

Mr Chris Ritchie
Manager - Industry
Planning & Infrastructure
GPO Box 39
SYDNEY NSW 2001

EMAIL & STANDARD POST

Dear Mr Ritchie

Re: Moorebank Waste Recycling Project MP05_0157

I refer to your correspondence received on 15 October 2013 by the Environment Protection Authority ("EPA") requesting comments or advice on conditions of consent regarding the Moorebank Waste Recycling Project MP05_0157. I also refer to:

- I. Nexus Environmental Planning Pty Ltd "*Environmental Assessment Materials Recycling Facility Lot 6, DP 1065574 Newbridge Road Moorebank*" dated 19 February 2013 (the "EA").
- II. Preferred Projects Report dated 15 August 2013 ("PPR"), which included additional information responding to EPA's prior submission (refer to DOC13/12794) to the EA and a range of project amendments.
- III. Nexus Environmental Planning Pty Ltd report Ref: B950 received by the EPA on 20 January 2014 that further addresses submissions to the EA regarding noise issues.

The EPA has reviewed the PPR and the Nexus Environmental Planning Pty Ltd report Ref: B950 for the proposed materials recycling facility at Lot 6 DP 1065574 at Newbridge Road, Moorebank, NSW ("the Proposal") and based on the information in these, provides comments at Attachment A, recommended Conditions of Approval at Attachment B and Draft Conditions of Licence at Attachment C.

The recommended Conditions of Approval are conditions that will need to be included in any Environment Protection Licence for the premises. As such the EPA recommends that the planning approval and any related project approvals are consistent with these conditions.

The EPA advises that should the project approval be granted, the Proponent will need to apply for an environment protection licence pursuant to Schedule 1 of the *Protection of the Environment Operations Act 1997* ("POEO Act"). A separate application would need to be made to the EPA to obtain this licence.

The Proponent should be made aware that, consistent with provisions under Part 9.4 of the POEO Act, any environment protection licence issued by the EPA in relation to a waste facility will require the provision of a financial assurance. The amount and form of the assurance would be determined by the EPA and required as a condition of the licence.

In assessing the proposal the EPA has identified a number of environmental issues that the Department of Planning & Infrastructure may wish to consider in its overall assessment of the application. These issues are discussed in Attachment A and include the following issues:

1. Air Quality;
2. Noise and Vibration;
3. Water Quality; and
4. Landfill Gas.

If you have any questions in relation to this matter, please contact Alex Bourne on (02) 9995 5595.



16.5.14

RUTH OWLER
Unit Head Waste Operations
Environment Protection Authority

ATTACHMENT A – EPA COMMENTS

The proposed facility would receive inert building and construction waste including concrete, brick, asphalt, sandstone, and sand from the Sydney metropolitan area for crushing, stockpiling and resale. The proposed facility would have a maximum capacity of 500,000 tonnes per annum with a maximum daily processing rate of 1600 tonnes and proposed hours of operation are Monday to Saturday 7am to 6 pm, with crushing equipment operated from 7 am to 5:30 pm.

Air Quality

The EPA has reviewed the air quality section of the PPR for the proposed materials recycling facility at Moorebank. The modelling was revised in response to an independent technical review conducted on behalf of a respondent to the submissions process and following a joint meeting of expert witnesses as part of LEC proceedings in May 2013. The EPA provided feedback on the former submission (refer to DOC13/12794).

Revisions to modelling

The EPA notes that that modelling has been revised as follows:

- The number of sensitive receptors modelled has been increased to account for the George's Fair residential development, proposed marina development and potential future residential development on the existing Benedict's Sand and Gravel facility.
- Modelling has been conducted with AERMOD rather than AUSPLUME as for the original AQIA
- Cumulative impact assessment has been conducted using the Monte Carlo statistical probability method rather than as a contemporaneous assessment.
- The 2006 rather than 2005 meteorological data has been used as the former has a slightly higher proportion of worst case dispersion winds from the SE quadrant.
- The emissions inventory has been updated to incorporate post 2010 US EPA AP 42 and NPI emission factors as well as including an estimate for PM10 emissions due to on site truck exhausts and brake wear of 130kg/yr which appears to be based on estimation techniques from the NSW EPA GMR 2008 emissions inventory.
- Emissions from the existing Benedict's Sand and Gravel facility have been estimated using emission factors as for the proposed facility and included in the assessment.

Predicted impacts

The EPA notes that the revisions to the modelling do not alter the final outcomes of the assessment. The predicted project increments for TSP and PM10 indicate that the proposal is unlikely to result in exceedances of EPA dust impact assessment criteria provided operations are well managed and with appropriate controls in place.

Table 1- Summary of key predicted incremental impacts

Maximum predicted project increment at a sensitive receptor ($\mu\text{g}/\text{m}^3$)	Original AQIA	Revised AQIA
PM10 24 hour average	13.7	11.0
PM10 annual average	1.4	2.1
TSP	2.2	4.2

Assessment of cumulative PM10 24 hour average impacts using the Monte Carlo statistical technique indicates that the probability of additional exceedance days beyond those due to background emissions alone is low.

However EPA notes that there is ongoing residential development in the area in addition to a potential marina development. As such it is important to ensure that any conditions of approval issued for the proposal include a requirement to audit management practices post commencement of operations, to ensure that additional controls are developed if required. Regardless of the relatively low risk of impacts indicated by the modelling the reality is that there is likely to be community expectation for best management practice controls given the proximity to residential areas including the possibility of enclosure of the facility.

The proposed management measures to reduce emissions are:

- Watering of unsealed roads
- Sweeping of sealed trafficked areas
- Watering of stockpiles
- Although measures specific to crushing and grinding are not clearly highlighted in the main text of the AQIA it is stated in Appendix B that *"It has been assumed that there would be a reduction to TSP emissions from the use of enclosures. The reduction uses the same relationship between the controlled and uncontrolled US EPA emission factors (that is, 90%)"*.

Water pollution control

There will be no wastewater streams from processing operations.

Water pollution control should not be a significant issue, though the banks of the Georges River are 60-100m from the edge of the site.

Surface runoff following rainfall will contain suspended sediments. To intercept this runoff, the proponent will install 4 collection sumps. These sumps will provide for sediment settling and retention of any free oil. From the sumps, the runoff will be pumped to 4 stormwater storage tanks. Each tank will have 250,000 litres capacity. Collected stormwater will be reused in dust suppression, landscaping and other processes requiring moisture at the site.

There will be some overflow discharges from the collection sumps. These overflows will pass through grass and/or bioretention swales for additional treatment (sediment removal) before discharging from the site.

The proponent will conduct regular water quality monitoring of this system.

The modelling predicts that, through these measures, the proponent will capture 91% of the suspended solid load in runoff generated at the site. 55% of the water required for site operations will be supplied from captured stormwater, saving 14,000 m³ of potable water annually.

The site will also generate a daily wastewater stream from toilets and office buildings. This wastewater will be held in septic tanks and regularly pumped out by a licensed contractor.

EPA considers above scheme satisfactory and that approval conditions can call up the relevant provisions of the EA dealing with stormwater management and monitoring.

Note: Liverpool Council may have additional and/or local requirements for drainage design and run-off control.

Building over old landfill

The development will be over the site of an old landfill. In such situations, the developer must implement measures to prevent and monitor gas accumulation in on-site buildings and to maintain the integrity of the landfill cap. In this case, these issues are satisfactorily addressed in Appendix 6 of the EA – Geotechnical Assessment.

Noise and Vibration

Background

Following a review of the original Environmental Assessment dated 19 February 2013 and associated reports the EPA formed the opinion that the nature and timing of future possible land uses was unclear enough to withhold providing recommended conditions of consent pending additional details, which were sought in an email of 1 May 2013. These included:

- advice from the Department of Planning that Liverpool Council, as the consent authority for any application for residential development of Tanlane, confirming that any such consent would include requirements for noise mitigation measures to be incorporated that provide for an acceptable noise amenity for residents; and
- more details from the proponent on the feasible and reasonable noise mitigation measures that would be incorporated in the proposal with the objective of not exceeding the PSNLs for the Boral residential area.

The EPA has not received the requested advice from the Department of Planning or Liverpool Council within the ten months since our request, which seems a reasonable duration of time for a response.

Additional details on feasible and reasonable mitigation measures that could be implemented so as not to exceed the PSNLs for the Boral residential area have been provided by the proponent in a letter of 20 January 2014 to the Department of Planning.

CURRENT POSITION

Neither Liverpool Council or Department of Planning have not confirmed that consent for residential development of Tanlane could include requirements for noise mitigation measures to ensure an acceptable noise amenity for future residents. However, we consider that measures are available and could reasonably be incorporated in any consent. We reiterate our previous advice that it would be unreasonable for EPA to not support the proposed facility because residential development of Tanlane is not guaranteed or may not occur for some time and, in addition because there are measures that can be incorporated within any future residential development. We have therefore considered the Tanlane area as an existing industrial use and not considered it as a noise sensitive receiver.

EPA's recommended conditions of approval are provided in **Attachment B** for sensitive receivers predicted to have noise impacts up to EPA's derived Project-Specific Noise Levels (PSNL).

Clearly there are houses and roads currently being built in the Georges Fair area. In deriving PSNL we have not accepted the proponent's predicted future (higher) background noise levels but have based the PSNL on measured existing background noise levels. This is not saying that the predicted future levels are necessarily wrong, only that in applying the INP the EPA's practice has been to use existing background noise levels. INP guidance seems to predominantly contemplate developments that happen separately and sequentially and are inserted in an existing and unchanging acoustic environment. The situation of this proposal occurring coincident with development of a new residential suburb does, however, appear to be considered in Chapter 2.2.5 of the INP ("Effects of changing land use"), which concludes "...previously low ambient noise levels will not be maintained, and assessments of noise sources for control purposes should be made against the acceptable noise level relevant to the modified land use".

For receivers predicted to receive noise levels above our derived PSNL ("residual impacts") the Department of Planning and Infrastructure is best positioned to weigh the social, economic and environmental benefits of the proposal, and other considerations such as changing land use mentioned above, against potential adverse noise impacts according to Chapters 8 and 9 of the INP, and to determine if a noise limit above our (2013) PSNL is justified. If Planning determines that a noise limit above our PSNL is justified the information provided by the proponent indicates that the proponent could comply with the levels in **Table 1** below.

RECOMMENDATION

EPA advises that:

1. Comments relating to noise in EPA's previous submissions on the EIS have been mostly addressed.
2. Recommended conditions of approval for the project are in **Attachment B**. Note that monitoring and reporting conditions can be varied and must be negotiated with the proponent before being finalised in any Project Approval, so that they can be replicated by the EPA in an Environment Protection Licence.
3. For receivers predicted to receive noise levels above our PSNL ("residual impacts") the Department of Planning and Infrastructure is best positioned to weigh the social and economic benefits of the proposal against potential adverse noise impacts according to Chapters 8 and 9 of the INP, and to determine if a noise limit above our PSNL is justified. If Planning determines that a noise limit above our PSNL is justified the information provided by the proponent indicates that the proponent could comply with the levels in **Table 1** below. The Department of Planning and Infrastructure may choose to adopt the levels in **Table 1** as limits in a Project Approval, if approved, or seek to negotiate lower limits with the proponent. If levels above our PSNL are included in a Project Approval, EPA could include such levels in an Environment Protection Licence for the premises, provided they are not more than 5dB above our PSNL.

Table 1

Location	Daytime (7:00am to 6:00pm) [Monday to Saturday] L_{Aeq} (15 minute)
4N – Georges Fair	52
4K – Georges Fair	53
4M – Georges Fair	51
4S – 16 Bushview Lane Georges Fair	48

ATTACHMENT B - EPA KEY RECOMMENDED CONDITIONS OF APPROVAL

The EPA has included the following conditions of approval for consideration. Please note that the condition identifiers have been included for cross-reference purposes with any environment protection licence that may be issued in the future.

Noise, Meteorological Conditions and Operating Hours

L6 Recommended Noise Limits Materials Recycling Facility, Moorebank.

L6.1 Noise generated at the premises must not exceed the noise limits presented in Table 6.1 below. The location(s) referred to in the table below are indicated in the Report - Moorebank Recycling Facility Noise Impact Assessment (Report No: 03124-DA Version C) dated November 2012.

Table 6.1 Noise Limits – $L_{eq, 15\text{minute}}$ (dBA) unless otherwise indicated.

Location	Daytime (7:00am to 6:00pm) [Monday to Saturday]
1 - 37 Malinya Crescent Moorebank	44
2 - 26 Elouera Crescent Moorebank	44
3 - 42 Martin Crescent Milperra	48
6 - Vale of Ash Reserve	52 (50 $L_{eq, \text{daytime}}$)
7 - New Brighton Golf Course	48 (46 $L_{eq, \text{daytime}}$)

L6.2 For the purpose of condition L6.1;

- Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sunday and Public Holiday's.
- Evening is defined as the period 6pm to 10pm.
- Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sunday and Public Holiday's.

L6.3 Construction activity is permitted between the hours of 7:00am to 6:00pm Monday to Friday and Saturday 8:00am to 1:00pm with no construction on Sundays and Public Holidays.

L6.4 The noise limits set out in condition L6.1 apply under all meteorological conditions except for any one of the following:

- a) Wind speeds greater than 3 metres/second at 10 metres above ground level; or
- b) Stability category F temperature inversion conditions and wind speeds greater than 2 metres/second at 10 metres above ground level; or
- c) Stability category G temperature inversion conditions.

L6.5 For the purposes of condition L6.4:

- a) The meteorological data to be used for determining meteorological conditions is the data recorded by the meteorological weather station established at this site for the purposes of this Environment Protection Licence.
- b) Stability category temperature inversion conditions are to be determined by the sigma-theta method referred to in Part E4 of Appendix E to the NSW Industrial Noise Policy.

L6.6 For the purposes of determining the noise generated at the premises a Class 1 or 2 noise monitoring equipment as defined by AS IEC61672.1-2004 and AS IEC61672.2-2004, or other noise monitoring equipment accepted by the EPA in writing, must be used.

L6.7 To determine compliance:

- a) with the $L_{eq(15 \text{ minute})}$ noise limits in condition L6.1, the noise monitoring equipment must be located:
 - within 30 metres of a dwelling façade where any dwelling on the property is situated more than 30 metres from the property boundary that is closest to the premises;
 - approximately on the boundary where any dwelling is situated 30 metres or less from the property boundary that is closest to the premises;
 - within approximately 50 metres of the boundary of a National Park or a Nature Reserve.
- b) the noise monitoring equipment must be located in a position that is:
 - at the most affected point at a location where there is no dwelling at the location; or
 - at the most affected point within an area at a location prescribed by conditions L6.6(a).

L6.8 Noise must not be generated from the premises in excess of the appropriate limit specified in condition L6.1:

- in an area at a location other than an area prescribed by condition L6.1; and/or
- at a point other than the most affected point at a location.

L6.9 For the purposes of determining the noise generated at the premises the modification factors in Section 4 of the NSW Industrial Noise Policy must be applied, as appropriate, to the noise levels measured by the noise monitoring equipment.

L7 Hours of operation

L7.1 Activities at the premises may only be carried on between 7am and 6pm, Monday to Saturday.

L7.2 Crushing activities at the premises may only be carried on between 7am and 5:30pm, Monday to Saturday.

L7.3 This condition does not apply to the delivery of material outside the hours of operation permitted by condition L7.1, if that delivery is required by police or other authorities for safety reasons; and/or the operation or personnel or equipment are endangered. In such circumstances, prior notification is provided to the EPA and affected residents as soon as possible, or within a reasonable period in the case of emergency.

L7.4 The hours of operation specified in conditions L7.1 may be varied with written consent if the EPA is satisfied that the amenity of the residents in the locality will not be adversely affected.

M7 Requirement to Monitor Noise

M7.1 To determine compliance with Condition L6.1, attended noise monitoring must be undertaken in accordance with Conditions L6.6 and L6.7 and:

- a) at each one of the locations listed in Condition L6.1;
- b) occur bi-annually beginning 1 January each year;
- c) occur during each day, evening and night period as defined in the NSW Industrial Noise Policy for a minimum of:
 - 1.5 hours during the day;
 - 30 minutes during the evening; and
 - 1 hour during the night.
- d) occur for three consecutive days.

M8 Requirement to monitor weather

- M8.1 The meteorological weather station must be maintained so as to be capable of continuously monitoring the parameters specified in condition M8.2.
- M8.2 For each monitoring point specified in the table below the proponent must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1. The proponent must use the sampling method, units of measure, averaging period and sample at the frequency, specified opposite in the other columns.

Point 21

Parameter	Units Measure	of Frequency	Averaging Period	Sampling Method
Air temperature	°C	Continuous	1 hour	AM-4
Wind direction	°	Continuous	15 minute	AM-2 & AM-4
Wind speed	m/s	Continuous	15 minute	AM-2 & AM-4
Sigma theta	°	Continuous	15 minute	AM-2 & AM-4
Rainfall	Mm	Continuous	15 minute	AM-4
Relative humidity	%	Continuous	1 hour	AM-4

R4 Noise Monitoring Report

A noise compliance assessment report must be submitted to the EPA within 30 days of the completion of the bi-annual monitoring. The assessment must be prepared by a suitably qualified and experienced acoustical consultant which:

- assesses compliance with noise limits presented in Condition L6.1; and
- outlines any management actions taken within the monitoring period to address any exceedences of the limits contained in Condition L6.1.

Additional recommended inclusions in the Planning Approval

A Traffic Noise Management Strategy (TNMS) be developed by the proponent, for the purposes of construction and operational noise impacts prior to commencement of construction and to improve operation transport, to ensure that feasible and reasonable noise management strategies for vehicle movements associated with the facility are identified and applied, that include but are not necessarily limited to the following;

- driver training to ensure that noisy practices such as the use of compression engine brakes are not unnecessarily used near sensitive receivers;
- best noise practice in the selection and maintenance of vehicle fleets;
- movement scheduling where practicable to reduce impacts during sensitive times of the day, or evening (truck movements shall be contained to day and evening operations only);
- communication and management strategies for non proponent/proponent owned and operated vehicles to ensure the provision of the TNMS are implemented;
- a system of audited management practices that identifies non conformances, initiates and monitors corrective and preventative action (including disciplinary action for breaches of

noise minimisation procedures) and assesses the implementation and improvement of the TNMS;

- specific procedures to minimise impacts at identified sensitive areas;
- clauses in conditions of employment, or in contracts, of drivers that require adherence to the noise minimisation procedures and facilitate effective implementation of the disciplinary actions for breaches of the procedure.

Air Quality Conditions

PX Location of monitoring/discharge points and areas

PX.1 The following points referred to in the table below are identified for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.

Air

EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Description of Location
<u>1</u>	<u>Meteorological Monitoring</u>		<u>To be determined</u>

MX Requirement to monitor meteorological parameters

MX.1 For each monitoring point specified in the table below, the proponent must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1. The proponent must use the sampling method, units of measure, averaging period and sample at the frequency, specified opposite in the other columns.

POINT 1

Parameter	Units of measure	Frequency	Averaging Period	Sampling Method
Rainfall	mm	Continuous	1 hour	AM-4
Wind speed @ 10 metres	m/s	Continuous	15 minute	AM-2 & AM-4
Wind direction @ 10 metres	°	Continuous	15 minute	AM-2 & AM-4
Temperature @ 2 metres	°C	Continuous	15 minute	AM-4
Temperature @ 10 metres	°C	Continuous	15 minute	AM-4
Sigma theta @ 10 metres	°	Continuous	15 minute	AM-2 & AM-4
Solar radiation	W/m ²	Continuous	15 minute	AM-4

Parameter	Units of measure	Frequency	Averaging Period	Sampling Method
Additional requirements				AM-1 & AM-4
- Siting				AM-2 & AM-4
- Measurement				

OX Dust

- OX.1 The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.
- OX.2 Activities occurring in or on the premises must be carried out in a manner that will minimise the generation, or emission from the premises, of wind blown or traffic generated dust.

OY Odour

- OY.1 The proponent must not cause or permit the emission of offensive odour beyond the boundary of the premises.

Note: Section 129 of the *Protection of the Environment Operations Act 1997* provides that a proponent must not cause or permit the emission of offensive odour beyond the boundary of 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.

- OY.2 No condition of an environment protection licence identifies a potentially offensive odour for the purposes of Section 129 of the *Protection of the Environment Operations Act 1997*.

UX Dust audit

- UX.1 By 6 months from the commencement of operations the proponent must submit a dust audit report to the EPA's Senior Manager Waste Operations.

The dust audit report must address the following:

- A summary of any dust complaints received and actions taken to reduce dust emissions where complaints are verified;
- Benchmark the design and management practices at the Moorebank Materials Recycling premises against industry best practice for minimising dust emissions. This should include, but not be limited to, the use of onsite meteorological monitoring data to inform dust management practices, stockpile management and watering regimes.
- Using the results of (a) and (b), if it is identified that the facility does not meet industry best practice standards for dust minimisation in any area of the proposed operations the report must include:
 - Proposed mitigation works and/or management practices to ensure that dust is minimised as far as is practicable; and
 - A timetable for the implementation of these works.

Complaints Management

E1 Complaints Management System

E1.1 Prior to the commencement of any activity at the Premises, the proponent must develop a complaints management system to be incorporated in the Environmental Management Plan for the facility. The system shall include, but not be limited to:

- a hotline for receiving any complaints from the community in relation to activities conducted at the premises;
- a commitment by the proponent to:
 - investigate potential sources of noise and dust, taking into account on site activities and meteorological data at the time of the complaint;
 - take immediate action to reduce noise and dust impacts if they are currently occurring at the time of the complaint;
 - contact the complainant about the action taken in response to the complaint
- a record of complaints and the proponent's responses or actions, readily accessible to the community and regulatory authorities, and
- a system for providing feedback to the community.

Landfill Gas Accumulation

The construction of the onsite facilities shall be designed to address the potential for landfill gas accumulation.

Waste

The proposed facility can only receive concrete, brick, asphalt, sandstone and sand from the building and construction industry. No domestic loads can be received at the facility.

ATTACHMENT C – DRAFT LICENCE CONDITIONS

The following draft licence conditions are provided to indicate the potential requirements of an Environment Protection Licence that are relevant for consideration in the assessment of this application. Please note that as the EPA has not received a licence application for the proposed works, these conditions may alter in due course.

Administrative Conditions

A1. Information supplied to the EPA

A1.1 Except as expressly provided by these general terms of approval, works and activities must be carried out in accordance with the proposal contained in:

- *Environmental Assessment Materials Recycling Facility Lot 6, DP 1065574 Newbridge Road Moorebank*, Nexus Environmental Planning Pty Ltd, 19 February 2013; and
- *Preferred Projects Report*, Nexus Environmental Planning Pty Ltd, 15 August 2013; and
- *Report Ref: B950*, Nexus Environmental Planning Pty Ltd, 20 January 2014.

A2. Fit and Proper Person

A2.1 The applicant must, in the opinion of the EPA, be a fit and proper person to hold a licence under the *Protection of the Environment Operations Act 1997*, having regard to the matters in s.83 of that Act.

A3.1 The applicant must apply for and receive an environment protection licence from the EPA prior to commencing any activity associated with the proposal, including construction activities.

A3.2 Waste must not be received and/or disposed of at the premises until the EPA has provided the applicant with an environment protection licence which explicitly approves the receipt and processing of waste at the premises.

A4.1 This licence authorises the carrying out of the scheduled activities listed below at the premises specified. 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 / Fee Based Activity Scale

Scheduled Activity	Fee Based Activity	Scale
Resource Recovery	Recovery of general waste	> 0 T recovered
Waste Storage	Waste storage - other types of waste	> 0 T stored

Limit Conditions

L1 Pollution of Waters

Except as may be expressly provided in any other condition of this licence, the proponent must comply with section 120 of the *Protection of the Environment Operations Act 1997*.

L4 Volume and mass limits

L4.1 The height of any stockpile of any material (whether of waste or any other material) on the premises must not exceed 5 metres in height above ground level.

L4.2 There shall not be more than 30,000 cubic metres of waste and/or processed material on the premises at any time.

L3 Waste

- L3.1 The proponent 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.

Any waste received at the premises must only be used for the activities referred to in relation to that waste in the column titled "Activity" in the table below.

Any waste received at the premises is subject to those limits or conditions, if any, referred to in relation to that waste contained in the column titled "Other Limits" in the table below.

This condition does not limit any other conditions in this licence.

Code	Waste	Description	Activity	Other Limits
NA	General or Specific exempted waste	Waste that meets all the conditions of a resource recovery exemption under Clause 51A of the Protection of the Environment Operations(Waste) Regulation 2005	As specified in each particular resource recovery exemption	NA
NA	Building and demolition waste limited to concrete, brick, and sandstone		Waste Storage Resource Recovery	
NA	Asphalt waste (including asphalt resulting from road construction and waterproofing works)		Waste Storage Resource Recovery	
N/A	Sand	Sand that meet the CT1 thresholds of the Waste Classification Guidelines as in force from time to time with the exception of the maximum threshold values for contaminants specified in the 'Other Limits' column	Waste Storage Resource Recovery	Arsenic: 40mg/kg Cadmium: 2mg/kg Copper: 200mg/kg Mercury: 1.5mg/kg Petroleum Hydrocarbons C6-C9: 150mg/kg Petroleum Hydrocarbons C10-C36: 1600mg/kg Polycyclic aromatic hydrocarbons: 80mg/kg Polychlorinated byphenyls (individual) 1mg/kg

L6 Noise and Meteorological Conditions.

L6.1 Noise generated at the premises must not exceed the noise limits presented in Table 6.1 below. The location(s) referred to in the table below are indicated in the Report - Moorebank Recycling Facility Noise Impact Assessment (Report No: 03124-DA Version C) dated November 2012.

Table 6.1 Noise Limits – $L_{eq, 15\text{minute}}$ (dBA) unless otherwise indicated.

Location	Daytime (7:00am to 6:00pm) [Monday to Saturday]
1 - 37 Malinya Crescent Moorebank	44
2 - 26 Elouera Crescent Moorebank	44
3 - 42 Martin Crescent Milperra	48
6 - Vale of Ash Reserve	52 (50 $L_{eq, \text{daytime}}$)
7 - New Brighton Golf Course	48 (46 $L_{eq, \text{daytime}}$)

L6.2 For the purpose of condition L6.1;

- Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sunday and Public Holiday's.
- Evening is defined as the period 6pm to 10pm.
- Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sunday and Public Holiday's.

L6.3 Construction activity is permitted between the hours of 7:00am to 6:00pm Monday to Friday and Saturday 8:00am to 1:00pm with no construction on Sundays and Public Holidays.

L6.4 The noise limits set out in condition L6.1 apply under all meteorological conditions except for any one of the following:

- a) Wind speeds greater than 3 metres/second at 10 metres above ground level; or
- b) Stability category F temperature inversion conditions and wind speeds greater than 2 metres/second at 10 metres above ground level; or
- c) Stability category G temperature inversion conditions.

L6.5 For the purposes of condition L6.4:

- a) The meteorological data to be used for determining meteorological conditions is the data recorded by the meteorological weather station established at this site for the purposes of this Environment Protection Licence.
- b) Stability category temperature inversion conditions are to be determined by the sigma-theta method referred to in Part E4 of Appendix E to the NSW Industrial Noise Policy.

L6.6 For the purposes of determining the noise generated at the premises a Class 1 or 2 noise monitoring equipment as defined by AS IEC61672.1-2004 and AS IEC61672.2-2004, or other noise monitoring equipment accepted by the EPA in writing, must be used.

L6.7 To determine compliance:

- a) with the $L_{eq(15 \text{ minute})}$ noise limits in condition L6.1, the noise monitoring equipment must be located:
 - within 30 metres of a dwelling façade where any dwelling on the property is situated more than 30 metres from the property boundary that is closest to the premises;

- approximately on the boundary where any dwelling is situated 30 metres or less from the property boundary that is closest to the premises;
- within approximately 50 metres of the boundary of a National Park or a Nature Reserve.

b) the noise monitoring equipment must be located in a position that is:

- at the most affected point at a location where there is no dwelling at the location; or
- at the most affected point within an area at a location prescribed by conditions L6.6(a).

L6.8 Noise must not be generated from the premises in excess of the appropriate limit specified in condition L6.1:

- in an area at a location other than an area prescribed by condition L6.1; and/or
- at a point other than the most affected point at a location.

L6.9 For the purposes of determining the noise generated at the premises the modification factors in Section 4 of the NSW Industrial Noise Policy must be applied, as appropriate, to the noise levels measured by the noise monitoring equipment.

Operating Hours

L7 Hours of operation

L7.1 Activities at the premises may only be carried on between 7am and 6pm, Monday to Saturday.

L7.2 Crushing activities at the premises may only be carried on between 7am and 5:30pm, Monday to Saturday.

L7.3 This condition does not apply to the delivery of material outside the hours of operation permitted by condition L7.1, if that delivery is required by police or other authorities for safety reasons; and/or the operation or personnel or equipment are endangered. In such circumstances, prior notification is provided to the EPA and affected residents as soon as possible, or within a reasonable period in the case of emergency.

L7.4 The hours of operation specified in conditions L7.1 may be varied with written consent if the EPA is satisfied that the amenity of the residents in the locality will not be adversely affected.

M7 Requirement to Monitor Noise

M7.1 To determine compliance with Condition L6.1, attended noise monitoring must be undertaken in accordance with Conditions L6.6 and L6.7 and:

- a) at each one of the locations listed in Condition L6.1;
- b) occur bi-annually beginning 1 January each year;
- c) occur during each day, evening and night period as defined in the NSW Industrial Noise Policy for a minimum of:
 - 1.5 hours during the day;
 - 30 minutes during the evening; and
 - 1 hour during the night.
- d) occur for three consecutive days.

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 Testing methods - concentration limits

M2.1 In the event of an earthquake, storm, fire, flood or any other event where it is reasonable to suspect that a pollution incident has occurred, is occurring or is likely to occur, the proponent (whether or not the premises continue to be used for the purposes to which the licence relates) must:

- a) make all efforts to contain all firewater on the proponent's premises,
- b) make all efforts to control air pollution from the proponent's premises,
- c) make all efforts to contain any discharge, spill or run-off from the proponent's premises,
- d) make all efforts to prevent flood water entering the proponent's premises,
- e) remediate and rehabilitate any exposed areas of soil and/or waste,
- f) lawfully dispose of all liquid and solid waste(s) stored on the premises that is not already securely disposed of,
- g) at the request of the EPA monitor groundwater beneath the proponent's premises and its potential to migrate from the proponent's premises,
- h) at the request of the EPA monitor surface water leaving the proponent's premises; and
- i) ensure the proponent's premises is secure.

M3 Recording of pollution complaints

M3.1 The proponent must keep a legible record of all complaints made to the proponent or any employee or agent of the proponent in relation to pollution arising from any activity to which this licence applies.

M3.2 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 proponent in relation to the complaint, including any follow-up contact with the complainant; and
- f) if no action was taken by the proponent, the reasons why no action was taken.

M3.3 The record of a complaint must be kept for at least 4 years after the complaint was made.

M3.4 The record must be produced to any authorised officer of the EPA who asks to see them.

M4 Telephone complaints line

- M4.1 The proponent 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.
- M4.2 The proponent 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.
- M4.3 The preceding two conditions do not apply until 3 months after:
- the date of the issue of this licence or
 - 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 proponent under clause 10 of that regulation.

M8 Location of monitoring/discharge points and areas

- M8.1 The following points referred to in the table below are identified for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.

Air

EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Description of Location
<u>1</u>	<u>Meteorological Monitoring</u>		<u>To be determined</u>

MX Requirement to monitor meteorological parameters

- MX.1 For each monitoring point specified in the table below, the proponent must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1. The proponent must use the sampling method, units of measure, averaging period and sample at the frequency, specified opposite in the other columns.

POINT 1

Parameter	Units of measure	Frequency	Averaging Period	Sampling Method
Rainfall	mm	Continuous	1 hour	AM-4
Wind speed @ 10 metres	m/s	Continuous	15 minute	AM-2 & AM-4
Wind direction @ 10 metres	°	Continuous	15 minute	AM-2 & AM-4
Temperature @ 2 metres	°C	Continuous	15 minute	AM-4
Temperature @ 10 metres	°C	Continuous	15 minute	AM-4
Sigma theta @ 10 metres	°	Continuous	15 minute	AM-2 & AM-4
Solar radiation	W/m2	Continuous	15 minute	AM-4

Parameter	Units of measure	Frequency	Averaging Period	Sampling Method
Additional requirements				AM-1 & AM-4
- Siting				AM-2 & AM-4
- Measurement				

R4 Noise Monitoring Report

A noise compliance assessment report must be submitted to the EPA within 30 days of the completion of the bi-annual monitoring. The assessment must be prepared by a suitably qualified and experienced acoustical consultant which:

- c) assesses compliance with noise limits presented in Condition L6.1; and
- d) outlines any management actions taken within the monitoring period to address any exceedences of the limits contained in Condition L6.1.

Additions to Definition of Terms of the licence

- NSW Industrial Noise Policy - the document entitled "New South Wales Industrial Noise Policy published by the Environment Protection Authority in January 2000."
- Noise - sound pressure levels' for the purposes of conditions L6.1 to L6.7

Operating Conditions

O1 Activities must be carried out in a competent manner

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

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.

O4 Emergency response

- O4.1 The proponent must maintain, and implement as necessary, a current emergency response plan for the premises. The proponent 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 proponent must develop an emergency response plan within three months of that date.

O5 Processes and management

- O5.1 The proponent must ensure that any material for processing, storage or resource recovery at the premises is assessed and classified in accordance with the EPA's Waste Classification Guidelines as in force from time to time.
- O5.2 The proponent must ensure that each waste for recovery/recycling is stockpiled separately.

OY Odour

- OY.1 The proponent must not cause or permit the emission of offensive odour beyond the boundary of the premises.

Note: Section 129 of the *Protection of the Environment Operations Act 1997* provides that a proponent must not cause or permit the emission of offensive odour beyond the boundary of 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.

- OY.2 No condition of an environment protection licence identifies a potentially offensive odour for the purposes of Section 129 of the *Protection of the Environment Operations Act 1997*.

OX Dust

- OX.1 The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.
- OX.2 Activities occurring in or on the premises must be carried out in a manner that will minimise the generation, or emission from the premises, of wind blown or traffic generated dust.

UX Dust audit

- UX.1 By 6 months from the commencement of operations the proponent must submit a dust audit report to the EPA's Senior Manager Waste Operations.

The dust audit report must address the following:

- d) A summary of any dust complaints received and actions taken to reduce dust emissions where complaints are verified;
- e) Benchmark the design and management practices at the Moorebank Materials Recycling premises against industry best practice for minimising dust emissions. This should include, but not be limited to, the use of onsite meteorological monitoring data to inform dust management practices, stockpile management and watering regimes.
- f) Using the results of (a) and (b), if it is identified that the facility does not meet industry best practice standards for dust minimisation in any area of the proposed operations the report must include:
 - Proposed mitigation works and/or management practices to ensure that dust is minimised as far as is practicable; and
 - A timetable for the implementation of these works.

G1 Landfill Gas Accumulation

The construction of the onsite facilities shall be designed to address the potential for landfill gas accumulation.

Reporting Conditions

R1 Annual return documents

- R1.1 The proponent 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.
 At the end of each reporting period, the EPA will provide to the proponent a copy of the form that must be completed and returned to the EPA.
- R1.2 An Annual Return must be prepared in respect of each reporting period, except as provided below.
- R1.3 Where this licence is transferred from the proponent to a new proponent:
 a) the transferring proponent 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 proponent is granted; and
 b) the new proponent 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.
- R1.4 Where this licence is surrendered by the proponent or revoked by the EPA or Minister, the proponent 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.
- 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').
- R1.6 The proponent 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.
- R1.7 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.
- R1.8 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.

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.

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

R2 Notification of environmental harm

- R2.1 Notifications must be made by telephoning the Environment Line service on 131 555.
- R2.2 The proponent must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.

Note: The proponent or its employees must notify all relevant authorities 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.

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 proponent 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 proponent, or a specified class of them, who witnessed the event;
- d) the name, address and business hours telephone number of every other person (of whom the proponent is aware) who witnessed the event, unless the proponent has been unable to obtain that information after making reasonable effort;
- e) action taken by the proponent 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; and
- 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 proponent. The proponent must provide such further details to the EPA within the time specified in the request.

6 General Conditions

G1 Copy of licence kept at the premises or plant

- 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 proponent working at the premises.

8 Special Conditions

E1 Financial assurance

- E1.1 A financial assurance in the form of an unconditional and irrevocable guarantee from an Australian bank, building society or credit union in favour of the EPA in the amount of two hundred thousand dollars (\$200,000) must be provided to the EPA.
- E1.2 The financial assurance may be adjusted each financial year in line with the Consumer Price Index for the previous year.
- E1.3 The proponent must provide to the EPA the original counterpart guarantee within five working days of the issue of:
 - a) the financial assurance required by condition E1.1, and
 - b) the adjusted financial assurance as required by condition , E1.3 and E1.4.

E2 Environmental obligations of the proponent

- E2.1 While the proponent's premises are being used for the purpose to which the licence relates, the proponent must:
- a) Clean up any spill, leak or other discharge of any waste(s) or other material(s) as soon as practicable after it becomes known to the proponent or to one of the proponent's employees or agents.
 - b) In the event(s) that any liquid and non-liquid waste(s) is unlawfully deposited on the premises, such waste(s) must be removed and lawfully disposed of as soon as practicable or in accordance with any direction given by the EPA.
 - c) Provide all monitoring data as required by the conditions of this licence or as directed by the EPA.
- E2.2 After the proponent's premises cease to be used for the purpose to which the licence relates or in the event that the proponent ceases to carry out the activity that is the subject of this licence, that proponent must:
- a) remove and lawfully dispose of all liquid and non-liquid waste stored on the proponent's premises; and
 - b) rehabilitate the site, including conducting an assessment of and if required remediation of any site contamination.
- E3 Requirement to maintain financial assurance**
- E3.1 The financial assurance must be replenished by the full amount claimed or realised if the EPA has claimed on or realised the financial assurance or any part of it to undertake a work or program required to be carried out by the licence which has not been undertaken by the licence holder.
- E3.2 The EPA may require an increase in the amount of the financial assurance at any time as a result of reassessment of the total likely costs and expenses of rehabilitation of the premises.
- E4 Claims on financial assurance**
- E4.1 The EPA may claim on a financial assurance under s303 of the POEO Act if a proponent fails to carry out any work or program required to comply with the conditions of this licence.