute legal advice. Legal advice can only be provided by qualified legal practitioners. It should be noted that the conditions of development consent may impose additional restrictions on the release of water from the site and the Client should satisfy themselves with these and other regulatory requirements prior to releasing water from the site.

Sampling and chemical analysis of environmental media is based on appropriate guidance documents made and approved by the relevant regulatory authorities. Conclusions arising from the review and assessment of environmental data are based on the sampling and analysis considered appropriate based on the regulatory guidelines and site history, not on sampling and analysis of all media at all locations for all potential contaminants.

Changes to the environmental conditions may occur subsequent to the investigations described herein, through natural processes or through the intentional or accidental addition of contaminants. The conclusions and recommendations reached in this report are based on the information obtained at the time of the investigations.

This report does not provide a complete assessment of the environmental status of the site, and it is limited to the scope defined herein. Should information become available regarding conditions at the site including previously unknown sources of contamination, JBS Environmental Pty Ltd reserves the right to review the report in the context of the additional information.

Attachment 2 – Chullora Rail Yard EPL

Environment Protection Authority

Environment Protection Licence

Section 55 Protection of the Environment Operations Act 1997

- Licence number: 97
- File number: 400884
- Licence Anniversary Date: 01-January
- Review date not later than 01-Jul-2002

Information about this licence

Dictionary

The licence contains a dictionary, which defines terms used in the licence. It is found at the end of the licence.

Responsibilities of licensee

Separate to the requirements of this licence, general obligations of licensees are set out in the Protection of the Environment Operations Act 1997 ("the Act") and the Regulations made under the Act. These include obligations to:

- Ensure persons associated with you comply with this licence, as set out in section 64 of the Act.
- Control the pollution of waters and the pollution of air (see for example sections 120 - 132 of the Act).
- Report incidents causing or threatening material environmental harm to the environment, as set out in Part 5.7 of the Act.

Transfer of licence

Transfer of the licence to another person may be requested by the licensee using the form for this purpose available from the EPA.

Variation of licence conditions

Variations to the conditions of this licence may be requested by the licensee using the form for this purpose available from the EPA. The EPA may also vary a licence at any time by written notice without an application being made.

Where a licence has been granted in relation to development which was assessed under the Environmental Planning and Assessment Act 1979 in accordance with the procedures applying to integrated development, the EPA may not impose conditions which are inconsistent with the development consent conditions until the licence is first reviewed under Part 3.6 of the Act.

Duration of licence

This licence will remain in force until the licence is surrendered by the licence holder or until it is suspended or revoked by the EPA or the Minister. A licence may only be surrendered with the written approval of the EPA.

Licence review

The Act requires that the EPA review your licence at least every 3 years after the issue of the licence, as

set out in Part 3.6 of the Act. You will receive advance notice of the licence review. For licences held immediately before 1 July 1999, the first review will take place before 1 July 2002.

Fees and annual return to be sent to the EPA

The licence requires you to forward to the EPA an Annual Return, comprising a Statement of Compliance and a summary of any monitoring required by the licence (including the recording of complaints).

The Annual Return must be submitted within 60 days after the end of each reporting period. Where a licence is transferred, surrendered or revoked, a special reporting period applies.

For each licence fee period you must pay:

- an administrative fee; and
- a load-based fee (if applicable).

Usually the licence fee period is the same as the reporting period.

See condition R1 and the accompanying form regarding the Annual Return requirements.

The EPA publication "A Guide to Licensing" contains information about how to calculate your licence fees.

Public register and access to monitoring data

Part 9.5 of the Act requires the EPA to keep a public register of details and decisions of the EPA in relation to, for example:

- licence applications
- licence conditions and variations
- statements of compliance

Under s320 of the Act application can be made to the EPA for access to monitoring data which has been submitted to the EPA by licensees.

Licence anniversary date

01-January

This licence is issued to

RAIL SERVICES AUSTRALIA
LOCKED BAG A4090
SYDNEY SOUTH NSW 1238

subject to the conditions which follow:

1 Administrative conditions

A1 What the licence authorises and regulates

A1.1 Not applicable.

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.

Scheduled Activity
Waste Activities

Fee Based Activity	Scale
Hazardous, Industrial or Group A Waste Generation or Storage (73)	> 10 - 100 T

A1.3 Not applicable.

A2 Premises to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
LOCOMOTIVE MAINTENANCE OPERATIONS
WORTH STREET
CHULLORA
NSW
2190
LOT 32 DP 869897

Premises Details

A3 Other activities

A3.1 Not applicable.

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.

In this condition the reference to "the licence application" includes a reference to:
(a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998 and
(b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.

2 Discharges to air and water and applications to land

P1 Location of monitoring/discharge points and areas

P1.1 Not applicable.

P1.2 Not applicable.

P1.3 Not applicable.

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.

L2 Load limits

L2.1 Not applicable.

L2.2 Not applicable.

L3 Concentration limits

L3.1 Not applicable.

L3.2 Not applicable.

L3.3 Not applicable.

L4 Volume and mass limits

L4.1 Not applicable.

L5 Waste

L5.1 The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by the licence.

L5.2 This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if those activities require an environment protection licence.

L5.3 Except as provided by any other condition of this licence, only the hazardous and/or industrial and/or Group A waste listed below may be generated and/or stored at the premises.

(a) Acidic solutions or acids in solid form;

(b) Basic solutions or bases in solid form;

(c) Waste from the production, formulation and use of inks, dyes, pigments, paints, lacquers and varnish;

(d) Organic solvents excluding halogenated solvents;

(e) Halogenated organic solvents;

(f) Waste mineral oils unfit for their original intended use;

(g) Waste oil/water, hydrocarbons/water mixtures or emulsions; and

(h) Grease trap waste.

L6 Noise Limits

L6.1 Not applicable.

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 and storage of materials and substances used to carry out the activity; and
(b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

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; and
(b) must be operated in a proper and efficient manner.

O3 Emergency response

O3.1 Within 3 months of the date of the issue of this licence, the licensee must develop, or update, an emergency response plan which documents the procedures to deal with all types of incidents (e.g. spill, explosions or fire) that may occur at the premises or outside of the premises (e.g. during transfer) which are likely to cause harm to the environment.

O4 Processes 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 EPA Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes, in force as at 1 July 1999.

O4.2 The licensee must ensure that waste identified for recycling is stored separately from other waste.

O5 Monitoring of waste movements within NSW

O5.1 Conditions O5.2 to O5.16 apply to the movement of the types of hazardous and/or industrial and/or Group A waste as listed in L5.3, within NSW.

Prerequisites for waste movements

O5.2 If the waste is transported from the premises, the licensee must ensure that the waste is transported:
(a) to a place which has been licensed by the EPA to issue consignment authorisation numbers; and
(b) to a place that can otherwise lawfully accept that class of waste.

O5.3 If the waste is transported from the premises, the licensee must;
(a) obtain a consignment authorisation number from the consignee;
(b) complete an approved waste data form in relation to the consigned waste in accordance with the instructions on the form and to the extent required, and give a copy of the form to the person transporting the waste;
(c) ensure that the waste data form:
(i) is completed accurately, and
(ii) is retained for a period of not less than 4 years from the time the form was completed, and
(iii) is made available for inspection by an authorised officer on request;
(d) ensure, if the waste is of such an amount as to require the person transporting it to be licensed, that the person transporting the waste is licensed.

Application for a consignment authorisation number

O5.4 To obtain a consignment authorisation number as required by 05.3 (a), the licensee must apply in writing to the consignee. An application must include the following information:
(a) a statement identifying the classification of the waste in accordance with the requirements of condition 04.1;
(b) copies of all information used to classify the waste;
(c) an estimate of the amount of waste to which the application applies;
(d) whether the consignment will consist a single load or multiple loads;
(e) an estimate of the total period required for transportation of the consignment;
(f) the date of dispatch of at least the first load in the consignment.

Note: The licensee may nominate the dates of dispatch of as many loads as is feasible. This should be discussed with the consignee and will depend on the predictability of the rate of generation of the waste and the likelihood of the need for amendments to the dates nominated. If the waste is predictable, a schedule may be able to be submitted for the entire consignment, however if it is unpredictable, the date of only one future load may be able to be determined at a time (see also 05.9 about amending notified dates).

Note: The requirement for a written application for a consignment authorisation number does not preclude preliminary contact to obtain quotes and/or advice. Such preliminary contact does not require the formal provision of the above information that need only be supplied in the formal application.

O5.5 Once an application for a consignment authorisation number, as set out in 05.4 has been submitted, the licensee must not submit an application for the same consignment to another consignee until notification is received concerning the outcome of the application.

Notification of dates of dispatch of the second and subsequent loads in a consignment.

O5.6 The licensee must provide the consignee with written notification of the date of dispatch of each load of waste.

O5.7 The notification referred to in 05.6 must be received by consignee no later than the date of arrival of the preceding load at the destination.

Notification of a final load in a consignment.

O5.8 Unless the movement of an entire consignment of waste occurs in a single load, by the time the final load in a consignment is accepted at the destination, the licensee must have informed the consignee in writing, that no further loads are to be dispatched under that consignment authorisation number.

Note: The notifications referred to in conditions 05.6 and 05.8 may be attached to the waste data form of the preceding load.

Amendments to the nominated date(s) of dispatch

O5.9 If the date of dispatch for a load of waste is changed, the licensee must give written notification of this to the consignee and nominate a revised date of dispatch.

O5.10 A notification referred to in 05.9 must occur on or before the date of delivery as previously nominated.

Note: More than one amendment to dates of dispatch may occur.

Cancellation of consignment authorisations

O5.11 If the licensee determines that the delivery of a consignment of waste is to be discontinued for any reason, the consignee must be notified in writing before the nominated date of dispatch of the next expected load.

Notification of delayed delivery by transporter

O5.12 If the licensee receives written notification from a transporter who removed waste from the premises specifying a revised date of delivery to the destination which is more than 7 days after the date of dispatch, the licensee must note and record that date.

Record keeping

O5.13 The licensee must record and retain all information related to each consignment of waste.

Note: This includes waste data forms and copies of other documents such as notifications of revised delivery dates, regular and other reports, etc.

O5.14 The records referred to in 05.13 must be kept so that:
(a) all records relating to individual consignment authorisation numbers are kept physically together;
(b) consignments transported by each transporter can be readily identified and accessed; and
(c) consignments sent to each destination can readily be identified and accessed.

Note: The licensee must keep all information for at least 4 years.

Exception reporting

O5.15 The licensee must notify the EPA, in writing, within 48 hours of becoming aware of any suspected breaches of the Act, the Protection of the Environment Operations (Waste) Regulation 1996 or this licence.

O5.16 The licensee must notify the EPA in writing within 48 hours of becoming aware of any of the following:
(a) the refusal by a person to whom the licensee has applied for a consignment authorisation number in accordance with 05.4 to issue such a number;
(b) the refusal of a transporter to transport waste after arriving at the licensee's premises for the purposes of transporting that waste;
(c) a transporter who transports, or attempts to transport, waste without a waste data form completed to the extent required;
(d) the refusal of a consignee to accept waste from the licensee;
(e) the failure of the licensee to receive written confirmation of receipt of waste from a consignee within 21 days of dispatch, or where a transporter has provided written notification of a revised date of delivery as set out in 05.12 within 21 days of that date;
(f) the notification by a transporter of a revised date of delivery which is more than 90 days after the date of dispatch of the waste.

Note: The EPA should be notified of exception reports by sending a facsimile to:

Manager, Hazardous Waste Regulation

NSW Environment Protection Authority

Facsimile number - (02) 9995-5914

O6 Monitoring of interstate movements of controlled wastes

O6.1 Conditions O6.2 to O6.11 apply to the movement of the types of hazardous and/or industrial and/or Group A waste as listed in L5.3, into and out of NSW.

Note: The requirements of the NEPM apply to the interstate movement of any of the wastes listed in Appendix 1 of this licence.

Classification of controlled waste

O6.2 The licensee must accurately identify the waste, in accordance with 04.1, and determine if the waste is a controlled waste within the meaning of the NEPM.

Note: The waste producer must check with the agency in the State or Territory of destination to determine whether waste is classified as a controlled waste under the NEPM. Unless advised otherwise by the agency of the State or Territory of destination, any waste included in Appendix 1 of this licence is a controlled waste for the purposes of the NEPM.

Application for a consignment authorisation

O6.3 If the waste is transported from the premises to another participating State or Territory, the licensee must comply with all conditions attached to the consignment authorisation issued by an agency or a facility delegated by an agency in the destination State or Territory.

Note: The waste producer is required by the Protection of the Environment Operations (Waste) Regulation 1996 to obtain, prior to the waste being dispatched, a consignment authorisation from an agency, or a facility delegated by an agency, in the destination State or territory to allow the movement of controlled waste.

Waste movements

O6.4 If the waste is transported from the premises to another participating State or Territory, the licensee must ensure that the waste is transported to a place that can lawfully be used as a waste facility for that waste.

O6.5 The licensee must ensure that the waste transporter is licensed as required by the agency of each participating State or Territory through which the waste is transported.

O6.6 The licensee must:
(a) retain a copy of the waste transport certificate for the waste for a period of not less than 4 years from the time the form was completed, and
(b) make the copy of the waste transport certificate available for inspection by an authorised officer on request.

Note: The waste producer is required by the Protection of the Environment Operations (Waste) Regulation 1996 to complete a waste transport certificate for the waste. This should be done in accordance with the instructions printed on the certificate and the required copy of the waste transport certificate should be forwarded to the agency in the State of destination.

Notification of delayed delivery by transporter

O6.7 If the licensee receives written notification from the transporter who removed waste from the licensee's premises specifying a revised date of delivery to the destination which is more than 7 days after the date of dispatch, the licensee must note and record that date.

Record keeping

O6.8 The licensee must record and retain all information related to each consignment of waste.

Note: This includes the waste transport certificates and copies of other documents such as consignment authorisations issued by an agency in the destination State or Territory, notifications of revised delivery dates by transporters, regular and other reports, etc.

O6.9 The records referred to in 06.8 must be kept so that:
(a) all records relating to each consignment authorisation are kept physically together;
(b) consignments transported by each transporter can be readily identified and accessed, and
(c) consignments sent to each destination can readily be identified and accessed.

Note: The licensee must keep all information for at least 4 years.

Exception reporting

O6.10 The licensee must notify the EPA in writing within 48 hours of becoming aware of a suspected breach of the Act, the Protection of the Environment Operations (Waste) Regulation 1996 or this licence.

O6.11 The licensee must notify the EPA in writing within 48 hours of becoming aware of any of the following:
(a) the refusal by an agency, or facility delegated by an agency, in participating State or Territory to whom the licensee has applied for a consignment authorisation in accordance with 06.3, to issue such an authorisation;
(b) the refusal of a transporter to transport waste after arriving at the licensee's premises for the purposes of transporting that waste to another participating State or Territory to the extent required;
(c) a transporter who transports, or attempts to transport, waste to another participating State or Territory without a waste transport certificate completed to the extent required;
(d) the refusal of a destination in another participating State or Territory to accept from the licensee waste for which a consignment authorisation has been issued;
(e) the failure of the licensee to receive written confirmation of receipt of waste from a destination in another participating State or Territory within 28 days of dispatch.

Note: The EPA should be notified of exception reports by sending a facsimile to:

Manager, Hazardous Waste Regulation
NSW Environment Protection Authority
Facsimile number - (02) 9995 5914

5 Monitoring and 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.

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.

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.

M2 Requirement to monitor concentration of pollutants discharged

M2.1 Not applicable.

M3 Testing methods - concentration limits

M3.1 Not applicable.

M3.2 Not applicable.

M4 Recording of pollution complaints

M4.1 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.

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; and
(f) if no action was taken by the licensee, the reasons why no action was taken.

M4.3 The record of a complaint must be kept for at least 4 years after the complaint was made.

M4.4 The record must be produced to any authorised officer of the EPA who asks to see them.

M5 Telephone complaints line

M5.1 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.

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.

M5.3 Conditions M5.1 and M5.2 do not apply until 3 months after:
(a) the date of the issue of this licence or
(b) if this licence is a replacement licence within the meaning of the Protection of the Environment Operations (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.

M6 Requirement to monitor volume or mass

M6.1 Not applicable.

M6.2 Not applicable.

6 Reporting conditions

R1 Annual return documents

What documents must an Annual Return contain?

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.

Period covered by Annual Return

R1.2 An Annual Return must be prepared in respect of each reporting period, except as provided below.

Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.

R1.3 Where this licence is transferred from the licensee to a new licensee,

(a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and
(b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.

Note: An application to transfer a licence must be made in the approved form for this purpose.

R1.4 Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on
(a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or
(b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.

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 or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').

Notification where actual load can not be calculated

R1.6 Not applicable.

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 to be supplied to the EPA.

Certifying of Statement of Compliance and Signing of Monitoring and Complaints Summary

R1.8 Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:
(a) the licence holder; or
(b) by a person approved in writing by the EPA to sign on behalf of the licence holder.

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.

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.

R2.1 Notifications must be made by telephoning the EPA's Pollution Line service on 131 555.

R2.2 The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.

R3 Written report

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.

R3.2 The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.

R3.3 The request may require a report which includes any or all of the following information:
(a) the cause, time and duration of the event;
(b) the type, volume and concentration of every pollutant discharged as a result of the event;
(c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; and
(d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;
(e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;
(f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event;
(g) any other relevant matters.

R3.4 The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

R4 Regular reporting of transportation of certain wastes within NSW

R4.1 Conditions R4.2 to R4.5 apply to the transport of hazardous and/or industrial and/or Group A waste within NSW.

Regular reporting

R4.2 The licensee must supply to the EPA, for each transporter that transported waste from the licensees premises, the information as set out in Appendix 2, table 1.

R4.3 The licensee must supply to the EPA, for each destination within NSW which received waste from the licensee, the information as set out in Appendix 2, table 2.

Reporting periods

R4.4 Reports to the EPA in accordance with R4.2 and R4.3 shall be supplied on or before:
(a) 30 April for the reporting of information relating to wastes transported from the premises between 1 January and 31 March of that year;
(b) 31 July for the reporting of information relating to wastes transported from the premises between 1 April and 30 June of that year;
(c) 31 October for the reporting of information relating to wastes transported from the premises between 1 July and 30 September of that year;
(d) 31 January for the reporting of information relating to wastes transported from the premises between 1 October and 31 December of the previous year.

Note: The EPA should be notified of exception reports by sending a facsimile to:
Manager, Hazardous Waste Regulation
NSW Environment Protection Authority
Facsimile number - (02) 9995 5914

Nil reports

R4.5 If waste has not been transported from the premises in any reporting period as set out in R4.4 the EPA must be advised in writing by the licensee, by the dates referred to in R4.4 in lieu of reporting as required in R4.2 and R4.3.

R5 Regular reporting of interstate movements of controlled wastes

R5.1 Conditions R5.2 to R5.5 apply to the movement of hazardous and/or industrial and/or Group A waste as listed in L5.3, into and out of NSW.

Note: The requirements of the NEPM apply to the interstate movement of any of the wastes listed in Appendix 1 of this licence.

Regular reporting

R5.2 The licensee must supply to the EPA, for each transporter that transported waste from the premises to a destination in another participating State or Territory, the information as set out in Appendix 2, table 3.

Reporting periods

R5.3 Reports to the EPA in accordance with R5.2 shall be supplied on or before:
(a) 30 April for the reporting of information relating to wastes transported from the premises between 1 January and 31 March of that year;
(b) 31 July for the reporting of information relating to wastes transported from the premises between 1 April and 30 June of that year;
(c) 31 October for the reporting of information relating to wastes transported from the premises between 1 July and 30 September of that year;
(d) 31 January for the reporting of information relating to wastes transported from the premises

between 1 October and 31 December of the previous year.

Nil reports

R5.4 If waste has not been transported from the premises in any reporting period as set out in R5.3, the EPA must be advised in writing by the licensee, by the dates referred to in R5.3 in lieu of reporting as defined in R5.2.

Interstate transport of controlled wastes

R5.5 The licensee must comply with the requirements of the NEPM.

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 the licence applies.

G1.2 The licence must be produced to any authorised officer of the EPA who asks to see it.

G1.3 The licence must be available for inspection by any employee or agent of the licensee working at the premises.

Pollution studies and reduction programs

U1.1 Not applicable.

Special conditions

E1.1 Not applicable.

Appendices

APPENDIX 1

WASTE DESCRIPTIONS AND CORRESPONDING WASTE CODES

The waste descriptions and waste codes shown below must be used to identify hazardous, industrial and Group A wastes on the waste data form for movements of those wastes within NSW, and to identify controlled wastes on the waste transport certificate for those wastes moved between NSW and other States and Territories. The waste codes must also be used to identify wastes when reporting the information required in the Tables in Appendix 2.

Description	Waste Code		Description	Waste Code
Acidic solutions or acids in solid form	B100		Organohalogen compounds - other than substances referred to in this list	M160
Animal effluent and residues (abattoir effluent, poultry and fish processing wastes)	K100		Perchlorates	D340

Antimony; antimony compounds	D170		Phenols, phenol compounds including chlorophenols	M150
Arsenic; arsenic compounds	D130		Phosphorus compounds excluding mineral phosphates	D360
Asbestos	N220		Polychlorinated dibenzo-furan (any congener)	M170
Barium compounds (excluding barium sulphate)	D290		Polychlorinated dibenzo-p-dioxin (any congener)	M180
Basic solutions or bases in solid form	C100		Residues from industrial waste treatment/disposal operations	T190
Beryllium; beryllium compounds	D160		Selenium; selenium compounds	D240
Boron compounds	D310		Sewage sludge and residues including nightsoil and septic tank sludge	K130
Cadmium; cadmium compounds	D150		Soils contaminated with a waste	N120
Ceramic-based fibres with physico-chemical characteristics similar to those of asbestos	N230		Surface active agents (surfactants), containing principally organic constituents and which may contain metals and inorganic materials	M250
Chlorates	D350		Tannery wastes (including leather dust, ash, sludges and flours)	K140
Chromium compounds (hexavalent and trivalent)	D140		Tellurium; tellurium compounds	D250
Clinical and related wastes	R100		Thallium; thallium compounds	D180
Cobalt compounds	D200		Triethylamine catalysts for setting foundry sands	M230
Containers and drums which are contaminated with residues of substances referred to in this list	N100		Tyres	T140
Copper compounds	D190		Vanadium compounds	D270
Cyanides (inorganic)	A130		Waste chemical substances arising from research and development or teaching activities including those which are not identified and/or are new and whose effects on human health including those which are not identified and/or are new and whose effects on human health	T100
Cyanides (organic)	M210		Waste containing peroxides other than hydrogen peroxide	E100
Encapsulated, chemically-fixed, solidified or polymerised wastes	N160		Waste from heat treatment and tempering operations containing cyanides	A110
Ethers	G100		Waste from manufacture, formulation and use of wood-preserving chemicals	H170
Filter cake	N190		Waste from the production, formulation and use of biocides and phytopharmaceuticals	H100
Fire debris and fire washwaters	N140		Waste from the production, formulation and use of inks, dyes, pigments, paints, lacquers and varnish	F100
Fly ash	N150		Waste from the production, formulation and use of organic solvents	G160
Grease trap waste	K110		Waste from the production, formulation and use of photographic chemicals and processing materials	T120
Halogenated organic solvents	G150		Waste from the production, formulation and use of resins, latex, plasticisers, glues and adhesives	F110
Highly odorous organic chemicals (including mercaptans and acrylates)	M260		Waste from the production and preparation of pharmaceutical products	R140
Inorganic fluorine compounds excluding calcium fluoride	D110		Waste mineral oils unfit for their original intended use	J100
Inorganic sulfides	D330		Waste oil/water, hydrocarbons/water mixtures or emulsions	J120
Isocyanate compounds	M220		Waste pharmaceuticals, drugs and medicines	R120
Lead; lead compounds	D220		Waste resulting from surface treatment of metals and plastics	A100
Mercury; mercury compounds	D120		Waste tarry residues arising from refining, distillation, and any pyrolytic treatment	J160
Metal carbonyls Nickel compounds Non toxic salts Organic phosphorous compounds	D100 D210 D300 H110		Waste substances and articles containing or contaminated with polychlorinated biphenyls, polychlorinated napthalenes, polychlorinated terphenyls and/or polybrominated biphenyls	M100
Organic solvents excluding halogenated solvents	G110		Wool scouring wastes Zinc compounds	K190 D230

APPENDIX 2

Table 1

[Table 1 refers to the regular reporting requirements in R4.2. Its purpose is to provide information on the total amount of waste moved by each transporter from waste activities in NSW.]

1. The licensee must provide a copy of the information in the following table for each transporter used by the licensee in the reporting period.

Waste Activities Table 1: Waste Movements By Transporter and Waste Category			
Name of Licensed Waste Activity:		**Waste Activity Licence No.:**	
Reporting Period:		**ANZSIC Code for Waste Activity:**	
Name of Transporter:		**Licence No. of Transporter**	
Waste class	**Waste Code**	**Amount of Waste Transported in Reporting Period (tonnes)**	
Hazardous Non-Liquid Waste	*Code for each waste of this class*	*Total Weight for waste of each code*	
Hazardous Liquid Waste	*Code*	*Weight*	
	Code	*Weight*	
Industrial Non-Liquid Waste	*Code*	*Weight*	
	Code	*Weight*	
Group A Liquid Waste	*Code*	*Weight*	

	Code	*Weight*

[NOTES: ***Waste code*** *refers to the codes listed in Appendix 1 of this licence and entered on the waste transport certificates.*
Waste class *refers to the classification of waste in accordance with Appendix 1 of the Protection of the Environment Operations Act 1997 and its regulations.*

ANZSIC code *means the Australian and New Zealand Standard Industrial Classification code published by the Australian Bureau of Statistics.]*

Table 2:

[Table 2 refers to the reporting requirements in R4.3. Its purpose is to provide information on the total amount of waste sent to each destination within NSW. Cross referencing by ANZSIC code provides data on which types of industry are sending wastes to disposal and treatment facilities.]

1. The licensee must provide a copy of the information in the following table for each destination within NSW used by the licensee in the reporting period for the purposes of the receipt of controlled waste.

Waste Activities Table 2: Waste Movements By Destination (within NSW) and Waste Category			
Name of Licensed Waste Activity:		**Waste Activity Licence No.:**	
Reporting Period:		**ANZSIC Code for Waste Activity**	
Destination:			

Waste class	**Waste Code**	**Amount of Waste Transported in Reporting Period (tonnes)**
Hazardous Non-Liquid Wastes	*Code for each waste of this class*	*Total Weight for waste of each code*
	Code	*Weight*
Industrial Non-Liquid Wastes	*Code*	*Weight*
	Code	*Weight*
Hazardous Liquid Wastes	*Code*	*Weight*
	Code	*Weight*
Group A Liquid Wastes	*Code*	*Weight*

NOTES:

Waste code *refers to the codes listed in Appendix 1 of this licence and entered on waste data forms.*
Waste class *refers to the classification of waste in accordance with Schedule 1 of the Protection of the Environment Operations Act 1997 and its regulations.*

ANZSIC code *means the Australian and New Zealand Standard Industrial Classification code published by the Australian Bureau of Statistics.*

Table 3:

[Table 3 refers to the regular reporting requirements in R5.2. Its purpose is to provide information on the total amounts of controlled wastes sent from NSW licensed waste activities to other States and Territories. Cross-referencing by ANZSIC code allows data on which types of industries are sending wastes interstate.]

1. The licensee must provide a copy of the information in the following table for each destination outside NSW used by the licensee in the reporting period for the purposes of the receipt of controlled waste.

Waste Activities Table 3: Controlled Waste Movements By Interstate Destination and Waste Category			
Name of Licensed Waste Activity:		**Waste Activity Licence No.:**	
Reporting Period:		**ANZSIC Code Waste Activity:**	
Destination State or Territory:		**Destination Facility**	
Waste class	**Waste Code**	**Amount of Waste Transported in Reporting Period (tonnes)**	
Hazardous Non-Liquid Waste	*Code for each waste of this type*	*Total Weight for waste of this code*	
	Code	*Weight*	
Industrial Non-Liquid Waste	*Code*	*Weight*	
	Code	*Weight*	
Hazardous Liquid Waste	*Code*	*Weight*	
	Code	*Weight*	
Group A Liquid Waste	*Code*	*Weight*	

Other Types of Waste (eg Group B and C Liquid Wastes, Used Tyres)	*Code*	*Weight*

*[NOTES: **Waste code** refers to the codes listed in Appendix 1 of this licence and entered on the waste transport certificates.*
***Waste class** refers to the classification of waste in accordance with Appendix 1 of the Protection of the Environment Operations Act 1997 and its regulations.*
***ANZSIC code** means the Australian and New Zealand Standard Industrial Classification code published by the Australian Bureau of Statistics.]*

Dictionary

General Dictionary

In this licence, unless the contrary is indicated, the terms below have the following meanings:

3DGM [in relation to a concentration limit]	Means the three day geometric mean, which is calculated by multiplying the results of the analysis of three samples collected on consecutive days and then taking the cubed root of that amount. Where one or more of the samples is zero or below the detection limit for the analysis, then 1 or the detection limit respectively should be used in place of those samples
Act	Means the Protection of the Environment Operations Act 1997
activity	Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment Operations Act 1997
actual load	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 1998
AMG	Australian Map Grid
anniversary date	The anniversary date is the anniversary each year of the date of issue of the licence. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
annual return	Is defined in R1.1
Approved Methods Publication	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 1998
assessable pollutants	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 1998
BOD	Means biochemical oxygen demand
COD	Means chemical oxygen demand
composite sample	Unless otherwise specifically approved in writing by the EPA, a sample consisting of 24 individual samples collected at hourly intervals and each having an equivalent volume.
cond.	Means conductivity
environment	Has the same meaning as in the Protection of the Environment Operations Act 1997
environment protection legislation	Has the same meaning as in the Protection of the Environment Administration Act 1991

EPA	Means Environment Protection Authority of New South Wales.
fee-based activity classification	Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 1998.
flow weighted composite sample	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
grab sample	Means a single sample taken at a point at a single time
hazardous waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
industrial waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
inert waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
licensee	Means the licence holder described at the front of this licence
load calculation protocol	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 1998
local authority	Has the same meaning as in the Protection of the Environment Operations Act 1997
material harm	Has the same meaning as in section 147 Protection of the Environment Operations Act 1997
MBAS	Means methylene blue active substances
Minister	Means the Minister administering the Protection of the Environment Operations Act 1997
mobile plant	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
motor vehicle	Has the same meaning as in the Protection of the Environment Operations Act 1997
O&G	Means oil and grease
percentile [in relation to a concentration limit of a sample]	Means that percentage [eg.50%] of the number of samples taken that must meet the concentration limit specified in the licence for that pollutant over a specified period of time. In this licence, the specified period of time is the Reporting Period unless otherwise stated in this licence.
plant	Includes all plant within the meaning of the Protection of the Environment Operations Act 1997 as well as motor vehicles.
pollution of waters [or water pollution]	Has the same meaning as in the Protection of the Environment Operations Act 1997
premises	Means the premises described in condition A2.1
public authority	Has the same meaning as in the Protection of the Environment Operations Act 1997
regional office	Means the relevant EPA office referred to in the Contacting the EPA document accompanying this licence
reporting period	For the purposes of this licence, the reporting period means the period of 12 months after the issue of the licence, and each subsequent period of 12 months. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
reprocessing of waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
scheduled activity	Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997

solid waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
treatment of waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
TSP	Means total suspended particles
TSS	Means total suspended solids
utilisation area	Means any area shown as a utilisation area on a map submitted with the application for this licence
waste	Has the same meaning as in the Protection of the Environment Operations Act 1997
waste code	Means the waste codes listed in Appendix 5 of the EPA document A Guide to Licensing Part B.
waste type	Means Group A, Group B, Group C, inert, solid, industrial or hazardous waste

Model Licence Dictionary

In this licence, unless the contrary is indicated, the terms below have the following meanings:

Agency	A body or bodies of a participating State or a participating Territory which that State or Territory has nominated for the purposes of the NEPM.
Chemical control order (CCO)	An order under sections 22 and 23 of the Environmentally Hazardous Chemicals Act 1985.
Consignee	The person to whom the waste is dispatched, and includes: (a) in the case of a waste facility that is licensed - the occupier; (b) in the case of a person carrying on mobile waste processing that is licensed - the person operating the mobile place; (c) in the case of a place that can be otherwise lawfully be used as a waste facility for that waste - the owner or occupier of that place.
Consignment	One or more shipments of a specified waste dispatched to a particular destination.
Consignment authorisation	An approval which includes a unique identifier granted by an agency, or a facility delegated by an agency, in the jurisdiction of destination to allow the movement of controlled waste.
Controlled waste	Any waste included in List 1 of Schedule A of the NEPM, provided that the waste possesses one or more of the characteristics in List 2, of Schedule A of the NEPM.
Date of dispatch	The date on which a load of waste is removed from the premises**.**
Destination	Where hazardous, industrial or Group A wastes are transported within NSW, the place described in the waste data form as the destination for the waste. Where controlled wastes are transported between NSW and another participating State or Territory, the place described in Part 3 of the waste transport certificate as the facility receiving the waste.
Facility	A place where controlled wastes are received.
Facility Operator	A person in charge of a facility.
Jurisdiction of	In relation to a particular consignment of waste means the State or Territory in which

destination	the facility is located to which the waste is intended to be transported.
Load	The amount of a consignment of waste placed on a vehicle for any single dispatch from the premises at which it was generated or stored.
Load number	A consecutive number identifying each load of waste within a consignment and starting with 1 for the first load of each consignment. One or more loads may make up a consignment.
NEPM	The National Environment Protection (Movement of Controlled Wastes between States and Territories) Measure 1998.
Non-liquid waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997.
Participating State or Territory	A State or Territory that is (a) a party to the Intergovernmental Agreement on the Environment made on 1 May 1992 between the Commonwealth, the States, the Australian Capital Territory, the Northern Territory and the Australian Local Government Association, a copy of which is set out in the Schedule to the Commonwealth Act; and (b) in which an Act that corresponds to the National Environment Protection Council Act 1994 of the Commonwealth is in force in accordance with the Agreement.
Recycling of waste	The processing of waste into a similar non-waste product.
Regulation	The Protection of the Environment Operations (Waste) Regulation 1996.
Transporter	A person responsible for moving controlled wastes either from one participating State or Territory to another or through participating States or Territories.
Waste activity	An activity, whether required to be licensed or not, carried on for business or other commercial purposes, that involves the generating or storage of any of the following waste classes: (a) hazardous waste, (b) industrial waste, (c) Group A waste.
Waste class	Means either hazardous, industrial or Group A waste.
Waste data form	A certificate in the form approved by the EPA.
Waste guidelines	The document called *"Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes"* issued by the EPA and in force as at 1 July 1999.
Waste producer	Means the licensee.
Waste transport certificate	A certificate in the form approved by the EPA as fulfilling the requirements of Schedule B of the National Environment Protection (Movement of Controlled Wastes between States and Territories) Measure 1998.

Mr Tim Gilbert

Principal Officer Sydney Industry

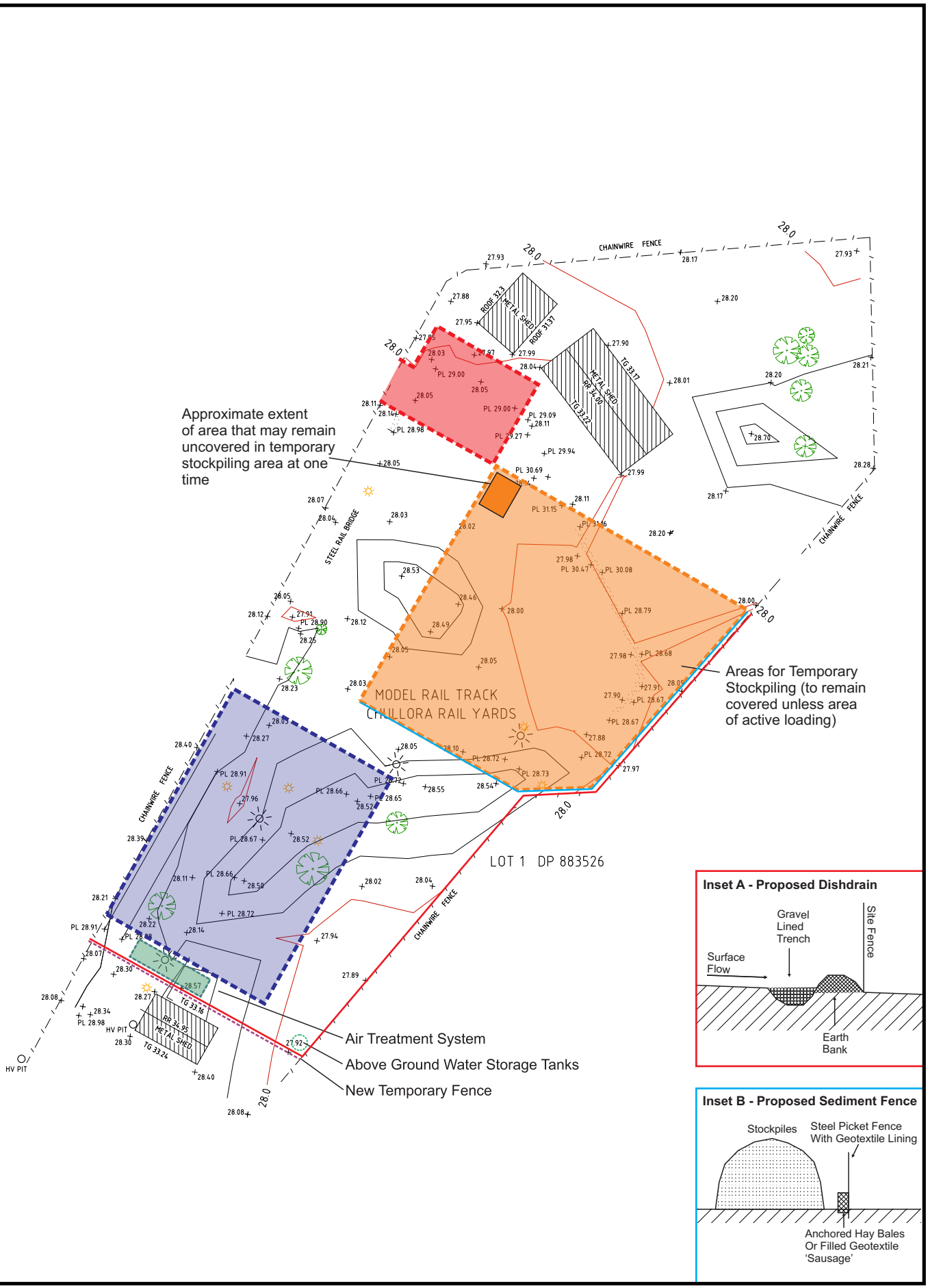
(By Delegation)

Date of this edition - 12-Jul-2001

End Notes

1 This licence was surrendered by notice 1004852 on 12-Jul-2001.

Attachment 3 –Figure 1



Source: Base Image: © 2011 Lynton Surveyors Pty Ltd - 2011C107_DET.dwg

0 10 20 40 m

Scale: Approximate

Datum: MGA94 Zone 56 - AHD

Rev	Description	Drn.	Date
A4			
0	Original Issue - L014	SE	10-8-2012

Legend:

- New Temporary Fence
- Air Treatment System
- Temporary Enclosure
- Area for Stockpiling
- Decontamination Area / Wheel Wash
- Proposed Dish Drain (Inset A)
- Proposed Sediment Fence (Inset B)

JBS ENVIRONMENTAL

Figure 1: Proposed Chullora Treatment Area Setup

Client: Incoll Management

Project: RailCorp Macdonaldtown Approvals

Job No: 40913 File Name: 40913_01