NSW EPA

Our reference: DOC12/36329

Department of Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2001

Attention: Mr Chris Ritchie

EMAIL AND STANDARD POST

Dear Mr Ritchie

Whytes Gully Landfill Expansion Project, Kembla Grange (11_0094)
Exhibition of Environmental Assessment – Submission from NSW EPA

I refer to correspondence from the Department of Planning and Infrastructure (DoPI) to the Environment Protection Authority (EPA) received on 3 August 2012 inviting the Environment Protection Authority (EPA) to make a detailed submission in relation to the Whytes Gully Landfill Expansion Project, Kembla Grange 11_0094 (the Project) which has been placed on public exhibition by Wollongong City Council (the Proponent).

The EPA has reviewed the Environmental Assessment provided by Golder Associates on behalf of the Proponent and provides comments at Attachment A.

If you have any questions in relation to this matter, please contact Megan Whelan on (02) 4224 4109.

Yours sincerely

3/9/12

JASON SCARBOROUGH
A/Unit Head – Waste Operations
Environment Protection Authority

Enclosed: Attachment A

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ATTACHMENT A

Environment Protection Authority Submission
Comments and Recommended Conditions of Approval
Whytes Gully Landfill Expansion Project, Kembla Grange (11_0094)

A. AIR QUALITY AND ODOUR

Comments

The issue of PM10 24-hour average exceedances requires some clarification. Results presented in Figure 7.12 of the air quality assessment appear inconsistent with the assessment text. Assessment text (pages 34 and 35) states that there will be no additional PM10 24-hour average exceedances due to the project. Figure 7.12 shows at least 1 additional exceedance day. The proponent should confirm the cumulative 24-hour average PM10 assessment results. If the results shown in Figure 7.12 are correct, the proponent should provide a revised assessment including additional controls to ensure no exceedances are predicted to occur due to project operations.

If the assessment does not predict exceedances of impact assessment criteria for PM10, the EPA recommends the following conditions:

Recommended Conditions of Approval

Monitoring

The proponent must install, operate and maintain a meteorological monitoring station at the site for the life of the project.

Operating Conditions – project areas

For each project stage identified in column 1 of the table (below), the maximum project area shall not exceed the area specified in the column other columns for the active tipping face, waste relocation, daily cover and 90 day cover.

Stage	Active Tipping Face Area (m^2)	Waste Relocation Area (m^2)	Daily Cover Area (m^2)	90 Day Cover Area (m^2)
Stage 1	1,100	1,800	19,800	14,000
Stage 2	1,000	0	1,300	7,500
Stage 3	1,000	0	1,300	7,500
Stage 4	1,000	0	1,300	7,500

Air Quality Management Plan

The proponent must develop and implement an air quality management plan prior to the commencement of project operations. As a minimum, the air quality management plan must include the following parts:

- *Key performance indicator(s);*
- *Monitoring method(s);*
- *Location, frequency and duration of monitoring;*
- *Record keeping;*
- *Response mechanisms; and*
- *Compliance reporting.*

Recommended Environment Protection Licence Conditions

Odour

No condition of this licence identifies a potentially offensive odour for the purposes of section 129 of the Protection of the Environment Operations Act 1997.

Note: Section 129 of the *Protection of the Environment Operations Act 1997*, provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.

Dust

All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.

Requirement to monitor weather

The licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1. The licensee must use the sampling method, units of measure, averaging period and sample at the frequency, specified opposite in the other columns.

Parameter	Units of measure	Frequency	Averaging Period	Sampling Method
Rainfall	mm/hour	continuous	1 hour	AM-4
Sigma theta	degrees	continuous	10 minute	AM-2 and AM-4
Siting				AM-1
Temperature at 2 metres	kelvin	continuous	10 minute	AM-4
Temperature at 10 metres	kelvin	continuous	10 minute	AM-4
Total solar radiation	watts per square metre	continuous	10 minute	AM-4
Wind Direction at 10 metres	degrees	continuous	10 minute	AM-2 and AM-4
Wind Speed at 10 metres	metres per second	continuous	10 minute	AM-2 and AM-4

Covering of Waste

Cover material must be:

(a) Daily cover

Daily cover material must be:

(i) virgin excavated natural material.

Cover material must be applied to a minimum depth of 15 centimetres over all exposed landfilled waste prior to ceasing operations at the end of each day.

(b) Intermediate cover

Cover material must be applied to a depth of 30 centimetres over surfaces of the landfilled waste at the premises which are to be exposed for more than 90 days.

B. NOISE

Comments

The Noise Impact Assessment (NIA) in the Environmental Assessment includes the subject premises in the background noise monitoring, which is not in accordance with the guidance in the Industrial Noise Policy (INP). The EPA will therefore assume that the minimum background level of 30dBA applies to the surrounding residential receivers.

The EPA does not agree with the proponent that cumulative noise levels should be assessed against the construction noise criteria. The EPA considers that the INP applies to the entire process on site, that is both the construction and operation stages.

The cumulative (i.e. construction and operation) predicted noise levels at receivers N1 and N2 are significantly greater than the Project Specific Noise Level (PSNL) - up to 54dBA at N1 and up to 45dBA at N2. The proponent has not provided any description of feasible and reasonable mitigation measures to reduce the predicted levels. The EPA advises that it does not normally Licence to levels significantly greater than the PSNLs.

The EPA has not included receivers N1 and N2 in the noise limits table in the attached recommended licence conditions, on the assumption that Planning will advise the proponent that the negotiated agreements process in Chapter 8 of the INP is available to them, and that Planning will require the proponent to provide evidence of negotiated agreements being in place with N1 and N2 before any Project Approval can be issued.

The EPA has recommended noise limits for receivers N3 to N5 based on the predicted cumulative noise levels in Tables 15 and 16 in the NIA. Where the levels are more than 2dBA above the PSNLs, the EPA recommends that the proponent implement a noise management plan (NMP) to minimise noise from the site over the life of the landfill. The EPA does not and will not approve or endorse a NMP and does not need to review such a plan.

Recommended Conditions of Approval

The EPA recommends that a Traffic Noise Management Strategy (TNMS) be developed by the proponent, prior to commencement of operation activities, 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,
- communication and management strategies for non licensee/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 for drivers to minimise impacts at identified sensitive receivers,
- 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 procedures.

Recommended Licence Conditions

Limit Conditions

L6.1 Noise generated at the premises must not exceed the noise limits in the table below. The locations referred to in the table below are indicated by the Noise Impact Assessment as contained within Environmental Assessment for the proposed Whytes Gully New Landfill Cell, Golder Associates, June 2012.

	NOISE LIMITS dB(A)
Locality	Day
	$L_{Aeq\ (15\ minute)}$
N3	38
N4	35
N5	35

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 Holidays.

L6.3 To determine compliance:

a) with the $L_{eq(15\ minute)}$ noise limits in condition L6.1, the noise measurement equipment must be located:

- approximately on the property boundary, where any dwelling is situated 30 metres or less from the property boundary closest to the premises; or
- within 30 metres of a dwelling façade, but not closer than 3m, where any dwelling on the property is situated more than 30 metres from the property boundary closest to the premises; or, where applicable
- within approximately 50 metres of the boundary of a National Park or a Nature Reserve.

b) with the noise limits in condition L6.1, the noise measurement equipment must be located:

- 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 condition L6.3(a).

L6.4 A non-compliance of condition L6.1 will still occur where noise generated from the premises in excess of the appropriate limit is measured:

- at a location other than an area prescribed by conditions L6.3(a); and/or
- at a point other than the most affected point at a location.

L6.5 The noise limits set out in condition L6.1 apply under all meteorological conditions except for 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.

L6.6 For the purposes of condition L6.5:

a) Data recorded by the meteorological station identified as EPA Identification Point [x] must be used to determine meteorological conditions; and
b) Temperature inversion conditions (stability category) are to be determined by the sigma-theta method referred to in Part E4 of Appendix E to the NSW Industrial Noise Policy.

L6.7 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.

Monitoring Conditions

M8 Requirement to Monitor Noise

M8.1 To assess compliance with Condition L6.1, attended noise monitoring must be undertaken in accordance with Conditions L6.3 and:

a) at each one of the locations listed in Condition L6.1;

b) occur annually in a reporting period

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.

M8.2 The licensee must undertake noise monitoring as directed by an authorised officer of the EPA.

Reporting Conditions

R4 Noise Monitoring Report

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

a) an assessment of compliance with noise limits presented in Condition L6.1; and

b) an outline of 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

- Noise - sound pressure levels for the purposes of conditions L6.1 to L6.8.
- NSW Industrial Noise Policy - the document entitled "New South Wales Industrial Noise Policy published by the Environment Protection Authority in January 2000."

Recommended inclusions in a Noise Management Plan

The proponent must prepare and implement a Noise Management Plan that covers all premises based activities and transport operations. The plan must include but need not be limited to:

(a) Copies of the Project Noise Impact Assessments;

(b) Copies of the Project Approvals under which the development operates

(c) The operational noise limits in the Project Approval,

(d) Assessment of potential noise from the proposed operation against the limits in the Project Approval,

(e) Description of management methods and procedures and specific noise mitigation treatments that will be implemented,

(f) A system that allows for periodic assessment of Best Management Practice (BMP) and Best Available Technology Economically Achievable (BATEA) that has the potential to further reduce noise levels from the facility,

(g) Effective implementation of identified BMP and BATEA measures, where considered feasible and reasonable,

(h) Measures to monitor noise performance and respond to complaints,

(i) Measures for community consultation including site contact details,

(j) Noise monitoring and reporting procedures.