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**Veolia Environmental Services Australia**

Prepared by

**Ramboll Environ Australia Pty Ltd**

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# **INDEPENDENT ENVIRONMENTAL AUDIT WOODLAWN BIOREACTOR AND CRISPS CREEK INTERMODAL FACILITY**

**INDEPENDENT ENVIRONMENTAL AUDIT  
WOODLAWN BIOREACTOR AND CRISPS CREEK  
INTERMODAL FACILITY**

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## EXECUTIVE SUMMARY

Veolia Environmental Services Australia Pty Ltd (Veolia) engaged Ramboll Environ Australia Pty Ltd (Ramboll Environ) to conduct an environment audit (the Audit) of the Woodlawn Bioreactor and Crisps Creek Intermodal (the Sites). The site visit components of the Audit were conducted by Ronan Kellaghan and Shaun Taylor (the Auditors) on 4 August 2016. The Audit Report was prepared by the Auditors and reviewed and authorised by Victoria Sedwick.

The objective of the Audit was to assess the environmental performance of the Woodlawn Bioreactor and Crisps Creek Intermodal development, **including the requirements of the Site's** Environmental Protection Licences (EPLs), as required under Condition 7.6 of Schedule 7 of the Project Approval 10\_0012.

The Audit also considers the requirements outlined in the original Development Application (DA) No. 31-02-99, in accordance with the transitional arrangements outlined under Condition 10 and 12 of Schedule 3 in Project Approval 10\_0012.

The Auditors consider that overall, the environmental practices for the Site were adequate; however, compliance with the offensive odour conditions have not been verified.

One non-compliance has been identified, as follows:

- Truck wheel track out was evident at the intermodal facility (IMF) site access onto Bungadore road and fugitive dust emissions were observed as trucks exited the site. However, it is noted that this was an existing issue at the time of the Audit with corrective actions being implemented by Veolia. Veolia has informed the auditors that the track out observed during the Audit site visit was a result of high rainfall in the days preceding the audit and corrective actions are ongoing.

The following administrative non-compliances were identified during the Audit:

- The community liaison committee (CLC) was initially established under the DA No. 31-02-99 and continues to operate as required under Project Approval 10\_0012. However, an additional requirement under the recent approval requires details of the CLC members to be submitted to the Department of Planning and Environment (DPE) for endorsement, which was not done.
- Complaints are managed as part of the Veolia Incident Management System and therefore a specific complaints handling procedure has not been prepared in consultation with the nominated agencies and the CLC, although the CLC is aware of the complaints lodging process.
- The commissioning of this Independent Environmental Audit occurred after the date required by the approval; however, circumstances **beyond Veolia's control have** contributed to the delay, including the additional requirements of the DPE to provide experts in odour and traffic to conduct the audit.
- Veolia were unable to remove all leachate from evaporation dam ED3N-1 by 30 June 2013 as specified in EPL 11436 Condition U2.1. Veolia met with the EPA in July 2013 and detailed the operational processes being undertaken to remove the leachate, which were accepted by the EPA.

The following observations are made during the Audit and recommendations provided where relevant:

- On 15 July 2016, the DPE and EPA inspected 20 waste shipping containers at the IMF and found that 18 were leaking from poor door seals or faulty welds. Veolia have responded to and addressed this through an assessment of their Container maintenance quality assurance program and improvements are ongoing. There was no evidence of leaking containers observed during the Audit site visit.
- Due to maintenance on the main gas line, Flare#2 was switched to vent mode on 21 August 2013, and not detected until 9 September 2013. The incidence was immediately logged in

**Veolia's incident management system** but reporting to the EPA was late (23 September 2013), which resulted in an official caution from the EPA and Penalty Infringement Notice (PIN). Veolia has since implemented a new isolation/de-isolation plan, to encompass both flares 1 & 2, to prevent future occurrence.

- The Independent Odour Audit (IOA) is required to determine whether the project is complying with the condition to protect receivers against offensive odour; however, the 2015 IOA is inconclusive in this regard. Future IOA should re-focus towards investigation and verification of community odour complaints.
- The existing meteorological station does not meet the siting requirements of the relevant Australian Standard, in terms of separation distance to the nearest trees. It is the Auditors view that existing trees would probably have a small or minimal effect on the recorded wind conditions, however to facilitate investigating odour complaints, it is recommended that an alternative or additional location be considered. A suitable additional location would be on the Pylara property, which would assist in understanding the non-steady state nature of local dispersion and inform the investigation of community complaints.
- Performance testing and reporting for the gas engines should include destruction efficiency testing for odour and volatile organic compounds (VOCs).
- It is recommended that Veolia use their internal audit tracking system to record dates for commissioning and submission of reports and audits required under the approvals and EPLs.
- The operating hours specified in EPL 11455 (7am to 6pm) do not match the Project Approval 10\_0012 operating hours (6am to 10pm). It is noted that expanded operations have not commenced, therefore the expanded operational hours are not currently needed and Veolia are in the process of applying for an update to EPL 11455 so that hours of operation match the new approval.
- It is recommended that Veolia consider formalising complaints handling in a standalone procedure and present to CLC for review.
- No specific mention of a Pollution Incident Response Management Plan (PIRMP) is provided in the Emergency Response Plan (ERP). However it is noted that Veolia operate an integrated environmental and safety management system that addresses both ERP and PIRMP requirements, and which has been accepted by the EPA.

# 1. INTRODUCTION

Veolia Environmental Services Australia Pty Ltd (Veolia) engaged Ramboll Environ Australia Pty Ltd (Ramboll Environ) to conduct an Independent Environmental Audit (the Audit) of the Woodlawn Bioreactor and Crisps Creek Intermodal Facility.

The Woodlawn Bioreactor is located within the Woodlawn Eco-Precinct, approximately 10 km southwest of the village of Tarago. The Crisps Creek Intermodal (IMF) is located approximately 8 kilometres (km) east of the Bioreactor and approximately 2 km south of Tarago, on the Bungendore Road.

The Audit is required under Condition 7.6 of Schedule 7 of the Project Approval 10\_0012 for the Sites. The Sites are identified in the Project Approval 10\_0012 as Lot 19 DP 827588, Lots 25, 30, 88 & 91 DP 754919.

The site visit component of the Audit was conducted by Shaun Taylor and Ronan Kellaghan (the Auditors) on 4 August 2016. The Lead Auditor, Victoria Sedwick attended the opening meeting via conference call. The Audit Report was prepared by the Auditors and reviewed and authorised by, Victoria Sedwick.

## 1.1 Audit objective and scope

The objective of the Audit was to assess the environmental performance of the Sites, for the period since the last Audit, conducted on 4 April 2012, against the current and original approvals (Project Approval 10\_0012 and Development Application DA No. 31-02-99).

Condition 7.6, Schedule 7 of 10\_0012 requires the Audit to consider the Sites' Environmental Protection Licences (EPL 11436 and EPL 11455), as follows:

*Every three (3) years after the first Independent Odour Audit required under condition 7 of schedule 4 of this approval, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the Project. This audit must:*

- a) be conducted by a suitably qualified, experienced, and independent team of experts, including both traffic and odour experts, whose appointment has been endorsed by the Director-General;*
- b) incorporate and consider the findings/mandatory recommendations of any Independent Odour Audit required by this approval.*
- c) assess the environmental performance of the Project, and its effects on the surrounding environment;*
- d) assess whether the Project is complying with the relevant standards, performance measures, and statutory requirements;*
- e) review the adequacy of any strategy/plan/program required under this approval; and, if necessary,*
- f) recommend measures or actions to improve the environmental performance of the Project, and/or any strategy/plan/program required under this approval.*

Condition 3.10 and 3.12, Schedule 3 of 10\_0012 outline the transitional arrangements and relationship with the original approval (DA No. 31-02-99), as follows:

*3.10 This approval does not affect the rights or obligations under DA No. 31-02-99 except in the event of any inconsistency between DA No. 31-02-99 and this approval, this approval shall prevail.*

*3.12 All existing environmental management plans that apply to the site under DA No. 31-02-99 shall continue to be fully applied until replaced under this approval.*

## 1.2 Exclusions

The Mechanical Biological Treatment facility (previously referred to as the Alternative Waste Treatment facility) is still in construction phase and therefore Project Approval 06\_0239 and EPL 20476 are not reviewed as part of this Audit.

### 1.3 Audit methodology

The Audit was conducted in accordance with the general requirements of AS/NZS ISO 19011: 2014 *Guidelines for quality and/or environmental management systems auditing* and the NSW Department of Planning and Environment (DPE) *Independent Audit Guideline* (October 2015).

Compliance has been assessed using the Independent Audit Guideline criteria and non-compliances have been assigned risk levels from the Independent Audit Guideline as shown within Table 1 and **Table 2**.

The following tasks were completed during the audit:

- Review of documentation prior to inspections of the Sites.
- Preparation of an audit plan and protocol.
- Inspections of the Sites accompanied by Veolia personnel.
- Interviews with Veolia personnel.
- Review site records for verification of the audit findings.
- Preparation of a written Audit Report (this report).

The draft Audit Report was provided to Veolia on 22 September 2016 to review for factual correctness and the draft Action Plan (Table 7) was provided to Veolia on 22 September 2016 for review.

### 1.4 Audit Team

The audit team including Victoria Sedwick (Lead Auditor), Ronan Kellaghan (Auditor) and Shaun Taylor (Auditor) was approved in writing by the DPE in a letter to Veolia dated 28 April 2016 (**Appendix 1**).

## 2. AUDIT FINDINGS

This section contains a summary of the Audit findings. Formal compliance assessment is presented in **Section 5** of this report, as follows:

- Project Approval 10\_0012 - **Table 3**.
- Development Application DA No. 31-02-99 - **Table 4**.
- EPL 11436 - **Table 5**.
- EPL 11455 - **Table 6**.

The Action Plan is outlined in **Table 7**.

### 2.1 General

The audit relates to two sites: the Woodlawn Bioreactor and the Crisps Creek Intermodal Facility. The Woodlawn Bioreactor (Bioreactor) is located within the Woodlawn Eco-Precinct, located off Collector Road, approximately 10 km southwest of the Village of Tarago. The Woodlawn site has a total area of approximately 300 hectares (ha), with the Bioreactor occupying approximately 70 ha within the void of the previously operating open cut mine (Woodlawn mine). The Crisps Creek Intermodal Facility (IMF) is located approximately 8km east of the Bioreactor and 2km south of Tarago.

Containerised general solid **putrescible waste from Veolia's Clyde Transfer Terminal (CTT)** is transported by rail to the IMF. The train arrives at the IMF at approximately 6.30am and containers are unloaded and transferred to trucks for transfer to the Bioreactor. Transfer of containers between the IMF and Bioreactor generally occurs between the approximately 6.30 am and approximately 2 pm. Incoming trucks are weighed at the Bioreactor weighbridge and container numbers recorded, before processing to the active tipping face within the Bioreactor. Waste is unloaded to the active tipping face and compactors are used to spread and compact the waste.

The Bioreactor is approved to receive 900,000 tonnes of waste by rail from Sydney, 100,000 tonnes of residual waste from the Woodlawn Alternative Waste Treatment Facility (AWT) (not currently operational) and 50,000 tonnes of regional waste, received by road.

### 2.2 Environmental management

The Site operates under Veolia's integrated management system which includes health safety and environmental management. Measures to prevent and/or minimise harm to the environment are outlined in the Landfill Environmental Management Plan (LEMP). At the time of the Audit, the original 2014 LEMP remained in place while the updated 2016 draft LEMP was awaiting DPE approval.

Veolia has developed and implemented the measures required under the development consent to prevent and/or minimise any harm to the environment may result from their operations. The review of site documentation; observations and interviews with Site representatives demonstrated that the existing environmental management system is considered generally adequate in addressing the development consent requirements.

Non-compliances and opportunities for improvement identified during the Audit are outlined in the following sections of this report.

#### 2.2.1 Complaints

Veolia operates a complaints line with the telephone number advertised in the Tarago Times **monthly publication**. **Complaints are recorded as incidents in Veolia's incident management system** and described in the LEMP. Complaints are reported in the EPL Annual Return and Annual Environmental Monitoring Report (AEMR). Complaints for the site are generally related to odour. For the 2014-2015 Annual Return, a total of 63 complaints were logged and reported. Further discussion on odour complaints is provided in **Section 2.6.1**.

**Non-Compliance (Administrative):** The community liaison committee (CLC) was established under the DA No. 31-02-99 and continued to operate for Project Approval 10\_0012. Therefore, details of the CLC members including the Chairperson and frequency of meetings was not submitted to the DPE.

**Non-Compliance (Administrative):** Complaints are managed as part of the Veolia Incident Management System and therefore no specific complaints handling procedure has been prepared in consultation with the nominated agencies and the CLC, although the CLC is aware of the complaints lodging process.

**Recommendation:** The Auditors recommend Veolia consider formalising complaints handling in a standalone procedure and presenting to the CLC for review.

### 2.3 Planning approvals

Project Approval (10\_0012 – refer **Appendix 2**) for the Woodlawn Waste Expansion Project was granted on 16 March 2012, incorporating the Crisps Creek Intermodal facility. The original Development Application (DA No. 31-02-99 – refer **Appendix 3**) remains in place and Condition 3.10 and 3.12 (Schedule 3) of 10\_0012 outline the transitional arrangements and relationship with the original approval.

A review of both approvals was carried out as part of this Audit. The review of site documentation, audit observations and interviews with site representatives from Veolia has demonstrated the development has to date been conducted in general accordance with the terms of the Project Approval 10\_0012 and DA No. 31-02-99, although some non-compliances and opportunities for improvement were observed. The compliance findings are documented in **Table 3** and **Table 4** and summarised in the sections below.

**Non-Compliance (Administrative):** Condition 6 of Schedule 7 required this Independent Environmental Audit to be commissioned every three (3) years after the first Independent Odour Audit (IOA), which was completed in 2012. Although this audit was not commissioned in 2015 and within three years of the first IOA, there were circumstances that contributed to the length of the delay which were beyond the control of Veolia, including allocation of a suitable Auditor and revised DPE requirements for an odour and traffic expert as part of the audit team.

**Recommendation:** It is recommended that Veolia use their internal audit tracking system to record dates for commissioning and submission of reports and audits required under 10\_0012 and EPL 11436 and 11455.

### 2.4 Environment Protection Licence

The facility operates under EPL 11436 and 11455 (refer to **Appendix 4** and **Appendix 5**), issued by the NSW Environment Protection Authority (EPA) on 5 September 2002 in accordance with Section 55 of the NSW *Protection of the Environment Operations Act 1997* (POEO Act).

The Bioreactor EPL (11436) covers the following Scheduled Activities:

- Waste disposal (application to land).
- Electricity Generating Works.

The IMF EPL (11455) covers the following Scheduled Activities:

- Waste storage.

A review of both EPLs was carried out as part of this Audit. The compliance findings are documented in **Table 4** and **Table 5** and summarised in the sections below.

Due to maintenance on the main gas line, Flare#2 was switched to vent mode on 21 August 2013, and not detected until 9 September 2013. The incidence was immediately logged in **Veolia's incident management system but reporting to the EPA was late** (23 September 2013), which resulted in an official caution from the EPA and Penalty Infringement Notice (PIN). Veolia has since implemented a new isolation/de-isolation plan, to encompass both flares 1 & 2, to prevent future occurrence.

EPL 11455 operating hours (7am to 6pm) do not match the Project Approval 10\_0012 operating hours (6am to 10pm). It is noted that expanded operations have not commenced, therefore the expanded operational hours are not currently needed. Veolia are in the process of applying for an update to EPL 11455 so that hours of operation match the new approval.

**Recommendation:** It is recommended that Veolia apply for an update to EPL 11455 so that hours of operation match the new approval.

#### 2.4.1 Pollution Studies and Reduction Program

Condition U1.4 of EPL 11436 requires that Veolia provide a written report to the Manager, Waste Operations, by 31 October 2013, detailing the outcomes of the alternative daily cover trial. A report dated November 2013 was sent to EPA on 30 November 2013, however an extension to this reporting deadline was granted by the EPA.

Condition U2.1 requires that all untreated leachate must be removed from ED3N-1 by no later than 30 June 2013.

**Non-Compliance (Administrative):** As reported in the 2013 AEMR, Veolia were unable to remove all leachate by this date due to the required residence time for the biological treatment system. Veolia corresponded with the EPA following the missed deadline and listed the operational processes being undertaken to remove the leachate. All leachate was removed and treated by September 2013.

## 2.5 Pollution Incident Response Management Plan

Under the POEO Act, the holder of an EPL is required to have in place a Pollution Incident Response Management Plan (PIRMP) and to make certain parts of the PIRMP publicly available. Veolia's procedure for communication with external parties is available on their website (<http://www.veolia.com.au/sustainable-solutions/environmental-compliance>) and includes instructions for notification of environmental incidents, including pollution incidents.

The 2016 draft LEMP describes that how the PIRMP forms part of the Emergency Response Plan (PRO-NSW-218-049); however, there is no specific mention of the PIRMP within the Emergency Response Plan. It is noted, however that EPA has approved Veolia's ERP as an integrated environmental and safety management system, which addresses both ERP and PIRMP requirements.

## 2.6 Environmental issues

### 2.6.1 Odour

In accordance with Project Approval condition 4.6 and EPL condition L6.1, Veolia is required to ensure no offensive odour is emitted from the site. A review of the Woodlawn Odour Complaints Register reveals a number of odour complaints are received in each year since the previous Independent Environmental Audit (IEA) (April 2012).

The independent odour audit (IOA) is required to determine whether the project is complying with the condition to protect receivers against offensive odour. Condition 4.7 (b) requires the IOA to audit the effectiveness of protecting receivers against offensive odour and condition 4.7 (f) requires the IOA to determine if receivers are protected against offensive odour.

The 2015 IOA is inconclusive in this regard. For example, ambient odour surveys found "*no odour was detectable beyond the boundary of the site at the time of the*" audit, whereas the odour diary analysis concluded "*that odour impact is predominantly experienced by participating entrants.....*". The odour complaint analysis in the IOA is limited to 2 pages.

It is beyond the scope of this Audit to verify each odour complaint and the IOA is not conclusive in this regard. It is difficult, therefore, to determine compliance with this condition, however some analysis was completed and is presented in **Appendix 6**.

Of the 92 logged odour complaints in the previous 2 years, the NSW EPA have taken action as follows:

- On 20 March 2015, the NSW EPA issued Veolia with a show cause letter, relating to an odour complaint received on 19 January 2015. Veolia responded to the show cause letter, **responding to EPA's suggestion that** equipment was not maintained in a proper and efficient manner. The NSW EPA subsequently issued a penalty infringement notice for causing offensive odour / failure to operate plant and equipment in a proper manner.
- The NSW EPA requested a response from Veolia to an odour complaint received on the 25 October 2015. Veolia responded on 17 November 2015 and no further action was taken.
- On 21 March 2016, NSW EPA wrote to Veolia regarding alleged odour from the Crisp Creek Intermodal facility. The EPA directed Veolia to report back on the quality assurance program (QAP) for container integrity and the measures taken to prevent offensive odour impacting on the Tarago Public School. On 8 April 2016, Veolia responded with their QAP and identified further improvements. No further action was taken. On 15 July 2016, the DPE and EPA inspected 20 waste shipping containers at the Crisps Creek Intermodal Facility and found that 18 were leaking from poor door seals or faulty welds. On 5 August 2016, Veolia responded to the show cause letter for an alleged breach of Project Approval conditions (dated 27 July 2016) (relating to the handling and transport of waste shipping containers).

Veolia respond and investigate each odour complaint received. There are also ongoing odour management measures being employed at the site. The annual odour audit outlines mandatory and non-mandatory odour controls and Veolia are also in the process of finalising a long term leachate management strategy, in consultation with the DPE and EPA.

### **Summary of compliance assessment**

**Determining compliance with a condition of "no offensive odour" is not straightforward.** The EPA has developed odour goals (expressed as odour units [ou]) to assess the likelihood of nuisance impact arising from the emission of odour. However, the criteria are typically used for the design and siting of a new facility (i.e. compared against dispersion modelling predictions) and cannot be directly applied to ambient odour monitoring. Once a facility is operational, the benchmark is no longer the odour assessment criteria but whether the odour is offensive or being prevented or minimised using best available management practices.

Under the POEO Act, the term offensive odour, is defined as an odour:

- *that, by reason of its strength, nature, duration, character or quality, or the time at which it is emitted, or any other circumstances:*
  - *is harmful to (or is likely to be harmful to) a person who is outside the premises from which it is emitted, or*
  - *interferes unreasonably with (or is likely to interfere unreasonably with) the comfort or repose of a person who is outside the premises from which it is emitted, or*
- *b) that is of a strength, nature, duration, character or quality prescribed by the regulations or that is emitted at a time, or in other circumstances, prescribed by the regulations.*

In practice, offensive odour can only be judged by public reaction to the odour. If taken at face value, the presence of repeated complaints would indicate that offensive odour has occurred.

**However, it is the auditors' view that not every logged odour complaints is verified as offensive odour from the Sites.**

Approximately 50% of the complaints in 2015 and 63% in 2016 are from the same individual, located approximately 9 km from the bioreactor and complaints from this individual appear inconsistent. Some complaints were logged when prevailing winds would not transport odour from the site to the complaint location. Furthermore, some complaints were logged when employees would have been onsite and the inferred odour intensity in the complaint log at a distance of ~9 km (described as making the complaint feel sick), would suggest that if the bioreactor was the source, the onsite concentrations would have resulted in significant occupational health and safety concerns for employees working in the void.

**Recommendation:** Future IOA should re-focus some of the effort towards investigation and verifying community odour complaints. This would assist the 3-year IEA in determining compliance with conditions of consent.

**Recommendation:** As described above, there is some uncertainty in the influence of nearby terrain features on the prevailing winds for the local area. The installation of a second weather station on the Pylara property would greatly assist in understanding the non-steady state nature of local dispersion and inform the investigation of community complaints.

#### 2.6.2 Air Quality (General)

Condition 4.4 requires that landfill gas engine (LGE) emissions at the Bioreactor comply with the requirements of the POEO (Clean Air) Regulation 2010. The auditors have reviewed the WBE Master Record – Engine Emissions which show compliance with POEO (Clean Air) Regulation 2010 for oxides of nitrogen (NO<sub>x</sub>), sulphur trioxide (SO<sub>3</sub>) and hydrogen sulphide (H<sub>2</sub>S). The auditors have also cross checked a NATA testing report for 2015 the WBE Master Record – Engine Emissions spreadsheet and confirmed this to be correct. Condition L2.4 of EPL 11436 summarises the relevant limits from the POEO (Clean Air) Regulation 2010 and condition M2 of EPL 11436 outlines the monitoring requirements, both of which have been complied with.

However, condition O6.16 of EPL of EPL 11436 requires the gas engines to achieve a minimum destruction efficiency testing of 98% for volatile organic compounds, air toxics and odour. Destruction efficiency testing is not currently included in the annual testing regime and compliance with this condition cannot be verified. However, the auditors have reviewed the data presented in the IOA, which reports odour concentrations for landfill gas (9,000,000 ou) and gas engines (~1,900) and we have calculated an odour destruction efficiency of >99.9%.

**Recommendation:** Performance testing for the gas engines should include destruction efficiency testing for odour and VOCs, in accordance with requirements in condition O6.16 of EPL 11436.

Condition 4.11 outlines the dust limits for the Sites. The auditors have reviewed dust deposition monitoring data for DG28 (Pylara) and DG18 (IMF). For the calendar year 2015, annual average dust deposition at Pylara exceeded 4 g/m<sup>2</sup>/month. However, this is not a private receiver and therefore this does not represent an exceedance. At DG18, the annual average dust deposition complies with the criteria. Veolia no longer monitors for PM<sub>10</sub> or TSP; however, the auditors have no reason to believe that the criteria for PM<sub>10</sub> and TSP are exceeded at any private residential receiver. The auditors did not witness dust being generated at the bioreactor site during the audit site visit.

Condition 4.12 requires the preparation and implementation of an Air Quality and Greenhouse Gas Management Plan (AQGHGMP). The auditors have reviewed the current (2004) Air Quality Management Plan and revised draft 2016 AQGHGMP, which, although in draft is the more relevant document. The AQGHGMP has been prepared in consultation with DPE and EPA and meets the requirements of this condition.

Condition 4.22 requires that a suitable meteorological station is installed that complies with the Approved Methods for Sampling of Air Pollutants in NSW. The approved methods reference AS2923-1987 – *Guide for measurement of horizontal wind for air quality applications* which has since been superseded with AS/NZS 3580.14: 2014 – *Methods for the sampling and analysis of ambient air - Meteorological Monitoring for ambient air quality monitoring applications*. The current location of the station does not appear to meet the separation distance requirement of 10 times the height of the nearest tree (referenced in both AS2923 and AS/NZS 3580.14).

**Recommendation:** It is the Auditors view that existing trees would probably have a small or minimal effect on the recorded wind conditions, however to avoid any dispute when investigating odour complaints, it is recommended that an alternative or additional location should be considered, as per the recommendation in **Section 2.6.1**.

### 2.6.3 Material track out

Condition O3.3 (EPL 11455) requires all sealed and unsealed surfaces must be managed to minimise the quantity of wind-blown dust emissions. Condition O6.22 (EPL 11436) Condition O5.1 (EPL 11455) requires that vehicles leaving the premises must not track materials to external surfaces.

**Non-Compliance:** Wheel track out was evident at the IMF access to Bungadore road and dust emissions were being generated as trucks exited the site. However, it is noted that this was an existing issue at the time of the Audit with corrective actions being implemented by Veolia. Veolia has informed the auditors that the track out observed during the Audit site visit was a result of high rainfall in the days preceding the audit and corrective actions are ongoing.

### 2.6.4 Waste management

Condition 4, Schedule 5 of Project Approval 10\_0012 and Condition O6.1 of EPL 11455 requires that all containers must be designed, constructed and maintained to prevent the emission of offensive odour and be water tight to prevent the leakage of leachate from waste containers during transport and handling activities. On 15 July 2016, the DPE and EPA inspected 20 waste shipping containers at the IMF and found that 18 were leaking from poor door seals or faulty welds. Veolia have responded to and addressed this through an assessment of their Container maintenance quality assurance program and improvements are ongoing. There was no evidence of leaking containers observed during the Audit site visit.

### 2.6.5 Traffic management

Traffic management has not been identified as significant issue for the site. The 2004 EMP (as approved by DPE) does not include details on the route to be taken by heavy vehicles, however the travel routes are communicated to the drivers and vehicles are tracked via GPS via the Intelligent Access Program. The 2016 IMF EMP (currently with DPE for review and approval) includes the transport route to be used by heavy vehicles. The mandatory pavement and traffic management measures outlined in the approval, have been agreed with Palerang Council. However Veolia does not anticipate exceeding the regional waste threshold of 30,000 tonnes per annum in the immediate future and as such these measures do not need to be implemented.

### 2.6.6 Surface water quality

Surface water management is documented in the Soil and Water Management Plan. The site is designed as a zero discharge site, with all storm water and leachate collected and stored in ED3. Surface and storm water run-off at the IMF collected in an onsite retention system. Water quality testing is completed following rainfall events and prior to discharge to Mulwaree River. If polluted, water is pumped from the retention basin for disposal at the Bioreactor.

### 2.6.7 Storage and handling of chemicals and fuels

Storage and handling of chemicals, fuels and oils is considered to be appropriate. The above ground diesel storage tank at the Bioreactor is double skinned and installed on concrete paved area. The site is designed as a zero discharge site, with all surface flow contained onsite.

### 2.6.8 Noise and vibration

Noise and vibration have not been identified as significant issues at the Bioreactor or IMF.

### 3. CONCLUSION

The Auditors consider that overall, the environmental practices for the Site were adequate; however, compliance with the offensive odour conditions have not been verified. One non-compliance has been identified, as follows:

- Truck wheel track out was evident at the intermodal facility (IMF) site access onto Bungadore road and fugitive dust emissions were observed as trucks exited the site. However, it is noted that this was an existing issue at the time of the Audit with corrective actions being implemented by Veolia. Veolia has informed the auditors that the track out observed during the Audit site visit was a result of high rainfall in the days preceding the audit and corrective actions are ongoing.

The following administrative non-compliances were identified during the Audit:

- The community liaison committee (CLC) was initially established under the DA No. 31-02-99 and continues to operate as required under Project Approval 10\_0012. However, an additional requirement under the recent approval requires details of the CLC members to be submitted to the Department of Planning and Environment (DPE) for endorsement, which was not done.
- Complaints are managed as part of the Veolia Incident Management System and therefore a specific complaints handling procedure has not been prepared in consultation with the nominated agencies and the CLC, although the CLC is aware of the complaints lodging process.
- The commissioning of this Independent Environmental Audit occurred after the date required by the approval; however, circumstances **beyond Veolia's control have** contributed to the delay, including the additional requirements of the DPE to provide experts in odour and traffic to conduct the audit.
- Veolia were unable to remove all leachate from evaporation dam ED3N-1 by the required date in EPL 11436 Condition U2.1. Veolia corresponded with the EPA following the missed deadline and detailed the operational processes being undertaken to remove the leachate, which was accepted by the EPA. All leachate was removed one month later.

The following observations are made during the Audit and recommendations provided where relevant:

- On 15 July 2016, the DPE and EPA inspected 20 waste shipping containers at the IMF and found that 18 were leaking from poor door seals or faulty welds. Veolia have responded to and addressed this through an assessment of their Container maintenance quality assurance program and improvements are ongoing. There was no evidence of leaking containers observed during the Audit site visit.
- Due to maintenance on the main gas line, Flare#2 was switched to vent mode on 21 August 2013, and not detected until 9 September 2013. The incidence was immediately logged in **Veolia's incident management system but** reporting to the EPA was late (23 September 2013), which resulted in an official caution from the EPA and Penalty Infringement Notice (PIN). Veolia has since implemented a new isolation/de-isolation plan, to encompass both flares 1 & 2, to prevent future occurrence.
- The Independent Odour Audit (IOA) is required to determine whether the project is complying with the condition to protect receivers against offensive odour; however, the 2015 IOA is inconclusive in this regard. Future IOA should re-focus towards investigation and verification of community odour complaints.
- The existing meteorological station does not meet the siting requirements of the relevant Australian Standard, in terms of separation distance to the nearest trees. It is the Auditors view that existing trees would probably have a small or minimal effect on the recorded wind conditions, however to facilitate investigating odour complaints, it is recommended that an alternative or additional location be considered. A suitable additional location would be on

the Pylara property, which would assist in understanding the non-steady state nature of local dispersion and inform the investigation of community complaints.

- Performance testing and reporting for the gas engines should include destruction efficiency testing for odour and volatile organic compounds (VOCs).
- It is recommended that Veolia use their internal audit tracking system to record dates for commissioning and submission of reports and audits required under the approvals and EPLs.
- The operating hours specified in EPL 11455 (7am to 6pm) do not match the Project Approval 10\_0012 operating hours (6am to 10pm). It is noted that expanded operations have not commenced, therefore the expanded operational hours are not currently needed and Veolia are in the process of applying for an update to EPL 11455 so that hours of operation match the new approval.
- It is recommended that Veolia consider formalising complaints handling in a standalone procedure and present to CLC for review.
- No specific mention of a Pollution Incident Response Management Plan (PIRMP) is provided in the Emergency Response Plan (ERP). Veolia operates an integrated environmental and safety management system that addresses both ERP and PIRMP requirements, and which has been accepted by the EPA.

<b>INDEPENDENT AUDIT CERTIFICATION</b>	
Development Name	Woodlawn Bioreactor and Crisps Creek Intermodal
Development Consent No.	Project Approval 10_0012 & Development Application DA No. 31-02-99
Description of Development	Woodlawn Bioreactor and Crisps Creek Intermodal Facility
Development Address	Collector Road and Bungendore Road, Tarago
Operator	Veolia Environmental Services (Australia) Pty Ltd
Operator Address	PO BOX 171 GRANVILLE NSW 2142
<b>Independent Audit</b>	
Title of Audit	Woodlawn Bioreactor and Crisps Creek Intermodal
<p><i>I certify that I have undertaken the independent audit and prepared the contents of the attached independent audit report and to the best of my knowledge:</i></p> <ul style="list-style-type: none"> <li>• <i>The audit has been undertaken in accordance with relevant approval condition(s) and in accordance with the auditing standard AS/NZS ISO 19011:2014 and Post Approval Guidelines – Independent Audits</i></li> <li>• <i>The findings of the audit are reported truthfully, accurately and completely;</i></li> <li>• <i>I have exercised due diligence and professional judgement in conducting the audit;</i></li> <li>• <i>I have acted professionally, in an unbiased manner and did not allow undue influence to limit or over-ride objectivity in conducting the audit;</i></li> <li>• <i>I am not related to any owner or operator of the development as an employer, business partner, employee, sharing a common employer, having a contractual arrangement outside the audit, spouse, partner, sibling, parent, or child;</i></li> <li>• <i>I do not have any pecuniary interest in the audited development, including where there is a reasonable likelihood or expectation of financial gain or loss to me or to a person to whom I am closely related (i.e. immediate family);</i></li> <li>• <i>Neither I nor my employer have provided consultancy services for the audited development that were subject to this audit except as otherwise declared to the lead regulator prior to the audit; and</i></li> <li>• <i>I have not accepted, nor intend to accept any inducement, commission, gift or any other benefit (apart from fair payment) from any owner or operator of the development, their employees or any interested party. I have not knowingly allowed, nor intend to allow my colleagues to do so.</i></li> </ul> <p><i>Note.</i></p> <p><i>a) The Independent Audit is an 'environmental audit' for the purposes of section 122B (2) of the Environmental Planning and Assessment Act 1979. Section 122E provides that a person must not include false or misleading information (or provide information for inclusion in) an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000.</i></p> <p><i>b) The Crimes Act 1900 contains other offences relating to false and misleading information: section 192G (Intention to defraud by false or misleading statement—maximum penalty 5 years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents—maximum penalty 2 years imprisonment or \$22,000, or both).</i></p>	
Signature	
Name of Lead / Principal Auditor	Victoria Sedwick
Address	Ramboll Environ PO Box 560, North Sydney NSW 2060
Email Address	vsedwick@ramboll.com
Auditor Certification	Exemplar Global Lead Auditor Accreditation No.13180
Date:	16 December 2016

## 5. COMPLIANCE ASSESSMENT TABLES

<b>Table 1: Compliance Assessment Criteria</b>	
<b>Assessment</b>	<b>Criteria</b>
Compliant	Where the auditor has collected sufficient verifiable evidence to demonstrate that the intent and all elements of the requirement of the regulatory approval have been complied with within the scope of the audit.
Not verified	Where the auditor has not been able to collect sufficient verifiable evidence to demonstrate that the intent and all elements of the requirement of the regulatory approval have been complied with within the scope of the audit. In the absence of sufficient verification the auditor may in some instances be able to verify by other means (visual inspection, personal communication, etc.) that a requirement has been met. In such a situation, the requirement should still be assessed as not verified. However, the auditor could note in the report that they have no reasons to believe that the operation is non-compliant with that requirement.
Non-compliant	Where the auditor has collected sufficient verifiable evidence to demonstrate that the intent of one or more specific elements of the regulatory approval have not been complied with within the scope of the audit.
Administrative non-compliance	A technical non-compliance with a regulatory approval that would not impact on performance and that is considered minor in nature (e.g. report submitted but not on the due date, failed monitor or late monitoring session). This would not apply to performance-related aspects (e.g. exceedance of a noise limit) or where a requirement had not been met at all (e.g. noise management plan not prepared and submitted for approval).
Not triggered	A regulatory approval requirement has an activation or timing trigger that had not been met at the time of the audit inspection, therefore a determination of compliance could not be made.
Observation	Observations are recorded where the audit identified issues of concern which do not strictly relate to the scope of the audit or assessment of compliance. Further observations are considered to be indicators of potential non-compliances or areas where performance may be improved.
Note	A statement or fact, where no assessment of compliance is required.

<b>Table 2: Risk Levels for Non-compliances</b>		
<b>Risk level</b>	<b>Colour code</b>	<b>Description</b>
<b>High</b>		Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence
<b>Medium</b>		Non-compliance with: <ul style="list-style-type: none"> <li>• potential for serious environmental consequences, but is unlikely to occur; or</li> <li>• potential for moderate environmental consequences, but is likely to occur</li> </ul>
<b>Low</b>		Non-compliance with: <ul style="list-style-type: none"> <li>• potential for moderate environmental consequences, but is unlikely to occur; or</li> <li>• potential for low environmental consequences, but is likely to occur</li> </ul>
<b>Administrative non-compliance</b>		Only to be applied where the non-compliance does not result in any risk of environmental harm (e.g. submitting a report to government later than required under approval conditions)

<b>Table 3: Conditions of Development Consent – Application No. 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
<b>SCHEDULE 3. ADMINISTRATIVE CONDITIONS</b>			
	<b>OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT</b>		
3.1	The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation or decommissioning of the Project.	Observation	Measures to prevent and/or minimise harm to the environment are outlined in the Landfill Environmental Management Plan (LEMP). The original 2014 LEMP remains in place. The updated 2016 draft LEMP is awaiting DPE approval. Specific requirements of the LEMP are audited under the relevant conditions below. Veolia has developed and implemented the measures required under the development consent to prevent and/or minimise any harm to the environment may result from their operations. The review of site documentation; observations and interviews with Site representatives demonstrated that the existing environmental management system is considered generally adequate in addressing the development consent requirements.

<b>Table 3: Conditions of Development Consent – Application No. 10_0012</b>		
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>
<b>TERMS OF APPROVAL</b>		
3.2	Observation	<p><b>The Auditors’ review of documentation, audit observations and interviews with site representatives demonstrated the operation of the site has to date been conducted generally in accordance with the identified documents and conditions of this consent.</b></p> <p>The Auditors identified minor issues with the implementation of some actions and measures contained within the approved management plans, as further outlined in this table.</p> <p>Compliance with these requirements are audited under specific conditions below.</p>
3.3	Noted	
3.4	Noted	
<b>LIMITS OF APPROVAL</b>		
<b>Woodlawn Bioreactor</b>		
3.5	Compliant	<p>Weighbridge records reviewed for period July 2015 to June 2016 and confirm input rates were not exceeded. Note, tonnages of residual waste from AWT are not triggered.</p>

<b>Table 3: Conditions of Development Consent – Application No. 10_0012</b>		
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>
3.6	Not triggered	A sample of the weighbridge records was reviewed for period July 2015 to June 2016 and confirmed trigger level was not exceeded. A total of 24,975 tonnes of regional waste was received for July 2015 to June 2016.
3.7	Compliant	Weighbridge records reviewed for period July 2015 to June 2016 and confirmed limit was not exceeded. A total of 660,510 tonnes of waste was received for July 2015 to June 2016.
<b>Crisps Creek IMF</b>		
3.8	Compliant	Weighbridge records reviewed for period July 2015 to June 2016 and confirmed input rates from Sydney were not exceeded. A total of 561,952 tonnes was received by rail from July 2015 to June 2016. AWT input rates are not triggered.
<b>STRUCTURAL ADEQUACY</b>		
3.9	Noted	Assessed in the 2008 and 2012 audit. No change since 2012 audit.



<b>Table 3: Conditions of Development Consent – Application No. 10_0012</b>			
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>	
3.15	With the approval of the Director-General, the Proponent may submit any plan or program required by this approval on a progressive basis.	Noted	
	<b>COMPLIANCE</b>		
3.16	The Proponent must assess and manage project-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedules 3, 4, 5 and 6. Any exceedance of these criteria and/or performance measures constitutes a breach of this approval and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation. Where any exceedance of these criteria and/or performance measures has occurred, the Proponent must, at the earliest opportunity: a) take all reasonable and feasible steps to bring the operation back into compliance; b) ensure that the exceedance does not recur; c) consider all reasonable and feasible options for remediation (where relevant) and how to prevent a recurrence and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and d) implement remediation and prevention measures as directed by the Director-General, to the satisfaction of the Director-General.	Complaint	A penalty infringement notice (PIN) was issued by the EPA in June 2016 for failing to operate equipment in a proper and efficient manner (related to the leachate and gas management system). Measures that Veolia has put in place since the PIN are <ul style="list-style-type: none"> <li>• employing a dedicated maintenance engineer for the site.</li> <li>• installing inline sensors to detect blockages in the gas extraction</li> <li>• development of a long term leachate management system</li> </ul>
<b>SCHEDULE 4. SPECIFIC ENVIRONMENTAL CONDITIONS – LANDFILL SITE</b>			
	<b>WASTE MANAGEMENT</b>		
	<b>Restrictions of the Receipt, Storage, Handling and Disposal of Waste</b>		
4.1	The Proponent shall only receive waste on site that is authorised for receipt by an EPL.	Compliant	The Facility is not open to the general public, with material only received from material transported from Veolia’s Sydney facilities, and from regional clients. The specifications for permitted waste are included in the contracts with all clients. All clients are advised of the requirements in the event that unauthorised waste is received (client issued with a notice and required to remove from the Facility). Signage has been erected at the entry to the Facility confirming what waste types are not to be received at the Facility.



<b>Table 3: Conditions of Development Consent – Application No. 10_0012</b>		
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>
4.5	Compliant	GHG mitigation measures are outlined in updated 2016 draft LEMP. It is noted that the collection of methane from the bioreactor and the generation of electricity from the gas is the most significant GHG mitigation measure employed by the site.
		<b>Odour</b>
		<b>Discharge Limits</b>
4.6	Not verified	<p>The IOA is required to demonstrate whether the project is complying with the requirements in the approval to protect receivers against offensive odour.</p> <p>The IOA is inconclusive in this regard. For example, ambient odour surveys found <i>“no odour was detectable beyond the boundary of the site at the time of the....”</i> but the odour diary analysis concluded <i>“that odour impact is predominantly experienced by participating entrants”</i>.</p> <p>In practice, offensive odour can only be judged by public reaction to the odour. If taken at face value, the presence of repeated complaints might indicate that offensive odour has occurred. However, not every logged odour complaints has been verified as offensive odour from the Woodlawn site. Approximately 50% of the complaints in 2015 and 63% in 2016 are from the same individual, located approximately 9 km from the bioreactor. Complaints from this individual appear inconsistent, for example some complaints were logged when prevailing winds would not transport odour from the site to the complaint</p>



<b>Table 3: Conditions of Development Consent – Application No. 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	iii. a comparison of the results of these measurements against the predictions in the EA; (f) determine whether the project is complying with the requirements in this approval to protect receivers against offensive odour; (g) outline all reasonable and feasible measures (including a cost/benefit analysis, if required) that may be required to improve odour control at the site; and (h) recommend and prioritise (mandatory and non-mandatory) recommendations for their implementation.		
4.8	The Director-General may vary the frequency of the audit after 5 years depending on the performance of the project and demonstrated compliance with Condition 6 of Schedule 4. This condition is linked to condition 9 in Schedule 5.	Noted	
4.9	Within 6 weeks of the completion of an odour audit, the Proponent shall submit a copy of the audit report to both OEH and the Department with a response to any recommendations contained in the audit report.	Compliant	2015 audit report was submitted to DPE on 23 December 2015, the same day the final report was issued. Note, the date is incorrect on cover letter-year is 2014. <b>Evidence of Veolia’s response to recommendation</b> has also been reviewed.
4.10	Unless otherwise directed by the Director-General, the Proponent shall implement all the mandatory odour controls and recommendations of any Independent Odour Audit/s. Recommendations of the first Independent Odour Audit required under this approval shall be implemented prior to the commencement of expanded operations. This audit must be documented in the Landfill EMP (see condition 3 in schedule 7).	Compliant	The implementation of mandatory odour controls is ongoing. Mandatory odour controls are strongly linked to the long term leachate management strategy, currently being finalised by Veolia in consultation with DPE and EPA.
	<b>Dust Limits</b>		
4.11	The Proponent shall ensure that dust generated by the project does not exceed the criteria listed in Tables 3 to 5 at any private residential receiver, or on more than 25 percent of any privately owned land surrounding the site.  <i>Refer to table in Approval</i>	Compliant	Dust deposition monitoring was reviewed for data for DG28 (Pylara) and DG18 (IMF). For the calendar year 2015, annual average dust deposition at Pylara exceeded 4 g/m <sup>2</sup> /month. This is not a private receiver therefore this does not represent an exceedance. At DG18, the annual average dust deposition complies with the criteria.



<b>Table 3: Conditions of Development Consent – Application No. 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
4.13	Except as may be expressly provided in the EPL for the site, the Proponent shall comply with Section 120 of the POEO Act.	Compliant	Monitoring of surface and groundwater is conducted in accordance with the LEMP. Monitoring results are reported in the Annual Return.
	<b>Soil</b>		
4.14	The Proponent shall: (a) minimise any soil loss through erosion on site; (b) where possible, set aside any topsoil won on site for the proposed revegetation and rehabilitation of the site; and (c) ensure that any topsoil stockpiles on site are suitably managed to ensure that the topsoil in these stockpiles can be beneficially used in the proposed revegetation and rehabilitation of the site.	Compliant	These measures are undertaken with implementation of the Soil and Water Management Plan.
	<b>Bunding</b>		
4.15	The Proponent shall store all chemicals, fuels and oils used on site in appropriately banded areas, with impervious flooring and sufficient capacity to contain 110% of the largest container stored within the bund, unless double-skinned tanks are used. Any bunds shall be designed and installed in accordance with the requirements of all relevant Australian Standards, and/or OEHS Environmental Protection Manual: <i>Technical Bulletin Bunding and Spill Management</i> .	Compliant	A 50,000L diesel tank is located on site. It is double skinned and therefore does not require a bund. Small quantities of other chemicals are stored at the Facility on hardstand areas with appropriate containment.
	<b>Erosion and Sediment Control</b>		
4.16	During the construction, the Proponent shall implement suitable erosion and sediment control measures on site, in accordance with the relevant requirements in the latest version of the <i>Managing Urban Stormwater: Soils and Construction guideline</i> .	Not triggered	
	<b>Soil and Water Management Plan</b>		
4.17	The Proponent shall prepare and implement a Soil & Water Management Plan for the Landfill to the satisfaction of the Director-General. This plan must: (a) be prepared in consultation with OEHS and NOW by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General; (b) be approved by the Director-General prior to the commencement of expanded operations; (c) must specifically consider soil and water management (including leachate management) at the Landfill	Compliant	The original 2004 SWMP (as approved by DPE) remains in place. The updated 2016 SWMP is awaiting DPE approval.



<b>Table 3: Conditions of Development Consent – Application No. 10_0012</b>		
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>
		<p><i>Noise generated by the project is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.</i></p> <p>a complaint; and noise level checks on any new (untested) items. Once the equipment is confirmed compliant an Equipment Noise Certificate is issued.</p> <p>No noise complaints have been received at the Facility.</p> <p>The Auditors inspected an example of a sound power and operator noise exposure assessment report commissioned by the supplier of a new dozer.</p>
		<b>Operating Hours</b>
4.20	Compliant	<p>The Proponent shall comply with the operating hours in Table 7 for the site, unless otherwise agreed in writing by the OEH.</p> <p><i>Refer to table in Approval</i></p> <p>Veolia advised that due to the current capacity, operations are generally restricted to 6:00am to 5:00pm.</p> <p>A review of weighbridge records indicates compliance with this condition.</p>
		<b>Monitoring and Management</b>
4.21	Compliant	<p>The Proponent shall prepare and implement a Noise Monitoring and Management Plan for the Landfill to the satisfaction of the Director-General. This Plan must:</p> <ul style="list-style-type: none"> <li>(a) be prepared in consultation with OEH by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General;</li> <li>(b) be approved by the Director-General prior to the commencement of expanded operations;</li> <li>(c) include a noise monitoring protocol for evaluating compliance with the noise impact assessment criteria in this approval;</li> <li>(d) details all reasonable and feasible measures to minimise noise at the site;</li> <li>(e) consider road traffic noise management and include a revised road traffic noise protocol;</li> <li>(f) describe mitigation measures that would be implemented in the event that a non-compliance is identified with the noise impact assessment criteria in this approval.</li> </ul> <p>This plan must be documented in the Landfill EMP (see condition 3 in schedule</p> <p>The original 2004 Noise Management Protocol (including a Noise Monitoring Program) (as approved by DPE) remains in place.</p> <p>The updated 2016 Noise Monitoring and Management Plan is awaiting DPE approval.</p> <p>No noise complaints have been received at the Facility.</p>

<b>Table 3: Conditions of Development Consent – Application No. 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	7).		
	<b>Meteorological Monitoring</b>		
4.22	During the life of the project, the Proponent shall ensure that there is a suitable meteorological station in the vicinity of the site that complies with the requirements in the latest version of <i>Approved Methods for Sampling of Air Pollutants in New South Wales guideline</i> .	Observation	The existing meteorological station does not meet the siting requirements of the relevant Australian Standard, in terms of separation distance to the nearest trees. It is the Auditors view that existing trees would probably have a small or minimal effect on the recorded wind conditions, however to facilitate investigating odour complaints, it is recommended that an alternative or additional location be considered. A suitable additional location would be on the Pylara property, which would assist in understanding the non-steady state nature of local dispersion and inform the investigation of community complaints
	<b>FLORA AND FAUNA</b>		
	<b>Vegetation Management Plan</b>		
4.23	The Proponent shall prepare and implement a Landscaping and Vegetation Management Plan for the Landfill. This plan must: (a) be prepared in consultation with OEH and NOW by a suitably qualified and experienced expert; (b) be approved by the Director-General prior to the commencement of expanded operations; (c) include measures to minimise such vegetation loss and additional tree planting to offset this loss; (d) detail any landscaping treatments at the Landfill, with particular attention to minimising the visibility of the site/s from residences and public vantage points; (e) describe the on-going maintenance regime for rehabilitation and vegetation management in the rehabilitation area/s. This plan must be documented in the Landfill EMP (see condition 3 in schedule 7).	Compliant	The original 2004 LVMP (as approved by DPE) remains in place. The updated 2016 LVMP is awaiting DPE approval.



<b>Table 3: Conditions of Development Consent – Application No. 10_0012</b>		
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>
<p>(a) complies with the latest version of <i>AS 4282(INT) - Control of Obtrusive Effects of Outdoor Lighting</i>; and                      (b) is mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties or the public road network.</p>	Compliant	<p>Australian Standard was not available. However it is assumed that it was provided to allow operations to commence.</p> <p>Veolia have advised that no new lighting installed since approval.</p> <p>(b) Section 3.4.2.8 of the revised LEMP states that <i>“All lighting installed at the site is directed away from Tarago/Bungendore road and screened to minimise potential distraction to road users. At the end of every day all lighting, with the exception of emergency lighting is switched off”</i>.</p> <p>With this directional lighting, and the distance to the nearest residence, it is considered unlikely that lighting at the Facility would create a nuisance. No lighting complaints have been received.</p>
<b>SECURITY</b>		
<p>4.27 The Proponent shall:                      (a) install and maintain a perimeter stock fence and security gates on the site; and                      (b) ensure that the security gates on site are locked whenever the site is unattended.</p>	Compliant	<p>(a) Stock fencing was observed around the perimeter of the facility. A security gate was observed at the entrance to the facility.</p> <p>(b) Veolia advised that the front security gate is locked and closed every night when the site is unoccupied. Security patrols occur twice a week in the evening when the site in unoccupied.</p>

<b>Table 3: Conditions of Development Consent – Application No. 10_0012</b>		
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>
<b>LANDFILL CLOSURE AND REHABILITATION</b>		
4.28	Compliant	The original 2004 Post Closure Landfill Rehabilitation Management Plan (incorporating Rehabilitation Management Plan) (as approved by DPE) remains in place.  The final landform and rehabilitation plans and responsibilities are currently under negotiation with Heron Mining, which is investigating plans to recommence mining within the Facility site.
4.29	Compliant	The original 2004 Post Closure Landfill Rehabilitation Management Plan (incorporating Rehabilitation Management Plan) (as approved by DPE) remains in place.  The final landform and rehabilitation plans and responsibilities are currently under negotiation with Heron Mining, which is investigating plans to recommence mining within the Facility site.
<b>SCHEDULE 5. SPECIFIC ENVIRONMENTAL CONDITIONS – CRISPS CREEK IMF SITE</b>		
<b>WASTE MANAGEMENT</b>		
<b>Restrictions of the Receipt, Storage, Handling and Disposal of Waste</b>		
5.1	Compliant	The Crisps Creek IMF only receives waste from <b>Veolia’s Clyde facility</b> . The control measures at this facility ensure only authorised waste is transported to Crisps Creek.

<b>Table 3: Conditions of Development Consent – Application No. 10_0012</b>			
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>	
5.2	The Proponent shall ensure that any contaminated stormwater and sludges collected at the Crisps Creek IMF are disposed of at the landfill site, unless otherwise approved by OEH.	Compliant	Stormwater generated at the Crisps Creek IMF is captured and diverted to a detention pond. Water quality monitoring is undertaken on a quarterly basis: if water quality complies with the applicable standards it is discharged to the Mulwaree River; and if it does not comply it is pumped out for treatment. Records for quarterly monitoring undertaken to date for 2016 were observed by the Auditors.
5.3	The Proponent shall ensure that there is no storage of sludges or overnight storage of containerised waste, on the Crisps Creek IMF site, unless otherwise approved by the OEH.	Compliant	No sludge or containerised waste is stored at the IMF overnight. All containers are unloaded and transported to the Bioreactor on the day of their arrival. The auditors have no reason to believe that containerised waste is stored overnight.
<b>Waste Transportation</b>			
5.4	The Proponent shall ensure that all waste containers are designed, constructed and maintained to prevent the emission of offensive odour and be water-tight to prevent the leakage of leachate during transport and handling activities.	Observation	On 15 July 2016, the DPE and EPA inspected 20 waste shipping containers at the IMF and found that 18 were leaking from poor door seals or faulty welds. Veolia have responded to and addressed this through an assessment of their Container maintenance quality assurance program and improvements are ongoing. There was no evidence of leaking containers observed during the Audit site visit
<b>Litter Control</b>			
5.5	The Proponent shall inspect daily and clear the site (and if necessary, surrounding area) of litter on at least a weekly basis.	Compliant	The Facility is maintained in good condition, with no litter observed. Veolia personnel undertake daily inspections of the IMF. In addition, formal Monthly Site Inspections (using the Veolia National Housekeeping



<b>Table 3: Conditions of Development Consent – Application No. 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
			<p>Crisps Creek Intermodal Facility and found that 18 were leaking from poor door seals or faulty welds. Odorous liquid was found to be leaking from the containers. On 5 August 2016, Veolia responded to the show cause letter for an alleged breach of conditions, presenting a case for minor breach and low potential harm.</p> <p>On 21 March 2016, NSW EPA wrote to Veolia alleging that Tarago School is regularly impacted by waste laden trains destined for the IMF. The EPA directed Veolia to report back on the quality assurance program (QAP) for container integrity and the measures taken to prevent offensive odour impacting on the Tarago Public School. On 8 April 2016, Veolia responded with their QAP and identified further improvements. No further action was taken.</p>
	<b>Independent Odour Audit</b>		
5.9	The Proponent shall include consideration of the Crisps Creek IMF site in any Independent Odour Audit required by condition 7 in schedule 4.	Compliant	The 2015 IOA include a brief section on the IMF site.
	<b>SOIL AND WATER</b>		
	<b>Pollution of Waters</b>		
5.10	Except as may be expressly provided in the EPL for the site, the Proponent shall comply with Section 120 of the POEO Act.	Compliant	Compliance with the following conditions provided for compliance with Section 120 of the POEO Act.



<b>Table 3: Conditions of Development Consent – Application No. 10_0012</b>		
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>
5.15 The Proponent shall ensure that the noise generated by the operations on-site, other than freight train activities, does not exceed the limits in Table 8 at any private residential receiver.  <i>Refer to table in Approval</i>	Compliant	The original 2004 Noise Management Protocol (including monitoring) (as approved by DPE) includes a monitoring protocol. For current operations monitoring is limited to: in response to a complaint; and noise level checks on any new (untested) items. Once the equipment is confirmed compliant an Equipment Noise Certificate is issued.  The IMF EMP (which is currently with DPE for review and approval) notes that noise modelling predicted that standard activities at the IMF would not exceed these criteria at the nearest sensitive receivers.  No noise complaints have been received at the IMF.  The Auditors inspected an example of a sound power and operator noise exposure assessment report commissioned by the supplier of a new dozer.
5.16 Noise emissions from freight trains entering and leaving the site must not exceed the noise limit of 45 dB(A) LAeq (15 minute) prior to 7:00 am and 50 dB(A) LAeq (15 minute) after 7:00 am. <i>Noise generated by the project is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.</i>	Compliant	The IMF EMP (which is currently with DPE for review and approval) notes that noise modelling predicted that standard activities (including trains) at the IMF would not exceed these criteria at the nearest sensitive receivers.  Pacific National has developed a Code of Conduct for Veolia Rail Operations. This is included as an appendix to the IMF EMP, which has been submitted to DPE for approval. This includes a number of measures that would control noise generation.
<b>Operating Hours</b>		

<b>Table 3: Conditions of Development Consent – Application No. 10_0012</b>		
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>
5.17	<p>The Proponent shall comply with the operating hours in Table 9 for the site, unless otherwise agreed in writing by the OEH.</p> <p><i>Refer to table in Approval</i></p>	<p>Compliant</p> <p>Veolia advised that due to the current capacity, operations are generally restricted to 6:00am to 5:00pm.</p> <p>Observation</p> <p>It is noted that the operational hours are inconsistent with the EPL, which state 7am to 6pm for operations.</p>
	<b>VISUAL AMENITY</b>	
	<b>Lighting</b>	
5.18	<p>The Proponent shall ensure that the lighting associated with the project:</p> <p>(a) complies with the latest version of <i>AS 4282(INT) - Control of Obtrusive Effects of Outdoor Lighting</i>; and</p> <p>(b) is mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties or the public road network.</p>	<p>Not verified</p> <p>(a) Evidence that lighting complied with the Australian Standard was not available. However it is assumed that compliance was achieved to allow operations to commence. Veolia advise that no new lighting has been installed since this approval.</p> <p>(b) With directional lighting, the distance to the nearest residence, and the limited night time activities at the IMF, it is considered unlikely that lighting at the IMF would create a nuisance. No lighting complaints have been received.</p> <p>Compliant</p>
	<b>SECURITY</b>	
5.19	<p>The Proponent shall:</p> <p>(a) install and maintain a perimeter stock fence and security gates on the site; and</p> <p>(b) ensure that the security gates on site are locked whenever the site is unattended.</p>	<p>Compliant</p> <p>(a) Stock fencing was observed around the perimeter of the facility. A security gate was observed at the entrance to the IMF.</p> <p>(b) Veolia advised that the front security gate is locked and closed every night when the site is unoccupied. Security patrols occur twice a week in the evening when the site in unoccupied.</p>
	<b>RAIL TRAFFIC</b>	
5.20	<p>The Proponent shall ensure that only 2 trains (4 movements) in total are permitted to ingress and egress from the Crisps Creek IMF per day from Monday to Saturday.</p>	<p>Compliant</p> <p>Veolia advised that the IMF and the Facility currently only have capacity to receive a</p>

<b>Table 3: Conditions of Development Consent – Application No. 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
			maximum of two trains per day.
5.21	The tonnage of waste delivered to the IMF by train must not exceed 780 000 tpa, until the electronic signalling system has been implemented so as to eliminate the need for waste trains to stop across the road crossing at Tarago.	Not triggered	Tonnage of waste delivered to the IMF by train does not yet exceed 780 000 tpa. However, the Veolia Facility Manager advised that the Country Rail Network (John Holland), managers of the rail network that services the IMF, undertook this work as part of their own network improvements program. As such tonnages delivered by train can exceed 780 000 tpa.
5.22	The Proponent shall prepare and implement a Rail Transport Code of Conduct for the Crisps Creek IMF in consultation with ARTC and Countrylink and to the satisfaction of the Director-General. This Plan must: (a) be submitted to the Director-General for approval prior to the commencement of expanded operations; (b) detail operational rail traffic management measures including driver code of conduct, locomotive arrival and departure procedures (e.g. reduced locomotive speed); (c) outline measures to minimise rail traffic noise; and (d) detail measures to minimise rail traffic related conflicts with existing rail operations.	Compliant	Pacific National (on behalf of Veolia) has developed a Code of Conduct for Veolia Rail Operations. This is included as an appendix to the IMF EMP, which has been submitted to DPE for approval.
<b>SCHEDULE 6. TRAFFIC AND ROAD UPGRADES</b>			
<b>TRAFFIC AND TRANSPORT</b>			
<b>Delivery of Waste from the IMF to the Landfill</b>			
6.1	The Proponent shall ensure that at all times heavy vehicles transporting waste from the Crisps Creek IMF to the Landfill travel via the Crisps Creek IMF site access road, onto Bungendore Road, onto Collector Road and then onto the Landfill site access road.	Compliant	The 2004 EMP (as approved by DPE) does not include details on the route to be taken by heavy vehicles. However, the requirement to follow the required route is communicated to the drivers. Vehicles are tracked via GPS via the Intelligent Access Program. It should be noted that the required route is the quickest road access between the IMF and the Facility. Therefore the auditors have no reason to believe this condition is not

<b>Table 3: Conditions of Development Consent – Application No. 10_0012</b>		
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>
		<p>complied with.</p> <p>The 2016 IMF EMP (currently with DPE for review and approval) includes the transport route to be used by heavy vehicles.</p>
6.2	Compliant	<p>The 2004 EMP (as approved by DPE) does not include details on the route to be taken by heavy vehicles. However, the requirement to follow the required route is communicated to the drivers. Vehicles are tracked via GPS via the Intelligent Access Program. It should be noted that the required route is the quickest road access between the IMF and the Facility. Therefore the auditors have no reason to believe this condition is not complied with.</p> <p>The 2016 IMF EMP (currently with DPE for review and approval) includes the transport route to be used by heavy vehicles.</p>
		<b>Delivery of Regional Waste by Road</b>
6.3	Not verified	<p>Veolia advised that the transport routes specified in Appendix 4 are included in contract documentation with clients.</p> <p>A Transport Code of Conduct was prepared by Veolia in April 2011. This Code of Conduct notes that Council truck drivers are required to undertake a site induction prior to delivery of waste to the Facility. This induction includes information on the required transport routes. The Code of Conduct also identifies the required transport routes.</p> <p>The 2016 IMF EMP (currently with DPE for review and approval) includes the transport route to be</p>



<b>Table 3: Conditions of Development Consent – Application No. 10_0012</b>		
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>
<p>project on this section of road; and (d) determine the full cost of undertaking any upgrades, and the Proponent's proportional contribution to these works based on heavy vehicle usage along Main Road 268 (Bungendore/Tarago Road).</p> <p><i>Note: the Proponent must submit a copy of this audit to the Department within 2 weeks of its completion.</i></p> <p><i>See Appendix 4 for reference to the intersection of Collector Road and Main Road 268.</i></p>	Not verified	<p>March 2012. Veolia advised that due to negotiations with Palerang Council an extension on submission of the report was granted. Evidence of the extension of this approval was sighted by the Auditors: a letter from DPE dated 8 May 2013 extended the required completion date to 15 July 2013.</p> <p>The audit report was provided to Veolia on 21 July 2013, and was provided to the Council and RMS on [date not verified].</p> <p>Following consultation with these agencies it was submitted to the Department on [date not verified].</p>
<p>6.6 Prior to the receipt of more than 30,000 tpa of regional waste at the Landfill by road from the south of the intersection of Collector Road and Main Road 268 (Bungendore/Tarago Road), the Proponent shall:</p> <p>(a) implement all mandatory pavement and traffic management measures required to address all road pavement/safety issues associated with the project on Main Road 268 (Bungendore/Tarago Road) recommended by the audit required by condition 5 of this schedule; and</p> <p>(b) forward fund the full cost of and provide (on Main Road 268 - Bungendore/Tarago Road) any mandatory road upgrades recommended by the audit required by condition 5 of this schedule, to the satisfaction of the Director-General.</p> <p><i>Note: a mechanism for recovering a proportion of the costs for undertaking any of the above measures is provided in condition 11 of this schedule. See Appendix 4 for reference to the intersection of Collector Road and Main Road 268.</i></p>	Not triggered	<p>Veolia advised that the approach to implementation of the mandatory pavement and traffic management measures (including costs) have been agreed with Palerang Council.</p> <p>However the Facility received 24,975 tonnes of regional waste from July 2015 to June 2016 and Veolia does not anticipate exceeding 30,000 tpa in the immediate future. As such these measures do not need to be implemented.</p>
<p>6.7 In any case, the Proponent shall ensure that all mandatory road upgrades measures provided as part of condition 6 of this schedule are completed prior to the receipt of more than 30,000 tpa of regional waste at the Landfill by road from the south of the intersection of Collector Road and Main Road 268 (Bungendore/Tarago Road).</p>	Not triggered	<p>The Facility received 24,975 tonnes of regional waste from July 2015 to June 2016 and Veolia does not anticipate exceeding 30,000 tpa in the immediate future. As such these measures do not need to be implemented.</p>

<b>Table 3: Conditions of Development Consent – Application No. 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	<i>Note: the Proponent must notify the Department within 2 weeks of the completion of all road upgrades required as part of this condition. See Appendix 4 for reference to the intersection of Collector Road and Main Road 268.</i>		
	<b>Goulburn Mulwaree LGA</b>		
6.8	<p>Prior to the commencement of expanded operations, the proponent shall assess the need for road upgrades, on the section of Main Road 268 (Bungendore/Tarago Road) between the Crisps Creek IMF site access and the intersection of Collector Road and Bungendore/Tarago Road. This assessment shall:</p> <ul style="list-style-type: none"> <li>a) be prepared to the satisfaction of the Director-General;</li> <li>b) be prepared by a suitably independent and qualified expert whose appointment has been endorsed by the Director-General in consultation with RMS;</li> <li>c) evaluate the suitability of the provision of a climbing lane or other suitable road upgrade alternative/s on this section of road in terms of road traffic <b>safety and the safety of the Proponent’s truck drivers negotiating the right-hand turn into Collector Road;</b></li> <li>d) based on the above, identify the most suitable road upgrade option for this section of road; and, if identified as the most suitable road upgrade option by this condition 8(d)</li> <li>e) assess the need for a climbing lane against <b><i>Austroads Guide to Road Design Part 3: Geometric Design</i></b> based on heavy vehicle usage associated with the Bioreactor on this section of road.</li> </ul> <p><i>Note: Within 2 weeks of its completion, a report on this assessment shall be submitted to the Department for review. See Appendix 4 for reference to the intersection of Collector Road and Main Road 268.</i></p>	Not triggered	Veolia advised that negotiations have been ongoing with Goulburn Mulwaree Council regarding the road upgrades. Veolia and Council have evaluated and accepted the upgraded requirements that would need to be completed once expanded operations have commenced.
6.9	<p>Depending on which road upgrade option is identified as most suitable under condition 8(d) above, prior to the commencement of expanded operations, or a time otherwise agreed to by the Director-General, the Proponent shall provide that road upgrade on the above section of Main Road 268 (Bungendore/Tarago Road), to the satisfaction of Goulburn Mulwaree Council.</p> <p><i>Note: these works must be provided at no cost to Goulburn Mulwaree Council or RMS.</i></p>	Not triggered	Expanded operations have not commenced.

<b>Table 3: Conditions of Development Consent – Application No. 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
<b>ROAD MAINTENANCE CONTRIBUTIONS</b>			
6.10	<p>From the date of this approval, the Proponent shall pay a minimum quarterly contribution of 4.1 cents per kilometre per tonne to:</p> <p>(a) Palerang Council for waste hauled to the Landfill along Palerang Council maintained roads; and</p> <p>(b) Goulburn Mulwaree Council for waste hauled to the Landfill along Goulburn Mulwaree Council maintained roads.</p> <p>The contribution rate shall be adjusted every year from the date of this approval to account for the effects of inflation (RMS Road Cost Index).</p>	Compliant	Veolia has paid this contribution as required. Veolia has been in recent communication with the Councils requesting confirmation of their calculation for the required contributions. Evidence of payment of the contribution (an extract of payment records for June to August 2016) was observed by the Auditors.
6.11	<p>The Proponent shall receive a reduction in road maintenance contributions paid to Palerang Council (in cents per kilometre per tonne of waste hauled) as required by condition 10 of this schedule based on the difference between the full cost of undertaking any mandatory road upgrades along Main Road 268 <b>(Bungendore/Tarago Road) and what the Proponent’s proportional</b> contribution should be (as determined by the audit required by condition 5 (d) of this schedule) unless other arrangements are made with Palerang Council, to the satisfaction of the Director-General.</p> <p><i>Note: at any time either party may refer the matter to the Director-General for dispute resolution.</i></p>	Compliant	As noted in response to Condition 6.10, Veolia has been in recent communication with the Councils requesting confirmation of their calculation for the required contributions.
<b>SCHEDULE 7. ENVIRONMENTAL MANAGEMENT, REPORTING &amp; AUDITING</b>			
<b>COMMUNITY LIASON COMMITTEE</b>			
7.1	The Proponent shall continue to operate a Community Liaison Committee (CLC) comprising representatives of the Proponent, the local community, Council and Supervisory Licensee. Representatives of relevant government agencies may be invited to attend meetings of the Committee as required.	Compliant	Evidence of quarterly CLC meeting was reviewed.
7.2	Within six (6) months of the date of this approval, the Proponent must submit details of the CLC members including the Chairperson and frequency of meetings to the Department for the Director- <b>General’s</b> endorsement.	<b>Administrative non-compliance</b>	The community liaison committee (CLC) was initially established under the DA No. 31-02-99 and continues to operate as required under Project Approval 10_0012. However, an additional requirement under this approval requires details of the CLC members to be submitted to the Department of Planning and Environment (DPE) for endorsement, which was not done



<b>Table 3: Conditions of Development Consent – Application No. 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	<p>stream rehabilitation and vegetation management along the Mulwaree River;</p> <p>v. identify all threats to the environment and public health that could arise from the operation of the Crisps Creek IMF, measures to minimise these risks and notify the relevant government agencies and community in the event of an emergency;</p> <p>d) identify the statutory approvals that apply to the Crisps Creek IMF;</p> <p>e) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the Crisps Creek IMF;</p> <p>f) include procedures to keep the local community informed about the operation and environmental management of the Crisps Creek IMF;</p> <p>g) describe the procedure for stakeholder consultation and complaints handling; and</p> <p>h) include a clear plan depicting all the monitoring currently being carried out within and around the Crisps Creek IMF.</p>		
	<b>Annual Environmental Management Review</b>		
7.5	<p>One (1) year after the commencement of expanded operations, and annually thereafter, the Proponent shall prepare an Annual Environmental Management Report (AEMR) to review the environmental performance of the project to the satisfaction of the Director-General. This review must:</p> <p>a) describe the operations that were carried out in the past year;</p> <p>b) analyse the monitoring results and complaints records of the Project over the past year, which includes a comparison of these results against the</p> <ul style="list-style-type: none"> <li>- relevant statutory requirements, limits or performance measures/criteria;</li> <li>- monitoring results of previous years; and</li> <li>- relevant predictions in the EA;</li> </ul> <p>c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;</p> <p>d) identify any trends in the monitoring data over the life of the Project; and</p> <p>e) describe what measure will be implemented over the next year to improve the environmental performance of the Project.</p>	Not triggered	Expanded operations have not commenced.
	<b>INDEPENDENT ENVIRONMENTAL AUDIT</b>		
7.6	<p>Every three (3) years after the first Independent Odour Audit required under condition 7 of schedule 4 of this approval, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the Project. This audit must:</p> <p>a) be conducted by a suitably qualified, experienced, and independent team of</p>	<b>Administrative non-compliance</b>	This Independent Environmental Audit has been prepared to address Condition 7.6. However, the commissioning of this Independent Environmental Audit occurred after the date required by the



<b>Table 3: Conditions of Development Consent – Application No. 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
			Infringement Notice (PIN). Veolia has since implemented a new isolation/de-isolation plan, to encompass both flares 1 & 2, to prevent future occurrence.
	<b>Revision of Plans &amp; Programs</b>		
7.9	<p>Within three (3) months of the submission of any:</p> <ul style="list-style-type: none"> <li>a) audit required under this approval;</li> <li>b) incident report under condition 8 of this schedule; or</li> <li>c) annual review under condition 5 of this schedule,</li> </ul> <p>The Proponent shall review, and if necessary revise the plans and programs required under this approval to the satisfaction of the Director-General.</p> <p><i>Note: This is to ensure the plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the Project.</i></p>	Compliant	The 2016 EMP recently submitted to DPE for approval has considered the outcomes of the required audits and reviews.
	<b>ACCESS TO INFORMATION</b>		
7.10	<p>From the commencement of expanded operations, the Proponent shall make the following information publicly available on its website as it is progressively required by the approval:</p> <ul style="list-style-type: none"> <li>a) a copy of all current statutory approvals;</li> <li>b) a copy of the Environmental Management Plan required under this approval;</li> <li>c) a copy of any Annual Environmental Management Report including monitoring results (over the last 5 years);</li> <li>d) a copy of any Independent Environmental or Odour Audit, and the <b>Proponent’s response to the recommendations</b> in any audit; and</li> <li>e) any other matter required by the Director-General.</li> </ul>	Not triggered	Expanded operations have not commenced.

<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>		
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>
<b>1</b>	<b>Compliant</b>	<b>Except where a condition is superseded by/ inconsistent with a condition in Approval 10_0012</b>
<b>2</b>	<b>Compliant</b>	<b>Assessed in the 2012 audit</b>
<b>3</b>	<b>Note</b>	<b>Superseded by Approval 10_0012</b>

<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>												
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>										
<b>Input Rate Variations</b>												
4	Note	Superseded by Approval 10_0012										
<p>The proposed landfill shall not exceed the annual input rates in Table 1, unless otherwise approved by the Minister. The Minister shall give such approval if the need for additional capacity is demonstrated by an independent public assessment of landfill capacity and demand in the Sydney Region. The assessment shall:</p> <p>a) take into account the status of alternative technologies for putrescible waste management and be undertaken at five-yearly intervals;</p> <p>b) be completed one year before commencement of each five year period, as set out in Table 1, or at any other time at the request of the Applicant, with the first review due four years from the date of operational commencement; and</p> <p>c) be undertaken by an independent person or organisation, to be appointed by the Minister, with the costs to be funded by the Applicant.</p> <p><b>Table 1: Maximum Input Rates</b></p> <table border="1"> <thead> <tr> <th>Years from date of operational commencement</th> <th>Maximum Input Rate</th> </tr> </thead> <tbody> <tr> <td>0-5</td> <td>400,000 tpa</td> </tr> <tr> <td>6-10</td> <td>360,000 tpa</td> </tr> <tr> <td>11-15</td> <td>325,000 tpa</td> </tr> <tr> <td>16-20</td> <td>290,000 tpa</td> </tr> </tbody> </table>			Years from date of operational commencement	Maximum Input Rate	0-5	400,000 tpa	6-10	360,000 tpa	11-15	325,000 tpa	16-20	290,000 tpa
Years from date of operational commencement	Maximum Input Rate											
0-5	400,000 tpa											
6-10	360,000 tpa											
11-15	325,000 tpa											
16-20	290,000 tpa											
5	Note	Superseded by Approval 10_0012										
<b>Compliance with Requirements of the Director-General and Prescribed Conditions</b>												
6	Note	Superseded by Approval 10_0012										
7	Note	Assessed in the 2012 audit										

<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>		
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>
<b><i>Obligation to Prevent and Minimise Harm to the Environment</i></b>		
8	Compliant	Development and implementation of the 2004 LEMP is developed to comply with this condition.
<b><i>Structural Adequacy</i></b>		
9	Compliant	Assessed in the 2008 audit
<b><i>Verification of Construction</i></b>		
10	Compliant	Assessed in the 2008 audit
<b><i>Dispute Resolution</i></b>		

<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
11	In the event that the Applicant, Council, a government authority other than the Department or the PCA cannot agree on the specification or requirements applicable under this consent, the matter shall be referred by either party to the Director-General or, if not resolved, to the Minister, whose determination of the disagreement shall be final and binding on the parties.	Not triggered	
<b>ENVIRONMENTAL MANAGEMENT</b>			
12	<p><b><i>Environmental Services</i></b></p> <p>The Applicant shall employ or contract suitably qualified environmental services throughout the duration of landfilling/construction and rehabilitation activities. The Applicant shall nominate an Environmental Management Representative/s (EMR/s) as the principle person responsible for overseeing environmental management of the project and supervision of environmental services. <b>The EMR’s/EMRs’ qualifications, experience and appointment shall be to the satisfaction of the Director-General.</b> The EMR/s shall have the authority to stop work if an adverse impact on the environment has occurred or is likely to occur.</p> <p>The EMR/s shall:</p> <ul style="list-style-type: none"> <li>a) be responsible for the preparation or certification of all environmental management plans and procedures;</li> <li>c) be responsible for considering and advising on matters specified in the conditions of this consent and compliance with such matters;</li> <li>e) oversee the receipt of, and response to, complaints about the environmental performance of the project;</li> <li>f) facilitate an induction and training program in environmental awareness and responsibility required under the Environment Protection Licence (EPL), both <b>generally and specific to the Applicant’s activities for all persons involved with construction, operation, monitoring and rehabilitation activities at all sites.</b> The training program must be implemented annually from the commencement of the development and evaluated every three years; and</li> <li>g) be present on-site during any critical construction or operational activities as defined in the relevant Landfill Environmental Management Plan (LEMP).</li> </ul>	Not verified	Veolia advised the Auditors that the role was appointed but the documentation confirming this could not be identified.



<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>			
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>	
16	Prior to the commencement of construction, the Applicant shall establish a Community Liaison Committee (CLC) comprising representatives of the Applicant, the local community, Council and Supervisory Licensee. Representatives of relevant government agencies may be invited to attend meetings of the Committee as required. The Chairperson and procedures for the Committee including frequency of meetings shall be determined by the Committee.	Compliant	CLC still operational and meets regularly
<b>Annual Environmental Management Report</b>			
17	In order to facilitate the integration of the environmental management of the subject land and the Woodlawn mine site, the Applicant shall liaise with the holder of the Woodlawn mining lease in relation to the formulation and review of the Annual Environmental Management Report (AEMR) for the mine. The AEMR shall comply with the requirements of the Director-General of the Department of Mineral Resources and be subject to review by all relevant government agencies.	Note	Superseded by Approval 10_0012
18	<b>Conditions Compliance Reports</b> The Applicant shall submit to the Director-General, the EPA, DLWC and Council Conditions Compliance Reports as follows: a) at least one month prior to the commencement of construction works for the purposes of landfilling, or within such period as otherwise agreed to by the Director-General; b) at least one month prior to the commencement of construction works for the purposes of the intermodal transfer facility, or within such period as otherwise agreed to by the Director-General; c) every two years following the date of commencement of construction for the purposes of landfilling activity, or within such period as otherwise agreed to by the Director-General.	Note	No longer applicable.

<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>		
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>
<b>Independent Environmental Audits</b>		
19	<b>Administrative Non-compliance</b>	<p>The previous IEA undertaken of Application No. 31-02-99 was in April 2012. As such an IEA was due in April 2015 (approximately one month after the IEA of Application No. 10_0012 was due).</p> <p>The commissioning of this Independent Environmental Audit occurred after the date required by the approval; however, circumstances <b>beyond Veolia’s control have contributed to the delay</b>, including the additional requirements of the DPE to provide experts in odour and traffic to conduct the audit.</p>
<b>SITE REHABILITATION</b>		
<b>Whole of Site Rehabilitation</b>		
20	Note	Superseded by Approval 10_0012.
21	Note	Superseded by Approval 10_0012
<b>Rehabilitation Management Plan</b>		
22	Compliant	Assessed in the 2008 audit and still valid.

<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>			
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>	
<p>undertaken by the Applicant, details of the Woodlawn Mine site rehabilitation works being undertaken by the mine leaseholder, and a clear definition of the respective obligations of the parties;</p> <p>b) an outline of financial arrangements for site rehabilitation works proposed in the plan;</p> <p>c) the rehabilitation standards to be adopted;</p> <p>d) a rehabilitation schedule (to be reviewed on a regular basis);</p> <p>e) a post-establishment maintenance and monitoring program for rehabilitated</p> <p>f) areas;</p> <p>g) procedures for the removal of all derelict buildings and infrastructure;</p> <p>h) closure strategies in the event that landfilling activities conclude prior to the</p> <p>i) capacity of the mine void being filled; and</p> <p>j) integration of rehabilitation works with the rehabilitation of the Woodlawn mine site.</p> <p>The RMP shall be included in the LEMP.</p>			
23	The Applicant must obtain approval from the End of Mine Life Steering Committee and the EPA to disturb, obtain or use materials from the Woodlawn Mine site for the construction, operation and rehabilitation of the landfill, intermodal facility, haul roads and any other infrastructure at the premises.	Not triggered	Veolia advised that no approvals for such activities were sought in the past three years. The previous audit also noted that such activities and approvals were not required.
24	The Applicant shall liaise with the holder of the Woodlawn mining lease in the preparation of a Mining Operations Plan (MOP) in accordance with the requirements of the Department of Mineral Resources	Compliant	Veolia is in negotiations with Heron Mining with regard to its current mining plans and the implications that has for environmental management of the Facility.

<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>		
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>
<p>25 <b>EPA Financial Assurance</b>                      The Applicant shall provide to the EPA financial assurance commensurate with the ongoing environmental management and rehabilitation responsibilities for the landfill and associated activities. The financial assurance shall consist of:                      a) an unconditional and irrevocable bank guarantee, or other form of financial assurance acceptable to the EPA. The financial assurance is to be adjusted annually so that it keeps pace with inflation for so long as the EPA requires it to remain in place. The amount of the assurance will be determined by an independent review of the costings applicable to activities identified in the LEMP and Conditions 55 and 159; and                      b) an accumulating fund generated by monies set aside annually on deposit, or other form of financial assurance acceptable to the EPA which will have to be increased in a similar way, in respect of post closure works and responsibilities. The initial and ongoing annual deposit into this fund will be determined by an independent expert review of the costings applicable to activities identified in Condition 15.                      The financial assurance shall be maintained during the operation of the facility and thereafter until such time as the EPA notifies the Applicant in writing that it is satisfied that the premises have been appropriately rehabilitated and are environmentally secure.                      Written approval must be obtained from the EPA for any changes to the financial assurance detailed in this condition.</p>	<p>Compliance</p>	<p>The Auditors sighted evidence (a guarantee with the EPA as a beneficiary) of the financial assurance.</p>
<b>WASTE SOURCES AND TYPES</b>		
<p>26 All waste shall be sourced from the Sydney region. All waste received at the waste management facility shall be transported by rail to the intermodal facility.</p>	<p>Note</p>	<p>Superseded by Approval 10_0012 (regional waste now permitted).</p>

<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>		
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>
27	Note	Superseded by Approval 10_0012.
<p>The only wastes that can be disposed of at the premises are as follows:                      a) inert waste and solid waste defined in Schedule 1 of the Protection of the Environment Operations Act 1997 or waste that is assessed and classified as inert or solid waste following the technical assessment procedure outlined in Technical Appendix 1 of the Waste Guidelines; b) asbestos waste (including asbestos waste in bonded matrix and asbestos fibre and dust waste resulting from the removal of thermal or acoustic insulating materials or from processes involving asbestos material, and dust from ventilation collection systems) disposed of in accordance with clause 29 (5) of the Protection of the Environment Operation (Waste) Regulation 1996;                      c) <b>tyres in accordance with the EPA’s tyre disposal specification</b>; and                      d) <b>other types of waste as expressly approved by the EPA. (EPA GTA)</b></p>		
<b>WASTE MANAGEMENT PROCEDURES</b>		
28	Note	Superseded by Approval 10_0012.
<p>There shall be no storage of sludges nor overnight storage of containerised waste, on the intermodal facility site. This condition may be varied with the written approval of the EPA if it is required by police; and /or because the operation, personnel or equipment are endangered. (EPA GTA)</p>		
<b>Waste Transportation</b>		
29	Note	Superseded by Approval 10_0012.
<p>All containers must be designed, constructed and maintained to prevent the emission of offensive odour and be water tight to prevent the leakage of leachate from waste containers during transport and handling activities. (EPA GTA)</p>		
30	Note	Superseded by Approval 10_0012.
<p>All pressure relief valves on the containers must be designed to meet the environmental requirements of condition 29. (EPA GTA)</p>		
31	Compliant	Assessed in the 2012 audit.
<p>A Quality Assurance Program must be developed and implemented to ensure compliance with Condition 29. The program must include but need not necessarily be limited to the following:                      a) Container integrity;                      b) Integrity and performance of rubber seals;                      c) Performance of mechanisms to filter and remove odour where required                      d) including cleaning and performance testing; and                      e) Container cleaning. (EPA GTA)</p>		

<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>		
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>
32		
<u>Spillage Response</u> A protocol must be developed and implemented to manage incidents involving spillage of waste. The protocol must include but should not necessarily be limited to procedures identifying immediate cleaning of the site, disinfection and reporting protocols. <i>(EPA GTA)</i>	Compliant	Assessed in the 2012 audit.
<b>Control of Incoming Wastes</b>		
33		
The Applicant must develop procedures to screen deliveries of waste to ensure compliance with Condition 27. The procedure must be documented in the LEMP. <i>(EPA GTA)</i>	Note	Superseded by Approval 10_0012.
34		
The Applicant shall use its best endeavours to ensure that all waste received at the intermodal facility is containerised.	Note	Superseded by Approval 10_0012.
<b>OPERATIONAL STAGING AND LANDFILL MANAGEMENT</b>		
35		
The Applicant shall prepare a landfilling schedule consistent with the concept detailed in figure 4.10 in the EIS. Details of the landfill schedule and shall be provided in the LEMP.	Note	Superseded by Approval 10_0012.
<b>Cover Material</b>		
36		
Cover material must be virgin excavated natural material, unless otherwise approved in writing by the EPA. <i>(EPA GTA)</i>	Note	Superseded by Approval 10_0012.
37		
Cover material must be of a quality that will not inhibit the biological decomposition of the landfilled waste. <i>(EPA GTA)</i>	Note	Superseded by Approval 10_0012.
38		
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, unless otherwise approved in writing by the EPA. <i>(EPA GTA)</i>	Note	Superseded by Approval 10_0012.
39		
Cover material must be applied to a depth of 30 centimetres over surfaces of the landfilled waste which are exposed for more than 90 days, unless otherwise approved in writing by the EPA. <i>(EPA GTA)</i>	Note	Superseded by Approval 10_0012.
40		
At least two weeks supply of cover material must be available at the premises under all weather conditions, unless otherwise approved in writing by the EPA. <i>(EPA GTA)</i>	Note	Superseded by Approval 10_0012.
<b>Landfill Gas</b>		
41		
The Applicant shall ensure to the maximum practical extent the quantity of landfill gas that is collected and treated.	Note	Superseded by Approval 10_0012.

<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>		
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>
42	Note	Superseded by Approval 10_0012.
43	Note	Superseded by Approval 10_0012.
44	Note	Superseded by Approval 10_0012.
45	Note	Superseded by Approval 10_0012.
46	Note	Superseded by Approval 10_0012.
<b>WATER QUALITY AND MANAGEMENT</b>		
<b>Waste Management Facility Site</b>		
47	Note	Superseded by Approval 10_0012.
<u>Groundwater and Leachate Management</u>		
48	Compliant	Assessed in the 2012 audit.
49	Not triggered	

<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>			
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>	
50	A leachate collection/storage/recirculation/treatment system must be designed, installed and operated to: a) accept other waste-waters and contaminated storm-waters generated as a result of the operation of the facility; b) efficiently operate, notwithstanding the settlement of the waste; c) ensure that all liquid (including rainwater, surface water, groundwater and leachate) introduced into the waste is monitored to determine its chemical composition and quantity; d) ensure that liquid is not deliberately stored in the landfilled waste, unless it is necessary for the efficient decomposition of the landfilled waste. e) ensure that leachate can be recirculated within the biologically active zones of the landfilled waste; and f) comply with Conditions 48 and 8(b). Details of this system must be documented in the LEMP. <i>(EPA GTA)</i>	Note	Superseded by Approval 10_0012.
51	A barrier system must be designed and installed on the surfaces identified in condition 52 to limit the quantity of groundwater flowing into the mine void and to contain leachate over the period of time that the landfilled waste poses a potential environmental risk. The system must be documented in the LEMP. <i>(EPA GTA)</i>	Note	Superseded by Approval 10_0012.
52	The Applicant shall install the barrier system on the following surfaces of the mine void wherever these surfaces do not meet the performance requirements of Condition 53: a) the base and the top elevation of the mine void; and b) the localised joints, fracture zones and adits/portals.	Note	Superseded by Approval 10_0012.
53	The barrier system must at least achieve the performance of a 900 mm thick recompacted clay liner with an in-situ coefficient of permeability of less than 10 <sup>-9</sup> metres per second.	Note	Superseded by Approval 10_0012.
54	A Construction Quality Assurance Plan (CQAP) for the barrier system shall be prepared and included in the LEMP.	Compliant	The BSQAP forms part of the 2004 LEMP.
55	The Applicant shall prepare a Leachate Contingency Management Plan (LCMP) that addresses, but not necessarily be limited to the following matters: a) the removal of leachate from the waste and its treatment to remove any metals or compounds at concentrations which may inhibit the biological processes of the bioreactor landfill, prior to discharging the leachate back into the landfilled waste; b) the storage of leachate external to the landfilled waste in the mine void;	Compliant	The Leachate Management Plan forms part of the 2004 LEMP.

<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	c) method/s for removing leachate from the waste and disposing of it to ensure effective operation of the bioreactor landfill and to ensure that the groundwater gradient directs groundwater flows into the mine void; and d) an estimate of the full costs for implementing each aspect of this plan. <i>(EPA GTA)</i>		
56	The Applicant must not import water or other liquids into the mine void, unless otherwise approved by the EPA, except for first flush waters collected at the Intermodal Facility site and waters contained in ED3. <i>(EPA GTA)</i>	Compliant	No water is imported to the Landfill without prior approval of the EPA. This requirement is documented in the 2016 SWMP which forms part of the 2016 EMP submitted to SPE for approval.
57	The Applicant shall develop a plan (known as bioreactor water management plan) which addresses the treatment of water, prior to any water being added (other than by direct rainfall) to the landfilled waste. This plan shall be included in the LEMP.	Compliant	The Water Management Plan forms part of the 2004 LEMP. A Soil and Water Management Plan forms part of the 2016 EMP submitted for approval to DPE.
<b>Surface Water Management</b>			
58	There must be no discharge of waters from the area subject to the Development Application, unless more than 210mm of rain falls within a 72 hour time period (1 in 100 year ARI of 72 hours duration). <i>(EPA GTA)</i>	Compliant	The Facility is a zero discharge site, with discharge only acceptable in the event of a 1 in 100 year ARI of 72 hours duration This is documented in the 2016 EMP submitted for approval to DPE.
59	At the commencement of waste being received into the mine void the volume of water stored in ED3 shall be no greater than 40 ML.	Compliant	Assessed in the 2012 audit.
60	The Applicant shall install drainage so that the West Ridge Catchment shall not drain into the mine void.	Compliant	Assessed in the 2012 audit.
61	Contaminated water shall only be applied for dust suppression in the mine void, and in any areas around the perimeter of the void where any contaminated water will drain back into the void.	Compliant	The SWMP notes that only treated leachate, container wash down water, stormwater, bore water or mains water can be used in the Landfill.
62	The evaporation of water by spraying shall not result in the drifting of the sprayed liquid from the area subject to the DA and also shall not cause any adverse impact to public health. The proposed method for the spray evaporation of water shall be documented in the LEMP.	Compliant	The Soil and Water Management Plan which forms part of the 2016 EMP submitted for approval to DPE, describes how evaporation of water by spraying is to be undertaken..
63	ED3 shall not receive water stored in the Waste Rock Dam.	Compliant	No water is transferred from the Waste Rock Dam.
64	Stormwater in the mine void must only be discharged into ED3, or otherwise used for operational purposes within the landfill, as approved in writing by the EPA. <i>(EPA GTA)</i>	Compliant	The ED3MP, which forms part of the 2004 LEMP, documents this requirement.

<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>		
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>
65	Compliant	The ED3MP, which forms part of the 2004 LEMP, documents this requirement.
66	Compliant	A Surface Water Management Scheme forms part of the 2004 LEMP.
67	<b>Non-Compliant</b>	Truck wheel track out was evident at the intermodal facility (IMF) site access onto Bungadore road and fugitive dust emissions were observed as trucks exited the site. However, it is noted that this was an existing issue at the time of the Audit with corrective actions being implemented by Veolia. Veolia has informed the auditors that the track out observed during the Audit site visit was a result of high rainfall in the days preceding the audit and corrective actions are ongoing
68	Note	Superseded by Approval 10_0012.
69	Note	Superseded by Approval 10_0012.



<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>			
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>	
<p>from the waste-water management system.</p> <p>g) <b>Community Amenity.</b> Unreasonable interference and nuisance to the public, due to odour, dust, insects, and noise above existing background levels and arising from the operation of the waste-water management system must be avoided.</p> <p>h) <b>Resource Utilisation.</b> The useful resources of waste-water, including nutrients, organic matter and water must be identified and utilised to the maximum extent possible within the bounds posed by the other environmental and health performance criteria referred to in (a) to (e) above. <i>(EPA GTA)</i></p>			
72	Waste-water must only be applied to utilisation areas in conformance with Condition 71. <i>(EPA GTA)</i>	Compliant	A Wastewater Management Plan forms part of the 2004 LEMP. The 2016 SWMP describes the existing sewage scheme.
73	Spray from waste-water application must not drift beyond the boundary of the waste-water utilisation area to which it is applied. <i>(EPA GTA)</i>	Compliant	A Wastewater Management Plan forms part of the 2004 LEMP. The 2016 SWMP describes the existing sewage scheme. No complaints or records of non-compliance have been received regarding spray drifting beyond the required area.
74	Waste-water utilisation areas must effectively utilise the waste-water applied to those areas. This includes the use for pasture or crop production, as well as ensuring the soil is able to absorb the nutrients, salts, hydraulic load and organic materials in the solids or liquids. Monitoring of land and receiving waters to determine the impact of waste-water application may be required by the EPA. <i>(EPA GTA)</i>	Compliant	A Wastewater Management Plan forms part of the 2004 LEMP. The 2016 SWMP describes the existing sewage scheme. These plans acknowledge the need to apply <b>wastewater within the land’s capacity, and note</b> the requirement for wastewater to be pumped out for offsite management where storage capacity is not available and the land cannot receive the wastewater.
<b>Intermodal Facility Site</b>			

<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
75	The Applicant shall prepare and implement a Stormwater Management Scheme for the premises in accordance with the environment protection licence. The Scheme shall include measures to mitigate the impacts of stormwater run-off from and within the premises following the completion of construction activities and meet Condition 76 <i>(EPA GTA)</i>	Compliant	A Surface Water Management Scheme (covering the IMF) forms part of the 2004 LEMP. Refer to comments to EPL 11455.
76	Container handling, transfer and storage areas including any hardstand areas must be paved and sealed and be provided with a first flush stormwater management system designed to capture 15mm of stormwater for each square meter of catchment area. The paved and sealed areas including first flush system must also extend to include any rail unloading areas, stormwater detention pond, oil/water separator and container loading areas. <i>(EPA GTA)</i>	Compliant	A Surface Water Management Scheme (covering the IMF) forms part of the 2004 LEMP. This addresses this condition.
77	There must be no discharge of contaminated stormwater from the premises under dry weather conditions or storm event(s) of less than 1:100 year, 24 hour duration, average recurrence interval. <i>(EPA GTA)</i>		A Surface Water Management Scheme (covering the IMF) forms part of the 2004 LEMP. This addresses this condition.
78	All areas that involve the handling of containerised waste including container transfer and handling areas, clean container storage areas and internal roadways must be sealed. <i>(EPA GTA)</i>		A Surface Water Management Scheme (covering the IMF) forms part of the 2004 LEMP. This addresses this condition. The Auditors Note that the required areas were hardstand.
<u>Waste Water Management</u>			
79	Contaminated stormwater and any sludges collected at the Crisps Creek intermodal facility must be disposed of at the landfill site. <i>(EPA GTA)</i>	Note	Superseded by Approval 10_0012.
80	There must be no vehicle or container wash down at the premises. <i>(EPA GTA)</i>	Note	Superseded by Approval 10_0012.
81	The on-site sewerage waste water management system must be designed installed and operated in a manner consistent with the guidelines Environment and Health Protection for On-site Sewage Management for Single Households. <i>(EPA GTA)</i>	Note	Superseded by Approval 10_0012.
<b><i>Rivers and Foreshore Improvement Act 1948 – Part 3A Permit (DLWC GTAs)</i></b>			
<u>General</u>			
82	If any work is being carried out in such a manner that it may damage or detrimentally affect the stream, or damage or interfere in any way with any	Note	No longer applicable.

<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	work, the operation on that section of the stream shall cease immediately upon the oral or written direction of the officer.		
83	The Applicant may request in writing any reasons for any direction to cease operations which must be provided within 24 hours of such a request.	Note	No longer applicable.
74	If the permit conditions have been breached, the permit holder shall restore the site to the satisfaction of the Department. If the necessary works are not completed then the permit holder shall pay a fee prescribed by the Department for the initial breach inspection and all subsequent breach inspections.	Note	No longer applicable.
85	Operations shall be conducted in such a manner as not to cause damage or increase the erosion of adjacent stream banks. The permit holder shall carry out any reasonable instructions given by DLWC with a view to preventing damage to the banks.	Note	No longer applicable.
86	Any vegetation or other material removed from the area of operations shall be disposed of to an appropriate site where the debris cannot be swept back into the river during a flood.	Note	No longer applicable.
	<u>Conditions Specific to the DA</u>		
87	Operations shall be conducted in such a manner that is in accordance with the permit as not to cause damage or increase the erosion of adjacent stream banks. The permit holder shall carry out any reasonable instructions given by DLWC with a view to preventing damage to the banks.	Note	No longer applicable.
88	Prior to the commencement of construction, the Applicant shall submit for the approval of DLWC a Soil and Water Management Plan. The Plan shall be prepared by a suitably qualified person and shall cover all works in and near the stream, staging and maintenance requirements. The Plan shall meet the <b>requirements outlined in the NSW Department of Housing's publications (1998) <i>Managing Urban Stormwater: Soils and Construction</i> and <i>Managing Urban Stormwater: Treatment Techniques</i>.</b>	Note	No longer applicable.
89	The Applicant shall establish, to the satisfaction of DLWC, a riparian zone on the intermodal facility side of the Mulwaree River for the length of the intermodal facility and any associated works. The riparian zone shall be at least 40 metre in width (measured horizontally from the top of the bank) and consist of local native plant species but shall exclude bridge approaches, bridge, access roads and associated infrastructure in accordance with the Intermodal Construction Works Plan, and Soil and Water Management Plan	Compliant	Riparian zone established.
90	No exotic trees are to be planted within the stream or within 40 metres from the top of the bank of the stream.	Compliant	No exotic trees that appeared to be planted were

<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
			observed during the site visit.
91	Prior to commencing construction works the Applicant shall prepare to the satisfaction of DLWC a “Works Plan” to include Stream Rehabilitation and Vegetation Management. The Plan shall describe the proposed rehabilitation of the stream wherever disturbed, methods to stabilise the bed and banks of the stream, vegetation to be retained, additional plantings of local native vegetation, vegetation maintenance and performance criteria	Note	No longer applicable.
92	The Applicant shall ensure that the design of the bridge over the Mulwaree River is sensitive to the corridor functions (including current and future functions) of the river and piered approaches or equivalent are to be incorporated into the design.	Note	No longer applicable. Bridge is constructed.
93	Drainage lines to the Mulwaree River are to be in accordance with the requirements of DLWC and designs included in the Intermodal Facility Works Plan are to be approved by DLWC prior to the commencement of construction works.	Note	Construction completed and IMF operating.
	<b>NOISE</b>		
	<b>Hours of Construction and Operation</b>		
	<u>Construction</u>		
94	All construction work at the waste management facility and intermodal facility site that creates audible noise at residential premises must only be conducted between 7:00 am to 6:00 pm on Mondays to Fridays and between the hours of 8:00 am to 1:00 pm on Saturdays. There shall be no construction activities on Sundays or public holidays. <i>(EPA GTA)</i>	Note	No longer applicable.
95	The delivery of material outside the hours of operation permitted by Condition 94 may take place if that delivery is required by police or other authorities for safety reasons; and/or because the operation, personnel or equipment are endangered. In such circumstances, prior notification is to be provided to the EPA and affected residents as soon as possible, or within a reasonable period in the case of an emergency. <i>(EPA GTA)</i>	Note	No longer applicable.
96	The hours of construction specified in Condition 94 may be varied with the written consent of the EPA if the EPA is satisfied that the amenity of the residents in the locality will not be adversely affected. <i>(EPA GTA)</i>	Note	No longer applicable.
	<u>Operation</u>		
97	All operational activities at the waste management landfill site may only be	Note	Superseded by Approval 10_0012.

<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>		
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>
98	Note	Superseded by Approval 10_0012.
<b>Noise Limits</b>		
<u>Waste Management Facility Site</u>		
99	Note	Superseded by Approval 10_0012.
100	Note	Superseded by Approval 10_0012.
<u>Intermodal Facility Site</u>		
101	Note	Superseded by Approval 10_0012.
102	Note	Superseded by Approval 10_0012.
103	Note	Superseded by Approval 10_0012.

<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
104	The noise emission limits identified in conditions 101 and 102 apply for prevailing meteorological conditions, except under conditions of temperature inversions. Noise impacts that may be enhanced by temperature inversions must be addressed by: a) documenting noise complaints received to identify any higher level of impacts or patterns of temperature inversions; and b) where levels of noise complaints indicate a higher level of impact then actions to quantify and ameliorate any enhanced impacts under conditions of temperature inversions should be developed and implemented. <i>(EPA GTA)</i>	Note	Superseded by Approval 10_0012.
<b>Noise Management</b>			
105	The Applicant shall prepare and implement a Road Traffic Noise Management Protocol. The Applicant shall aim to meet the noise criteria set out in the EPA's <i>Environmental Guidelines for Road Traffic Noise</i> . The Protocol shall include, but not necessarily be limited to details about: a) scheduling movements outside critical time periods (for example, 6:00am to 7:00am); b) more stringent limits for noise emission from vehicles (eg. using specially designed "quiet" trucks and/or trucks required to use air bag suspension); c) driver education; d) limiting usage of exhaust brakes; e) type of road surface; f) in consultation with Mulwaree Shire Council exploring opportunities to reduce speed limits for trucks; g) regular maintenance of road surface; h) ongoing community liaison to monitoring complaints; and i) phasing in the increased road use; and j) options for overnight parking of haulage trucks.	Note	Superseded by Approval 10_0012. However a Noise Management Plan has been prepared as part of the 20014 LEMP.
106	The Applicant, with input from the rail service provider, shall prepare and implement an Operational Noise Management Protocol for the Intermodal facility. The Protocol shall include, but not necessarily be limited to details about: a) the incorporation of all reasonable and feasible noise mitigation methods for trains entering the site from the main line, shunting, rail movements on site, container movements, and truck movements; b) scheduling of train movements outside critical time periods; c) using the quietest trains possible; d) employee education;	Note	Superseded by Approval 10_0012. However a Noise Management Plan has been prepared as part of the 20014 LEMP.





<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	(ii) the Director-General or nominee, and (iii) the president of the Law Society of NSW or nominee. c) The qualified panel shall advise the independent valuer on the outstanding matters that the independent valuer refers for its consideration, following which the independent valuer shall determine a fair and reasonable acquisition price as described in condition 109 and/or the terms upon which Pylara is to be acquired.		
111	The Applicant shall bear the costs of any valuation or survey assessment requested by the independent valuer, panel or the Director-General.	Compliant	Veolia purchased Pylara property in 2001.
112	The Applicant shall, within fourteen days of receipt of a determination by the independent valuer, offer in writing to Pylara Pty Ltd to acquire the relevant land at a price no less than the said acquisition price as determined, and upon any terms set out by the independent valuer.	Compliant	Veolia purchased Pylara property in 2001.
	<b>AIR QUALITY</b>		
	<b>Odour</b>		
	<u>Waste Management Facility Site</u>		
113	There shall be no offensive odour emitted from the premises, in accordance with Section 129 of the Protection of the Environment Act 1997, nor emissions to the atmosphere from the landfill that may adversely affect the health or amenity of the community. <i>(EPA GTA)</i>	Note	Superseded by Approval 10_0012.
114	A meteorological station shall be installed and operated on the landfill site in accordance with the following Australian Standards: a) AS 2922-1987 Ambient air – Guide for the siting of sampling units; and b) AS 2923-1987 Ambient air – Guide for measurement of horizontal wind for air quality applications. The meteorological station shall measure and electronically log wind speed, wind direction, ambient temperature, sigma theta (standard deviation of the horizontal wind direction fluctuation), solar radiation. All parameters must be logged at 15 minute intervals to provide 1-hour average values and the station must be able to provide instantaneous wind speed and direction to assist in investigation of complaints. The meteorological station shall also measure rainfall and evaporation. <i>(EPA GTA)</i>	Note	Superseded by Approval 10_0012.
	<u>Intermodal Facility Site</u>		
115	There shall be no offensive odour emitted from the premises, in accordance	Note	Superseded by Approval 10_0012.

<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>		
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>
		with Section 129 of the Protection of the Environment Act 1997. <i>(EPA GTA)</i>
		<b>Dust</b>
		<u>Waste Management Facility Site</u>
116	Note	Activities occurring on the waste management facility site during the construction and operational phases must be carried out in a manner that will minimise emissions of dust from the premises. <i>(EPA GTA)</i>
117	Note	The Applicant must take all practical steps to manage dust emissions during the construction and operational phase of the waste management facility to minimise off-site impacts of total suspended particulates, lead and dust deposition. <i>(EPA GTA)</i>
118	Note	The LEMP must detail a system to prevent and suppress all dust emissions to meet the requirements in conditions 116 and 117. <i>(EPA GTA)</i>
119	Note	Trucks which are entering and leaving the premises and carrying loads must be sealed or covered at all times, except during loading and unloading. <i>(EPA GTA)</i>
120	Note	All internal permanent roadways between the container transfer area and Collector Road must be sealed. <i>(EPA GTA)</i>
121	Note	All sealed surfaces intended to carry vehicular traffic must be managed to minimise the quantity of wind blown dust emissions. <i>(EPA GTA)</i>
122	Note	All unsealed roads must be treated so that there are no visible dust emissions. Details of treatment measures must be documented in the LEMP.
123		A progressive rehabilitation strategy must be prepared and implemented for any unsealed areas of the site to prevent both wind blown dust emissions and contaminated stormwater runoff. This strategy must be documented in the LEMP. <i>(EPA GTA)</i>
		<u>Intermodal Facility Site</u>
		<b>Construction and Operational Phases</b>
124	Note	Activities occurring at the premises must be carried out in a manner that will minimise emissions of dust from the premises. <i>(EPA GTA)</i>
125	Note	The Applicant shall prepare a dust management plan that outlines measures to prevent wind blown dust. The dust management plan must be included as a component of the LEMP. The dust management plan must specify measures to prevent wind blown dust during the construction and operational phases. <i>(EPA GTA)</i>
126		Trucks entering and leaving the premises that are carrying excavated dusty Ambient Air Quality Monitoring Plan materials including clays, sands and soils

<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>		
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>
127		
128	Note	Superseded by Approval 10_0012.
129	Note	Superseded by Approval 10_0012.
130	Note	Superseded by Approval 10_0012.
131	Note	Superseded by Approval 10_0012.

<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>		
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>
<p>The program must include details on:</p> <ul style="list-style-type: none"> <li>(a) location of bore holes around the perimeter of the mine void and ED3– including the depth at which they are screened to enable access of groundwater;</li> <li>(b) monitoring the height of the groundwater table;</li> <li>(c) monitoring the groundwater gradient and to determine the direction of groundwater flow;</li> <li>(d) monitoring methodologies and standards to be employed;</li> <li>(e) reporting and assessment of results;</li> <li>(f) opportunities to integrate the monitoring program with other monitoring programs in the vicinity;</li> <li>(g) the parameters and substances that are proposed to be monitored, including sampling and analysis frequencies; and</li> <li>(h) groundwater height should be reported against water table contours around the site to assess any variation over time.</li> </ul>		
132	Note	Superseded by Approval 10_0012.
<p>The Applicant shall prepare and implement a surface water-monitoring program to monitor the environmental performance of the construction, operation and rehabilitation of the development on surface water. The surface water-monitoring program must be documented in the LEMP.</p> <p>The program must include details on:</p> <ul style="list-style-type: none"> <li>(a) Monitoring locations including:                             <ul style="list-style-type: none"> <li>(i) Crisps Creek ;</li> <li>(ii) Allianoyonyiga Creek;</li> <li>(iii) ED3; and</li> <li>(iv) rainwater collected in the mine void;</li> </ul> </li> <li>(b) monitoring methodologies and standards to be employed;</li> <li>(c) monitoring frequency based on rainfall events and creek flow assessment;</li> <li>(d) an assessment of the contribution of surface water pollution from the Woodlawn Waste Management Facility as distinct from the Woodlawn Mine site;</li> <li>(e) the quantity of water relocated from the mine void into ED3;</li> <li>(f) the quantity of water relocated from ED3 into the mine void;</li> <li>(g) the chemical composition of liquids added to the landfilled waste;</li> <li>(h) the quantity of water that reports to ED3 , including its sources;</li> <li>(i) the quantity of water removed and/or discharged from ED3, including its destination;</li> </ul>		

<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	(j) the total quantity of water contained in ED3; (k) the parameters and substances that are proposed to be monitored, including sampling and analysis frequencies; (l) reporting and assessment of results; and (m) opportunities to integrate the monitoring program with other monitoring programs in the vicinity.		
	<u>Leachate Monitoring</u>		
133	The Applicant shall prepare and implement a leachate quality and quantity monitoring program. The program must be documented in the LEMP. The program must include details on: (a) monitoring locations; (b) monitoring methodologies and standards to be employed; (c) monitoring frequency (d) the height of the saturation level in the waste; (e) the parameters and substances which are proposed to be monitored (eg redox potential, metals); and (f) reporting and assessment of results.	Note	Superseded by Approval 10_0012.
134	The Applicant shall notify the EPA as soon as practicable after becoming aware that the height of the saturation level in the waste is above the height of the groundwater table that surrounds the mine void.	Not triggered.	
	<u>Environmental Performance of the Bioreactor Landfill</u>		
135	A Bioreactor Performance Monitoring Program (BPMP) must be developed and implemented which will: (a) assess the efficiency of the decomposition of the landfilled waste; (b) assess the optimum leachate recirculation program; (c) assess the optimum water injection program; (d) assess the effect of the saturation depth of the leachate on bioreactor performance; and (e) assess the quantity of methane and carbon dioxide (and the relative proportions) that are emitted by the biological decomposition of the landfilled waste; The BPMP must also include monitoring of the quantity of rainwater that passively infiltrates into the landfilled waste, the quantity and chemical composition of water that is deliberately added to the landfilled waste, and the quantity of leachate in the landfilled waste. The Bioreactor Performance Monitoring Program must be documented in the	Compliant	A BPMP was prepared as part of the 2004 LEMP.

<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	LEMP.		
	<u>Noise Monitoring</u>		
136	Noise levels must be monitored to confirm performance and to assess compliance with Condition 99. A noise-monitoring program must be developed and implemented. The noise-monitoring program must be submitted to the EPA for review. The program must be documented in the LEMP. The program must include details on: (a) methodologies for noise monitoring; (b) location of noise monitoring; and (c) frequency of noise monitoring.	Note	Superseded by Approval 10_0012.
	<u>Geo-technical Stability</u>		
137	The geo-technical stability of the premises must be monitored in accordance with the recommendations of the report prepared by BFP Consultants P/L dated 17 December 1998, titled <i>Woodlawn Landfill – Geo-technical Study</i> . The monitoring program must be documented in the LEMP.	Compliant	Veolia advised that geotechnical consultants undertake quarterly monitoring of the stability of the Landfill. Veolia also advised that there is real time laser monitoring of the Landfill walls.
	<u>Reporting</u>		
138	The Applicant must provide an annual return to the EPA in relation to the development as required by any licence under the POEO Act 1997 in relation to the development. In the return, the Applicant must report on the annual monitoring undertaken (where the activity results in pollutant discharges), provide a summary of complaints relating to the development, report on compliance with licence conditions and provide a calculation of licence fees (administrative fees and, where relevant, load based fees) that are payable. If load based fees apply to the activity the Applicant will be required to submit load-based fee calculation work-sheets with the return.	Note.	Refer to EPL Compliance Tables.
	<b>Intermodal Facility Site</b>		
	Water Monitoring Program		
139	A surface water-monitoring program must be developed and implemented. The program must include details on but need not necessarily be limited to the following: (a) monitoring locations including: (i) Crisps Creek ; (ii) Mulwaree River; and (iii) the bypass from the first flush structure(s);	Note	Superseded by Approval 10_0012.

<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	(b) the monitoring methodologies and standards to be employed; (c) monitoring frequency based on rainfall event and creek flow assessment; (d) the quantity of water collected weekly in the first flush structure; (e) reporting and assessment of results; (f) the parameters and substances which are proposed to be monitored; and (g) opportunities to integrate the monitoring program with other monitoring programs in the vicinity. The monitoring program must be documented in the LEMP.		
	<u>Noise Monitoring</u>		
140	Noise levels must be monitored to confirm performance and to assess compliance with Conditions 100 and 101. A noise-monitoring program must be developed and implemented. The program must include details on: (a) methodologies for noise monitoring; (b) location of noise monitoring; and (c) frequency of noise monitoring. The monitoring program must be documented in the LEMP.	Note	Superseded by Approval 10_0012.
	<b>ROADWORKS</b>		
141	Prior to the commencement of construction, the Applicant shall undertake and submit to Council a detailed pavement analysis on the affected sections of Main Road 268 (Bungendore Road) and Collector Road. The Applicant shall fund any necessary rehabilitation work identified in the pavement analysis. The Applicant shall fund and provide on Main Road 268 (Bungendore Road) a minimum bitumen sealed width of 9.0 metres, incorporating marked fog lines and Centre-line as well as any required bus stops.	Note	No longer applicable.
142	The Applicant shall fund and provide on Main Road 268 (Bungendore Road) a minimum bitumen sealed width of 9.0 metres, incorporating marked fog lines and centre-line as well as any required bus stops.	Note	No longer applicable.
143	The intermodal facility access road shall be constructed in accordance with Auspec specifications and shall have a 7.0 metre wide sealed bitumen pavement for two Way roads and 5.0 metres on one way roads.	Note	No longer applicable.
144	In accordance with the "Mulwaree Section 94 Contributions Plan", the Applicant shall provide a financial contribution to Council towards extraordinary road damage accept as may be waived by Council. The contribution is to be paid quarterly in arrears.	Note	No longer applicable.
145	Prior to the commencement of landfilling operations, the Applicant shall fund	Note	No longer applicable.

<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	and undertake to the satisfaction of Council and the Roads and Traffic Authority the following works: (a) rehabilitation of the pavement at the intersection of Bungendore and Collector Roads; (b) provision of a right turn bay at the intersection of Bungendore and Collector Roads for south-bound traffic turning into Collector Road; (c) construction of a right turn bay on Bungendore Road for right-turning traffic into the Intermodal Facility. <i>(MSC GTA); and</i> (d) paving of the following areas with an asphalt concrete overlay: (i) intersection of the Intermodal access road and Main Road 268 (ii) intersection of Main Road 268 and the Collector Road (iii) intersection of the Collector Road and the access road to the landfill site.		
146	The access point to the Intermodal Facility at Bungendore Road shall be constructed to a design and standard to the Roads and Traffic Authority (RTA) and Council specifications and shall have a minimum sight distance of 225 metres in both directions. <i>(MSC GTA)</i>	Note	No longer applicable.
147	The access point to the Waste Management Facility site at Collector Road shall be constructed to accommodate B-doubles. <i>(MSC GTA)</i>	Note	No longer applicable.
148	The Applicant shall liaise with Council in relation to upgrading the existing warning signposting at the junction of Bungendore and Collector Roads to better inform through traffic of the side road junction and turning trucks. <i>(MSC GTA)</i>	Note	No longer applicable.
<b>LANDSCAPING AND VEGETATION MANAGEMENT</b>			
149	The Applicant shall prepare a Landscaping and Vegetation Management Plan for both the Waste Management Facility and Intermodal Facility sites. The Plan shall be prepared by a suitably qualified person and shall address, but not be limited to, the following matters: (a) details of likely vegetation loss, means to minimise such loss and additional tree planting to offset this loss; (b) proposed plant species; and (c) details on landscaping treatment at the intermodal facility site, with particular attention to minimising the visibility of the facility from residences and public vantage points.	Note	Superseded by Approval 10_0012.

<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
150	The Plan shall be prepared to the satisfaction of the Director-General and Council and shall be submitted at least three months prior to the commencement of landfilling operations.	Note	Superseded by Approval 10_0012.
<b>AGRICULTURAL RISKS</b>			
151	The Applicant shall prepare to the satisfaction of NSW Agriculture a contingency plan for agricultural risks in the event of an incident such as an accident during the transportation of waste from Sydney.	Compliant	Contingency Plan included in the Emergency Plan that forms part of the 2004 LEMP.
152	As part of the LEMP, the Applicant shall prepare a plan to manage pests, diseases, vermin, and declared noxious weeds. The plan shall also address measures to manage bird pests in order to minimise the risk of any transfer of contaminants from the waste management facility site to regional waterways and water supply reservoirs. The plan shall also address the recommendations of the report prepared by Kinsella Consulting entitled " <i>Potential for Transport of Pests and Diseases of Plants and Animals from North Sydney to Tarago in Municipal Wastes</i> ", dated February 1999 and included as Appendix L of the EIS. (EPA GTA)	Note	Superseded by Approval 10_0012.
<b>FLORA AND FAUNA</b>			
<b>Terrestrial Flora and Fauna</b>			
153	The Applicant shall consult with NPWS on measures to conserve the population of the vulnerable orchard ( <i>Diuris aequalis</i> – Buttercup Doubletail) in retained natural woodland on land within the Woodlawn mine site that is subject to the DA or areas potentially affected by the operation of the waste management facility.	Not verified	Section 3.7 of the AEMR details where on site this species is found. Evidence that consultation with NPWS/ OEH has occurred has not been reviewed by the auditors.
<b>Aquatic Flora and Fauna</b>			
154	The Applicant shall consult NSW Fisheries prior to the commencement of any works (including, but not limited to channel realignment, dredging, reclamation, culverts, road crossings, pipelines and weirs) in or adjacent to aquatic habitats.	Note	No longer applicable.
155	The Applicant shall undertake all practicable measures to maintain and, where possible, enhance existing habitat features in the Mulwaree River and Crisps Creek, including gravel beds, riffles, pools, snags and aquatic and riparian vegetation.	Note	No longer applicable.
156	The Applicant shall, in consultation with NSW Fisheries, ensure that the bridge from the Intermodal Facility over Mulwaree River is designed so that fish passage, instream flow and stream bed continuity are maintained.	Note	No longer applicable.



<b>Table 4: Conditions of Development Consent – Application No. 31-02-99</b>		
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>
<p>159 In relation to matters identified in Condition 158, as part of the LEMP, the Applicant must prepare an Emergency Management Plan. The Plan shall address, but not necessarily be limited to:</p> <ul style="list-style-type: none"> <li>(a) identification of threats to the environment and/or public health that could arise in relation to the construction and operation of Waste Management Facility and Intermodal Facility including the transportation of waste. These threats may include fire (waste transportation or within the landfill), overflow, dam failure, power or other utility failure, natural disaster etc;</li> <li>(b) identification of strategies to minimise and ameliorate the effects of any groundwater surface water pollution identified from the groundwater and surface water monitoring programs;</li> <li>(c) an estimate of the cost of implementation;</li> <li>(d) actions to effectively respond to the disruption of operations so the risk of pollution is minimised;</li> <li>(e) a communications strategy for alerting relevant agencies and the potentially affected community in the event of the disruption to operations leading to significant pollution; and</li> </ul> <p>30</p> <ul style="list-style-type: none"> <li>(f) ensuring that all relevant employees are familiar with the emergency management plan.</li> </ul> <p>The Applicant should regularly review the adequacy of the plan obtaining expert advice as required.</p>	Note	Superseded by Approval 10_0012.
<b>COMPLAINTS PROCEDURES</b>		
<p>160 Prior to the commencement of construction, the Applicant shall establish a free-call telephone line that operates 24 hours per day 7 days per week on which complaints about the subject development can be registered. The Applicants shall record details of all complaints received and actions taken in response to complaints in an up-to-date log book. The Applicants shall ensure that an initial response to complainants is provided within 24 hours and detailed response within 10 days of the complaint being lodged. The system must also be provided with a complaint verification procedure which correlates potential sources of odours with an operation or activity by assessing relevant meteorological data.</p>	Compliant	Telephone number operating as required.
<p>161 The complaints register shall be available for inspection upon request by the Director-General, EPA, DLWC, and the CLC.</p>	Note.	Superseded by Approval 10_0012 (all complaints required to be available on Veolia website).

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
<b>1</b>	<b>Administrative Conditions</b>		
<b>A1</b>	<b>What the licence authorises and regulates</b>		
A1.1	This licence authorises the carrying out of the scheduled activity listed below at the premises listed in A2 (Collector Road, TARAGO, NSW 2580) <i>Refer to table in EPL</i>	Compliant	
<b>A2</b>	<b>Premises or plant to which this licence applies</b>		
A2.1	The licence applies to the following premises: <i>Refer to table in EPL</i>	Noted	
<b>A3</b>	<b>Other Activities</b>		
A3.1	This licence applies to all other activities carried on at the premises, including: Ancillary Activity : Electricity Generating Works	Compliant	
<b>A4</b>	<b>Information supplied to the EPA</b>		
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.	Noted	
A4.2	The Woodlawn Bioreactor Landfill Environmental Management Plan, August 2004 prepared by Collex Pty Ltd and including any future amendments, is not to be taken as part of the documentation in A4.1, other than those parts specifically referenced in this licence.	Noted	

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
<b>2</b>	<b>Discharges to Air and Water and Applications to Land</b>		
<b>P1</b>	<b>Location of monitoring/discharge points and areas</b>		
P1.1	The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point. <i>Refer to EPL for table</i>	Compliant	Monitoring requirements are documented in the Landfill Environmental Management Plan (LEMP). Monitoring results are reported in the Annual Return.
P1.2	The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.	Compliant	Monitoring requirements are documented in the Landfill Environmental Management Plan (LEMP). Monitoring results are reported in the Annual Return.
P1.3	The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area. <i>Refer to EPL for table</i>	Compliant	Monitoring requirements are documented in the Landfill Environmental Management Plan (LEMP). Monitoring results are reported in the Annual Return.
<b>2</b>	<b>Limit Conditions</b>		
<b>L1</b>	<b>Pollution of waters</b>		
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.	Compliant	Monitoring of surface and groundwater is conducted in accordance with the LEMP. Monitoring results are reported in the Annual Return.
L1.2	There must be no pollution of surface water or groundwater.	Compliant	Monitoring of surface and groundwater is conducted in accordance with the LEMP. Monitoring results are reported in the Annual Return.
L1.3	There must be no discharge of waters from the premises unless more than 210 mm of rain falls within a 72 hour time period (1 in 100 year ARI of 72 hours duration).	Compliant	Documented in the LEMP (Soil and Water Management Plan).
L2	<b>Concentration limits</b>		
L2.1	For each monitoring/discharge point or utilisation area specified in the table below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.	Noted	

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>	
L2.2	Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.	Not triggered	No pH limit is specified
L2.3	To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table\&s. Note: No water pollutants relevant to the above condition.	Not triggered	No water pollutants relevant to this condition.
L2.4	Air Concentration Limits <i>Refer to EPL for table</i>	Compliant	The WBE Master Record – Engine Emissions spreadsheet was reviewed. The testing summary spreadsheets show compliance with POEO Clean Air Regulation limits for NO <sub>x</sub> , SO <sub>3</sub> and H <sub>2</sub> S. The NATA testing report for 2015 was checked against Veolia’s WBE Master Record – Engine Emissions spreadsheet and confirmed to be correct.
L2.5	This condition does not authorise the pollution of air by any pollutant other than those specified in the above tables.	Noted	
L2.6	The reference bases for the air pollutants specified in condition L2.4 for Point 8 are as follows: a) For Nitrogen oxides (NO <sub>2</sub> and/or NO): dry, 273 K, 101.3 kPa, 7% O <sub>2</sub> . b) For Sulphuric acid mist (H <sub>2</sub> SO <sub>4</sub> ) and/or sulphur trioxide (SO <sub>3</sub> ): dry, 273 K, 101.3 kPa.	Noted	
<b>L3</b>	<b>Waste</b>		
L3.1	The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled “Waste” and meeting the definition, if any, in the column titled “Description” in the table below. 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. <i>Refer to EPL for table</i>	Compliant	The site receives containerised general solid waste and does not accept asbestos, tyres or any other waste types. The Facility is not open to the general public, with material only received from material transported from Veolia’s Sydney facilities, and from regional clients. The specifications for permitted waste are included in the contracts with all clients. All clients are advised of the requirements in the event that unauthorised waste is received (client issued with a notice and required to remove from the Facility). Signage has been erected at the entry to the Facility confirming what waste types are not to be received at the Facility.

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
L3.2	The licensee may cause, permit or allow waste that is generated at the premises solely from activities relating the administration and operation of the Woodlawn Solid Waste Landfill to be disposed of at the premises provided the waste type is listed in the above table.	Noted	
L3.3	The licensee must not exceed the maximum annual landfill input rates outlined in the table below. <i>Refer to EPL for table</i>	Compliant	Weighbridge records reviewed for period July 2015 to June 2016 and confirm input rates were not exceeded.  Note, tonnages of residual waste from AWT are not triggered.
<b>L4</b>	<b>Noise Limits</b>		
L4.1	Noise from the premises must not exceed 35 dB(A) LAeq (15 minute) at the most affected residential receiver.	Compliant	The original 2004 Noise Management Protocol (including monitoring) (as approved by DPE) includes a monitoring protocol. For current operations monitoring is limited to: in response to a complaint; and noise level checks on any new (untested) items. Once the equipment is confirmed compliant an Equipment Noise Certificate is issued.  No noise complaints have been received at the Facility.  The Auditors inspected an example of a sound power and operator noise exposure assessment report commissioned by the supplier of a new dozer.
L4.3	For the purpose of Condition L4.1: a) The LAeq noise level must be measured or computed at the most affected residential receiver over a period of 15 minutes using "FAST" response on the sound level meter. b) 5dB(A) must be added to the measured level if the noise is substantially tonal or impulsive in character. c) Measurement locations are: i) for night time (10 pm to 7 am) assessment - 1 metre from the façade of the residence; and ii) for day time (7 am to 10 pm) assessment – at the residential boundary or 30 metres from the residence where the boundary is more than 30 metres from the residence. d) The noise emission limits apply for prevailing meteorological and winds up to 3 metres per second, except under conditions of temperature inversions.		
	Where noise impacts are enhanced by temperature inversions, the licensee must identify any patterns of temperature inversions and the increased level of impacts, and develop and implement actions to quantify and ameliorate any enhanced impacts.	Not triggered	No noise complaints have been received at the Facility.
<b>L5</b>	<b>Hours of Operation</b>		

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
L5.1	All operational activities at the premises may only be conducted between 6:00 am to 10:00 pm on Mondays to Saturdays. There must be no activities on Sundays, Good Friday or Christmas Day. (refer L5.2 re construction hours)	Compliant	Veolia advised that due to the current capacity, operations are generally restricted to 6:00am to 5:00pm. A review of weighbridge records indicates compliance with this condition.
L5.2	The hours of operation specified in condition L5.1 may be varied with the written consent of the EPA if the EPA is satisfied that the amenity of the residents in the locality will not be adversely affected	Compliant	Veolia were granted an exemption by the EPA to operate Sunday 21 December 2014.
L5.3	Construction work carried out at the premises between and Sundays and Public Holidays, must be inaudible at residential premises.	Not triggered	Construction of AWT covered under a separate EPL
<b>L6</b>	<b>Potentially Offensive Odour</b>		

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
L6.1	There must be no offensive odour emitted from the premises, in accordance with Section 129 of the Protection of the Environment Operations Act 1997, nor emissions to the atmosphere from the landfill that may adversely affect the health or amenity of the community.	Not verified	<p>The IOA is required to demonstrate whether the project is complying with the requirements in the approval to protect receivers against offensive odour. The IOA is inconclusive in <b>this regard</b>. For example, ambient odour surveys found <i>"no odour was detectable beyond the boundary of the site at the time of the...."</i>, however the odour diary analysis concluded <i>"that odour impact is predominantly experienced by participating entrants"</i>.</p> <p>In practice, offensive odour can only be judged by public reaction to the odour. If taken at face value, the presence of repeated complaints might indicate that offensive odour has occurred. However, not every logged odour complaints has been verified as offensive odour from the Woodlawn site. Approximately 50% of the complaints in 2015 and 63% in 2016 are from the same individual, located approximately 9 km from the bioreactor. Complaints from this individual appear inconsistent, for example some complaints were logged when prevailing winds would not transport odour from the site to the complaint location.</p> <p>It is noted that Veolia were issued with a Penalty Infringement Notice on 16 June 2015 for causing offensive odour and failure to operate plant and equipment. However, Veolia disputed this in their response to the show cause letter, indicating that plant and equipment was operating correctly and the odour complaint was not verified.</p> <p>We recommend that future IOA should re-focus effort towards investigation and verifying community odour complaints.</p>

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
L6.2	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.	Noted	
<b>4</b>	<b>Operating Conditions</b>		
<b>O1</b>	<b>Activities must be carried out in a competent manner</b>		
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.	Compliant	Operations at the site are conducted in accordance with the <b>LEMP and Veolia's ISO 9001 quality management system. A selection of Veolia's internal policies and their maintenance schedule and the training and competency records for operators were viewed as part of the audit.</b>
<b>O2</b>	<b>Maintenance of plant and equipment</b>		
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.	Compliant	<b>Veolia's maintenance schedule and the training and competency records for operators were viewed onsite. Veolia also participates in the National Heavy Vehicle Accreditation Scheme. Maintenance and operational performance is audited under the scheme.</b>  It is noted that Veolia were issued with a Penalty Infringement Notice on 16 June 2015 for causing offensive odour and failure to operate plant and equipment. However, Veolia disputed this in their response to the show cause letter, indicating that plant and equipment was operating correctly and the odour complaint was not verified.
<b>O3</b>	<b>Dust</b>		
O3.1	All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust at the boundary of the premises.	Compliant	The auditors did not witness dust being generated at the bioreactor site during the audit site visit.

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
O3.2	All operations and activities occurring at the premises must be carried out in a manner that will minimise off-site impacts of total suspended particulates, lead and dust deposition.	Compliant	We have reviewed dust deposition monitoring data for DG28 (Pylara) and DG18 (IMF). For the calendar year 2015, annual average dust deposition at Pylara exceeded 4 g/m <sup>2</sup> /month. This is not a private receiver therefore this does not represent an exceedance. Veolia no longer monitors for lead, PM <sub>10</sub> or TSP, however the auditors have no reason to believe that the criteria for lead, PM <sub>10</sub> and TSP would be exceeded at any private residential receiver.  The auditors did not witness dust being generated at the bioreactor site during the audit site visit.
O3.3	Trucks which are entering and leaving the premises and carrying loads must be sealed or covered at all times, except during loading and unloading.	Compliant	All waste received at the site is containerised
O3.4	All internal roadways between the container transfer area and Collector Road must be sealed, except roadways within the mine void.	Compliant	The access road to the IMF is sealed, as are all public roads between the IMF and the collector road.
O3.5	All surfaces intended to carry vehicular traffic must be managed to minimise the quantity of wind blown dust emissions.	Compliant	Water truck operates on all unsealed roads at the site
O3.6	All unsealed roads must be treated so that there are no visible dust emissions.	Compliant	Water truck in operation
<b>O4</b>	<b>Emergency Response</b>		
O4.1	The licensee must have in place and implement procedures to minimise the risk of fire at the premises.	Compliant	Fire and Emergency Management Plan included in the LEMP
O4.2	The licensee must extinguish fires at the premises as soon as possible.	Compliant	Fire and Emergency Management Plan included in the LEMP

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
O4.3	The licensee must maintain, and implement as necessary, a current emergency response plan for the premises. The licensee must keep the emergency response plan on the premises at all times. The emergency response plan must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment. If a current emergency response plan does not exist at the date on which this condition is attached to the licence, the licensee must develop an emergency response plan within three months of that date.	Compliant	The Emergency Management Plan is included in the LEMP.
<b>O5</b>	<b>Processes and management</b>		
O5.1	Water from the West Ridge Catchment, as shown on Figure GO25/6/02 contained in the Surface Water Management Scheme in Section 8.6 of the Landfill Environmental Management Plan dated August 2004, must not drain into the landfill void.	Compliant	Assessed in the 2012 audit.
O5.2	Evaporation Dam 3 must not receive water stored in the Waste Rock Dam.	Compliant	No water is transferred from the Waste Rock Dam.
O5.3	Stormwater in the landfill void must only be discharged into Evaporation Dam 3, or used for operational purposes within the landfill such as bioreactor water and dust suppression as approved in writing by the EPA.	Compliant	The ED3MP, which forms part of the 2004 LEMP, documents this requirement.
O5.4	Where contaminated water is used for dust suppression, it must only be applied in the landfill void, and in any areas around the perimeter of the void where contaminated water will drain back into the landfill void.	Compliant	The SWMP notes that only treated leachate, container wash down water, stormwater, bore water or mains water can be used in the Landfill.
O5.5	The evaporation of water by spraying must not result in the drifting of the sprayed liquid from the premises.	Compliant	The Soil and Water Management Plan which forms part of the 2016 EMP submitted for approval to DPE, describes how evaporation of water by spraying is to be undertaken with reference to wind conditions.

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
O5.6	Untreated leachate must not be transferred to Evaporation Dam 3 unless approved in writing by the EPA.	Compliant	The ED3MP, which forms part of the 2004 LEMP, documents this requirement.
O5.7	Containers used for transporting waste must only be washed at the container wash facility as frequently as is necessary to minimise environmental impacts from the containers. The container wash down facility must be designed, installed and operated with the aim of collecting, treating and disposing of any wash down waters to the leachate collection system. Any collected solids must be returned to the active tipping face.	Compliant	Veolia advised that all containers are washed down when empty at the Facility. No evidence of wash down was observed during the audit site visit; however, the auditors have no reason to believe this condition is not complied with.
O5.8	The licensee must ensure that the holder of Environment Protection Licence No. 11437, the supervisory licence, has adequate access to the premises and records held at the premises in order to be able to ensure that the design, construction, extension and maintenance of all engineered features of the premises being supervised are done in compliance with the conditions of the development approval and as further defined in conditions of this environment protection licence.	Compliant	A representative from Goulburn Mulwaree Council completes a site inspection each week.
O5.9	The licensee must ensure that the holder of Environment Protection Licence No. 11437, the supervisory licence, has adequate access to the premises and records held at the premises in order to be able to ensure that the licensee receives only those types of wastes and in such quantities that do not exceed those permitted by this environment protection licence.	Compliant	A representative from Goulburn Mulwaree Council completes a site inspection each week.
O5.10	The licensee must implement the most recent instructions given by the holder of Environment Protection Licence No. 11437, the supervisory licence, regarding the separation, re-use, reprocessing and recycling of waste at the premises.	Compliant	A representative from Goulburn Mulwaree Council completes a site inspection each week.

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
O5.11	The licensee must ensure that the holder of Environment Protection Licence No. 11437, the supervisory licence, has adequate access to the premises and records held at the premises in order to be able to verify the annual returns prepared by the licensee of these premises.	Compliant	A representative from Goulburn Mulwaree Council review annual return with Veolia on an annual basis.
<b>O6</b>	<b>Waste Management</b>		
	Note: The location of the Raw Water Dam is shown on Figure 3.2 - Existing Surface Water Management at Woodlawn Mine Site, contained in the Surface Water Management Scheme in Section 8.6 of the Landfill Environment Management Plan dated August 2004.	Noted	
O6.1	The last licensee must prepare and submit to the EPA within six months prior to the last load of waste being landfilled a closure plan in accordance with section 76 of the Protection of the Environment Operations Act 1997.	Not triggered	
O6.2	The landfill void must be managed to ensure the groundwater gradient directs groundwater flows towards the landfill void.	Compliant	Assessed in the 2012 audit.

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
O6.3	<p>A leachate collection/storage/recirculation/treatment system must be designed, installed and operated to:</p> <ul style="list-style-type: none"> <li>a) accept, in addition to leachate, other waste-waters and contaminated storm-waters allowed by this licence to be introduced into the waste;</li> <li>b) efficiently operate, despite settlement of the waste;</li> <li>c) ensure that liquid is not deliberately stored in the landfilled waste, unless it is necessary for the efficient decomposition of the landfilled waste;</li> <li>d) ensure that leachate can be recirculated within the biologically active zones of the landfilled waste;</li> <li>e) comply with condition O5.2; and</li> <li>f) ensure to the maximum extent practicable the biological decomposition of all organic waste and productive capture of methane.</li> </ul>	Compliant	<p>Documented in the LEMP. The original 2004 LMP (as approved by DPE) remains in place.</p> <p>The updated 2016 LMP is awaiting DPE approval.</p>
O6.4	<p>A barrier system must be installed for localised joints, fractures and rock debris within the landfill, in accordance with the specifications detailed in the letter from Coffey Geotechnics Pty Ltd to the Department of Planning, dated 6 September 2007, reference GEOTLCOV23353AA-AB (DECC reference DOC07/38671).</p> <p>Note: The licensee may propose an alternative barrier system for the different surfaces of the mine void that are required to be lined in accordance with condition O5.4. In order for the EPA to consider varying condition O5.4, the licensee must provide documented evidence that the proposed alternative barrier system is of at least equivalent performance to the barrier system specified in condition O5.4.</p>	Compliant	The BSQAP forms part of the 2004 LEMP.

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
O6.5	The licensee must install the barrier system referred to in O5.4 in accordance with the Construction Quality Assurance plan in Part 10 of the Barrier System and Quality Assurance Plan in Section 8.1 of the Landfill Environmental Management Plan, dated August 2004.	Compliant	The BSQAP forms part of the 2004 LEMP.
O6.6	The licensee must not import water or other liquids into the landfill void, unless otherwise approved by the EPA, except for first flush waters collected at the Crisps Creek Intermodal Facility site (Environment Protection Licence No. 11455), container washdown waters, and raw dam water. The licensee may also import leachate and washdown water generated at the Clyde Intermodal Facility (Environment Protection Licence No. 11763) from the compaction and loading of waste into rail containers that are subsequently transported to the Woodlawn Landfill. The leachate and washdown water generated at the Clyde Intermodal Facility must be able to be classified as Liquid Waste.	Compliant	No water is imported to the Landfill without prior approval of the EPA. This requirement is documented in the 2016 SWMP which forms part of the 2016 EMP submitted to SPE for approval.
O6.7	Cover material must be virgin excavated natural material, unless otherwise approved in writing by the EPA. Note: The licensee is encouraged to identify alternative daily cover materials and examine the feasibility of adopting such materials so as to minimise impacts of utilising virgin excavated natural material.	Not verified	Facility management reported that clay virgin excavated natural material sourced from within the Facility is used as daily cover. EPL 11436 provides for trials of alternative daily cover.
O6.8	Cover material must be of a quality that will not inhibit the biological decomposition of the landfilled waste.	Compliant	Daily cover, other than virgin excavated material needs to be approved by the EPA. Condition U1 allows for trials of alternative daily cover and include a requirement to demonstrate that biological decomposition is not compromised.

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
O6.9	<p>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, unless otherwise approved in writing by the EPA.</p> <p>Note: This condition does not exclude removal of daily cover at the beginning of each day to provide for the efficient operation of the bioreactor and to avoid perching of leachate within the landfilled waste mass.</p>	Not verified	Documented in the LEMP but could not be verified during the site visit. The auditors have no reason to believe this condition is not complied with.
O6.10	<p>Cover material must be applied to a depth of 30 centimetres over surfaces of the landfilled waste which have had 15 centimetres of cover material for more than 90 days, unless otherwise approved in writing by the EPA.</p> <p>Note: This condition does not exclude removal of cover prior to recommencement of active landfilling to provide for the efficient operation of the bioreactor and to avoid perching of leachate within the landfilled waste mass.</p>	Not verified	Could not be verified during the site visit. The auditors have no reason to believe this condition is not complied with.
O6.11	At least two weeks supply of cover material must be available at the premises under all weather conditions, unless otherwise approved in writing by the EPA.	Not verified	Documented in the LEMP but could not be verified during the site visit. The auditors have no reason to believe this condition is not complied with.
O6.12	The licensee must have in place and implement procedures to identify and prevent the disposal of any waste not permitted by this licence to be disposed of at the premises.	Compliant	<p>The Facility is not open to the general public, with material only <b>received from material transported from Veolia’s Sydney</b> facilities, and from regional clients. The specifications for permitted waste are included in the contracts with all clients. All clients are advised of the requirements in the event that unauthorised waste is received (client issued with a notice and required to remove from the Facility).</p> <p>Signage has been erected at the entry to the Facility confirming what waste types are not to be received at the Facility.</p>

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
O6.13	Final capping must comprise five layers in the order of installation: a seal bearing surface, a gas drainage layer, a sealing layer, an infiltration layer and the revegetation layer as specified in the Post Closure Landfill Rehabilitation Management Plan in Section 8.9 of the Landfill Environmental Management Plan dated August 2004	Not triggered	
O6.14	The licensee shall ensure that as much landfill gas as is practicable is collected and treated by flaring or beneficially used in the landfill gas fired power station.	Compliant	Current gas capture rates is estimated at 70-80%. Increasing this is an ongoing objective of the site. The long term leachate management system will help increase gas capture rates.
O6.15	The flare system must provide a destruction efficiency of volatile organic compounds, air toxics and odours of not less than 98%. The flare must be at ground-level and shrouded. The flare must be provided with automatic combustion air control, automatic shut-off gas valve and automatic re-start system.  Note: The following combinations of minimum performance specifications will be deemed to have achieved a destruction efficiency of 98 per cent. Alternative minimum performance specifications must be justified by the licensee.  <i>Refer to table in EPL</i>	Compliant	Monitoring results presented in annual return (2015) show minimum performance specifications are met.

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
O6.16	<p>The landfill gas fired power station must provide a minimum destruction efficiency of 98% for volatile organic compounds, air toxics and odours, and the discharge point(s) must be designed (ie. Stack height, diameter, discharge velocity etc.) to ensure that the design ground-level concentration criteria specified in the following tables are not exceeded at any location at or beyond the boundary of the premises.</p> <p><i>Refer to table in EPL</i></p>	Not verified	<p>Testing for destruction efficiency is not currently included in the annual testing of the gas engines. However, the Auditors have no reason to believe this destruction efficiency is not achieved. The auditors have reviewed the data presented in the IOA, which reports odour concentrations for landfill gas (9,000,000 ou) and gas engines (~1,900) and we have calculated an odour destruction efficiency of &gt;99.9%. However we cannot confirm destruction efficiency of VOCs and toxics.</p> <p>The second half of this conditions relates to the design of the gas engines discharge points. The auditors assume that the dispersion modelling completed for the 1999 approval has demonstrated compliance with the relevant ground level concentration criteria, although it is noted that we have not viewed the 1999 EIS.</p>
O6.17	<p><b>Prior to installation, the licensee must provide manufacturer's performance guarantees for all plant and equipment, demonstrating to the satisfaction of the EPA that emissions of air pollutants from the flare and landfill gas fired power station will comply with the Protection of the Environment Operations (Clean Air) Regulation 2002 and with the design parameters specified in conditions O5.16 and O5.17. In addition, prior to installation of the landfill gas fired power station, the licensee must carry out dispersion modelling and prepare a report to the satisfaction of the EPA that demonstrates that the stack diameters and heights of the discharge points have been designed in an acceptable manner.</b></p>	Not verified	<p>This condition dates back to before the first landfill gas engine was commissioned, in 2008. The auditors assume that the dispersion modelling completed for the 1999 approval has demonstrated compliance with this condition, although it is noted that we have not viewed the 1999 EIS.</p>
O6.18	<p>Any landfill gas condensate must be collected and returned to the leachate recycling system.</p>	Compliant	<p>Documented in the LEMP. Condensate is collected at the knock out pot and returned to the void.</p>
O6.19	<p>The landfill gas extraction and utilisation system must be designed and installed to withstand forces created by the weight and settlement of waste in the landfill.</p>	Compliant	<p>Documented in the LEMP. Gas pipes are constructed from high density plastic and laid in sand and stone aggregate to prevent damage.</p>

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
O6.20	All pipework carrying landfill gas adjacent to the haul road must be designed and installed so it is protected from damage as a result of haulage activities.	Compliant	Confirmed in the 2012 audit that the pipework is buried under a bund to protect it from trucks.
O6.21	The licensee must not exhume any landfilled waste unless approved in writing by the EPA.	Noted	
O6.22	Vehicles leaving the premises must not track materials to external surfaces.	Compliant	
O6.23	The licensee must provide a report to the EPA which details the design, construction, operation and rehabilitation of any new landfill cell. This report must be submitted to the EPA at least six months before the licensee intends to construct the cell, and it must include details on a QA/QC program which can demonstrate that the cell was constructed to meet its design specifications.	Not triggered	
O6.24	The licensee must take all practical measures to prevent litter leaving the premises	Compliant	Fence constructed around the bioreactor.
<b>O7</b>	<b>Other operating conditions</b>		
O7.1	The licensee must seal all drill holes with clay in accordance with the proposal contained in the Drill Hole Lining Plan submitted to the EPA in the letter dated 25 June 2002 prior to landfilling waste above each drill hole.	Not triggered	Nor drill holes sealed in 2013, 2014 or 2015
O7.2	The licensee must prepare and submit to the EPA a design and construction program for the sealing of the south western adit/portal. This program must be submitted no later than 6 months prior to waste levels reaching the adit/portal.	Compliant	As documented in 2013 AEMR, design approved by the EPA and details of work program submitted to EPA.
<b>5</b>	<b>Monitoring and Recording Conditions</b>		
<b>M1</b>	<b>Monitoring records</b>		

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>	
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.	Compliant	Auditors viewed samples of Veolia’s monitoring database and records.
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.	Compliant	Auditors viewed samples of Veolia’s monitoring database and records
<b>M2</b>	<b>Requirement to monitor concentration of pollutants discharged</b>		
M2.1	For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:	Compliant	Annual Return for past 3 years reviewed. Some sample points do not need the required sample frequency, however this is typically beyond Veolia’s control (i.e. not enough flow).
M2.2	Air monitoring requirements <i>Refer to tables in EPL</i>	Compliant	
M2.3	Water and/ or Land Monitoring Requirements <i>Refer to tables in EPL</i>	Compliant	
<b>M3</b>	<b>Testing methods - concentration limits</b>		

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
M3.1	Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with: a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or b) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or c) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.	Compliant	
M3.2	Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.	Not triggered	
<b>M4</b>	<b>Weather monitoring</b>		
M4.1	The licensee must undertake the following monitoring of meteorological parameters in accordance with the methods and frequencies specified in the table below.	Compliant	The siting of the station needs to be reviewed for compliance with condition 4.22 of approval 10-0012. The reporting units/data for solar radiation should be checked in the next quarterly service.
<b>M5</b>	<b>Recording of pollution complaints</b>		
M5.1	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.	Compliant	Odour complaints register reviewed.

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
M5.2	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.	Compliant	Odour complaints register reviewed.
M5.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	Compliant	Odour complaints register dates back to 2010
<b>M6</b>	<b>Telephone complaints line</b>		
M6.1	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.	Compliant	Reported in Tarago Times monthly publication
M6.2	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.	Compliant	Reported in Tarago Times monthly publication
M6.3	The preceding two conditions do not apply until the date of the issue of this licence (or preceding if replacement).	Noted	
<b>M7</b>	<b>Requirement to monitor volume or mass</b>		

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
M7.1	<p>For each discharge point or utilisation area specified below, the licensee must monitor:</p> <ul style="list-style-type: none"> <li>a) the volume of liquids discharged to water or applied to the area;</li> <li>b) the mass of solids applied to the area;</li> <li>c) the mass of pollutants emitted to the air;</li> </ul> <p>at the frequency and using the method and units of measure, specified below.</p> <p><i>Refer to table in EPL</i></p>	Compliant	Sample of data records reviewed during audit site visit.
<b>6</b>	<b>Reporting Conditions</b>		
<b>R1</b>	<b>Annual return documents</b>		
R1.1	<p>The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:</p> <ul style="list-style-type: none"> <li>a) a Statement of Compliance; and</li> <li>b) a Monitoring and Complaints Summary.</li> </ul> <p>At 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.</p>	Compliant	Annual return for past 3 years reviewed. Includes statement of compliant and monitoring summary
R1.2	An Annual Return must be prepared in respect of each reporting period.	Compliant	Annual return for past 3 years reviewed.
R1.3	<p>Where this licence is transferred from the licensee to a new licensee:</p> <ul style="list-style-type: none"> <li>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</li> <li>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.</li> </ul>	Not triggered	

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
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.	Not triggered	
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.	Compliant	Documented on EPA website.
R1.6	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.	Not verified	The annual return for 2012-2013, 2013-2014 and 2014-2015 has been provided and reviewed (3 years). The annual return for 2011/2012 has not been provided for review.
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.	Compliant	Annual return for past 3 years reviewed.
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.	Noted	

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
R1.9	<p>The Annual Return must be accompanied by / or include an Annual Report which must contain an assessment of environmental performance relevant to licence conditions including:</p> <ul style="list-style-type: none"> <li>a) tabulated results of all monitoring data required to be collected by this licence;</li> <li>b) a graphical presentation of data from at least the last three years (if available) in order to show variability and / or trends. Any statistically significant variations or anomalies should be highlighted and explained;</li> <li>an analysis and interpretation of all monitoring data;</li> <li>d) an analysis of and response to any complaints received;</li> <li>e) identification of any deficiencies in environmental performance identified by the monitoring data, trends or incidents and of remedial action taken or proposed to be taken to address these deficiencies; and</li> <li>f) recommendations on improving the environmental performance of the facility.</li> </ul>	Compliant	Annual Environmental Monitoring Report is submitted with each Annual Return
R1.10	The items specified in condition R1.7 must be signed by the holder of Environment Protection Licence No. 11437 – the supervisory licence.	Compliant	
<b>R2</b>	<b>Notification of environmental harm</b>		
R2.1	Notifications must be made by telephoning the Environment Line service on 131 555.	Compliant	Veolia reported an incident of venting of landfill gas from the flare to the Environment Line.

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
R2.2	<p>The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.</p> <p>Note: The licensee 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.</p>	Observation	<p>Due to maintenance on the main gas line, Flare#2 was switched to vent mode on 21 August 2013, and not detected until 9 September 2013. The incidence was immediately logged in <b>Veolia’s incident management system</b> but reporting to the EPA was late (23 September 2013), which resulted in an official caution from the EPA and Penalty Infringement Notice (PIN). Veolia has since implemented a new isolation/de-isolation plan, to encompass both flares 1 &amp; 2, to prevent future occurrence.</p>
<b>R3</b>	<b>Written report</b>		
R3.1	<p>Where an authorised officer of the EPA suspects on reasonable grounds that:</p> <p>a) where this licence applies to premises, an event has occurred at the premises; or</p> <p>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.</p>	Noted	
R3.2	<p>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.</p>	Noted	
R3.3	<p>The request may require a report which includes any or all of the information (listed in the condition).</p>	Noted	
R3.4	<p>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.</p>	Noted	

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
R3.5	Whenever the height of the saturation level in the waste is above the height of the groundwater table that surrounds the perimeter of the mine void, the licensee must provide a written report to the EPA within 3 months	Not triggered	Waste is below groundwater table
R3.6	The report must contain the following information: a) the height of the saturation level of the leachate in the mine void and the height of the groundwater at the perimeter of the mine void; and b) a program of actions to reduce the height of leachate in the mine void and the expected time duration for the actions and works.	Not triggered	
<b>R4</b>	<b>Other reporting conditions</b>		
R4.1	Whenever the volume of water stored in Evaporation Dam 3 exceeds 323 megalitres, the licensee must notify the EPA in accordance with the requirements of R2 and provide a written report to the EPA within 1 month. The report must contain the following information: a) the volume of water stored in Evaporation Dam 3; and b) a program of actions to reduce volume of water stored in Evaporation Dam 3 below 323 megalitres and maintain the stored water volume below 323 megalitres, and/or a program for the design and construction of works to increase the capacity of Evaporation Dam No. 3 to maintain the freeboard to contain the rainfall from a 1:100 year ARI storm of 72 hours duration, and the expected time duration for the actions and works.	Not triggered	Long term trend in volume reported in AEMR

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
R4.2	<p>Within 24 hours of receipt of an odour complaint, the Licensee must provide the EPA with a written report.</p> <p>The report must include the following information:</p> <ul style="list-style-type: none"> <li>a) The date, time and duration of the odour incident;</li> <li>b) A description of the nature of the odour;</li> <li>c) The meteorological conditions prevailing at the same time the odour was reported;</li> <li>d) The location(s) of the place where the odour was detected;</li> <li>e) The circumstances in which the odour incident occurred (including the cause of the odour, if known);</li> <li>f) Time and date stamped photographs of the active landfill cell showing intermediate and daily cover;</li> <li>g) The action taken or proposed to be taken to deal with the incident, including follow-up contact with any complainants;</li> <li>h) Details of any measures taken or proposed to be taken to prevent or mitigate against a recurrence of such an incident;</li> </ul> <p>and</p> <ul style="list-style-type: none"> <li>i) The current level of leachate in each pond.</li> </ul>	Compliant	Evidence of this reviewed for a recent odour complaint
<b>7</b>	<b>General Conditions</b>		
<b>G1</b>	<b>Copy of licence kept at the premises or plant</b>		
G1.1	A copy of this licence must be kept at the premises to which the licence applies (and available for inspection under G1.3).	Noted	
G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	Noted	
G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	Noted	
<b>8</b>	<b>Pollution Studies and Reduction Programs</b>		
<b>U1</b>	<b>Trial of Alternative Daily Cover</b>		
U1.1	The licensee may conduct a trial using alternative daily cover for a six (6) month period.	Noted	
U1.2	The alternative daily cover operational trial must conclude no later than 30 September 2013.	Not verified	Trial period was not specified in the report.

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
U1.3	The alternative daily cover operational trial may use the following materials a) Polymer slurry (b) Processing fines blended with VENM (VENM must comprise at least 25% of the mix by volume).	Compliant	Trial of processing fines completed. It is noted that blending with VENM had to be ceased as it was found to be impractical
U1.4	The licensee must provide a written report to the Manager, Waste Operations, by 31 October 2013, detailing the outcomes of the alternative daily cover trial. The report must include, but not necessarily be limited to: (a) A qualitative assessment of the effectiveness of the alternative daily cover in meeting the objectives of Benchmark Technique 33 of the Environmental Guidelines: Solid Waste Landfills (1996); (b) A qualitative assessment of the in-field practical effectiveness of using alternative daily cover; and (c) Recommendations regarding ongoing use.	Observation	Report dated November 2013 was sent to EPA on 30 November 2013, however an extension was granted by the EPA.
<b>U2</b>	<b>ED3N-1 Leachate Management</b>		
U2.1	All untreated leachate must be removed from ED3N-1 by no later than 30 June 2013.	<b>Administrative Non-compliant</b>	Veolia were unable to remove all leachate from evaporation dam ED3N-1 by 30 June 2013 as specified in EPL 11436 Condition U2.1. Veolia met with the EPA in July 2013 and detailed the operational processes being undertaken to remove the leachate, which were accepted by the EPA.
	In the interim period, liquid in ED3N-1 must be regularly monitored and maintained in an alkaline state	Compliant	The 2013 AEMR notes that monthly monitoring was done to ensure alkaline data was achieved
	By no later than 31 July 2013 the licensee must submit a report to the EPA which demonstrates that: 1. Water quality parameters in ED3N-1 are comparable to water quality parameters in ED3N-2 and ED3N-3; and 2. Odour emission values in ED3N-1 have returned to the levels predicted in the Environmental Assessment referenced in Project Approval 10_0012.	Not verified	The 2013 AEMR notes that a report was submitted to EPA " <i>demonstrating the water quality parameter and odour emission value of ED3N-1 in relation to other Evaporation Dams (ED3N-2 &amp; ED3N-3) during the reporting period. (U2.3)</i> ". The auditors have not viewed this report or evidence of submission.
<b>9</b>	<b>Special Conditions</b>		
<b>E1</b>	<b>Financial assurance</b>		

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor Landfill</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
E1.1	<p>A financial assurance comprising an unconditional and irrevocable bank guarantee in favour of the EPA, in the amount of five million three hundred and eighty thousand dollars (\$5,380,000), must be provided to the EPA. This financial assurance is required for the works and programs required by or under this licence.</p> <p><i>Refer to EPL for additional requirements for Financial Assurance</i></p>	Compliant	

<b>Table 6: Conditions of EPL 11455 - Veolia Crisps Creek Intermodal</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
<b>1</b>	<b>Administrative conditions</b>		
<b>A1</b>	<b>What the licence authorises and regulates</b>		
A1.1	Not applicable.	Noted	
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.	Compliant	
A1.3	Not applicable.	Noted	
A1.4	The only scheduled activity that may be carried on by the licensee is waste transfer in accordance with the conditions of this licence.	Compliant	
<b>2</b>	<b>Premises to which this licence applies</b>		
A2.1	The licence applies to the following premises: <i>Refer to table in EPL</i>	Noted	
<b>A3</b>	<b>Other activities</b>		
A3.1	Not applicable.	Noted	
<b>A4</b>	<b>Information supplied to the EPA</b>		
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.	Noted	

<b>Table 6: Conditions of EPL 11455 - Veolia Crisps Creek Intermodal</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
A4.2	The Woodlawn Bioreactor Landfill Environmental Management Plan, April 2001 prepared by Maunsell McIntyre Pty Ltd and submitted with the licence application (the Landfill Environmental Management Plan) and including any future amendments is not to be taken as part of the documentation in A4.1, other than those parts specifically referenced in this licence. A copy of the Landfill Environmental Management Plan may be viewed at the EPA's South Coast Regional Office.	Noted	
<b>2</b>	<b>Discharges to air and water and applications to land</b>		
<b>P1</b>	<b>Location of monitoring/discharge points and areas</b>		
P1.1	The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point. <i>Refer to table in EPL</i>	Compliant	Monitoring locations are documented in the Landfill Environmental Management Plan (LEMP). Monitoring results are reported in the Annual Return.
P1.2	The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point. <i>Refer to table in EPL</i>	Compliant	Monitoring locations are documented in the Landfill Environmental Management Plan (LEMP). Monitoring results are reported in the Annual Return.
P1.3	The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area. <i>Refer to table in EPL</i>	Compliant	Not applicable
<b>3</b>	<b>Limit conditions</b>		
<b>L1</b>	<b>Pollution of waters</b>		

<b>Table 6: Conditions of EPL 11455 - Veolia Crisps Creek Intermodal</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
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.	Compliant	Surface and storm water collected in an onsite retention system. Testing following rainfall events prior to discharge to Mulwaree River.  Monitoring locations are documented in the Landfill Environmental Management Plan (LEMP). Monitoring results are reported in the Annual Return.
L1.2	There must be no discharge of contaminated stormwater from the premises under dry weather conditions or storm event(s) of less than 1:100 year, 24 hour duration, average recurrence interval.	Compliant	No contaminated stormwater is discharged from the site, Stormwater is diverted to onsite retention system for storage and testing. Contaminated water is pumped out for disposal in the void.
<b>L2</b>	<b>Load Limits</b>		
L2.1	Not applicable	Noted	
L2.2	Not applicable	Noted	
<b>L3</b>	<b>Concentration Limits</b>		
L3.1	Not applicable	Noted	
L3.2	Not applicable	Noted	
L3.3	Not applicable	Noted	
<b>L4</b>	<b>Volume and mass limits</b>		
L4.1	Not applicable	Noted	
<b>L5</b>	<b>Waste</b>		
L5.1	The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the licence - General Solid Waste (putrescible); General Solid Waste (non putrescible); asbestos waste; waste tyres; general or special exempted wastes <i>Refer to table in EPL</i>	Compliant	The site receives containerised general solid waste and does not accept asbestos, tyres or any other waste types.
L5.2	There must be no storage of waste on site, including sludges and containers of waste, except with the written approval of the EPA if such storage is required by the Police and/or because the operation, personnel or equipment are endangered.	Compliant	No containers are stored overnight at the IMF.
<b>L6</b>	<b>Noise Limits</b>		

<b>Table 6: Conditions of EPL 11455 - Veolia Crisps Creek Intermodal</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
L6.1	Except as provided in condition L6.2, noise from the premises must not exceed an LAeq (15 minute) noise emission criterion of 35 dB(A) at the most affected residential receiver.	Compliant	<p>The original 2004 Noise Management Protocol (including monitoring) (as approved by DPE) includes a monitoring protocol. For current operations monitoring is limited to: in response to a complaint; and noise level checks on any new (untested) items. Once the equipment is confirmed compliant an Equipment Noise Certificate is issued.</p> <p>The IMF EMP (which is currently with DPE for review and approval) notes that noise modelling predicted that standard activities at the IMF would not exceed these criteria at the nearest sensitive receivers.</p> <p>No noise complaints have been received at the IMF.</p>
L6.2	Noise emissions from freight trains entering and leaving the premises must not exceed the noise limit of 45 dB(A) LAeq (15 minutes) prior to 7:00 am and 50 dB(A) LAeq (15 minutes) after 7:00 am. These limits apply only where there are no more than two freight trains entering and leaving the premises per day, otherwise the limit in condition L6.1 applies.	Compliant	<p>The IMF EMP (which is currently with DPE for review and approval) notes that noise modelling predicted that standard activities at the IMF would not exceed these criteria at the nearest sensitive receivers.</p> <p>No noise complaints have been received at the IMF.</p>

<b>Table 6: Conditions of EPL 11455 - Veolia Crisps Creek Intermodal</b>		
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>
<p>L6.3 For the purpose of Conditions L6.1 and L6.2:</p> <p>a) The LAeq noise level must be measured or computed at the most affected residential receiver over a period of 15 minutes using "FAST" response on the sound level meter. In the case of condition L6.2, the period is the duration of a train entering and/or leaving the premises if this is less than 15 minutes.</p> <p>b) 5dB(A) must be added to the measured level if the noise is substantially tonal or impulsive in character.</p> <p>c) Measurement locations are:</p> <ul style="list-style-type: none"> <li>• for night time (10 pm to 7 am) assessment – 1 metre from the façade of the residence; and</li> <li>• for day time (7 am to 10 pm) assessment – at the residential boundary or 30 metres from the residence where the boundary is more than 30 metres from the residence.</li> </ul> <p>d) The noise emission limits apply for prevailing meteorological conditions and winds up to 3 metres per second, except under conditions of temperature inversions.</p>	Noted	
<b>L7</b>	<b>Hours of Operation</b>	
	<b>Operational hours</b>	

<b>Table 6: Conditions of EPL 11455 - Veolia Crisps Creek Intermodal</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
L7.1	All operational activities at the premises including road haulage may only be conducted between 7:00 am to 6:00 pm on Mondays to Saturdays other than train operations which may be conducted from 6:00 am to 6:00 pm. There must be no activities on Sundays, Good Friday or Christmas Day.	Observation	<p>Veolia have advised that haulage of waste from the IMF to the bioreactor generally occurs between 7am and 2pm. Review of weighbridge records for the bioreactor demonstrate this is the case.</p> <p>However, the EPL operating hours do not match the 10_0012 approval operating hours (which are 6am to 10pm). It is noted that expanded operations have not commenced and the expanded hours are not currently needed. Veolia are in the process of applying for a licence update to match the new approval.</p> <p>The 2016 Draft LEMP and AEMR 2016 reports the approval hours of operation (6am – 10pm) so it is important that this is updated in the EPL.</p>
L7.2	The hours of operation specified in condition L7.1 may be varied with the written consent of the EPA if the EPA is satisfied that the amenity of the residents in the locality will not be adversely affected.	Not triggered	Veolia need to trigger this condition to match the EPL with approval 10_0012
<b>L8</b>	<b>Offensive Odour</b>		

<b>Table 6: Conditions of EPL 11455 - Veolia Crisps Creek Intermodal</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
L8.1	The licensee must not cause or permit the emission of offensive odour beyond the boundary of the premises.	Not verified	<p>The 2015 IOA concluded that measures used for waste transport operations are <i>"very effective at mitigating any odours emission"</i> and <i>"no evidence of any waste-based odour being emitted at the IMF"</i>.</p> <p>However, on 15 July 2016, the DPE and EPA inspected 20 waste shipping containers at the Crisps Creek Intermodal Facility and found that 18 were leaking from poor door seals or faulty welds. Odorous liquid was found to be leaking from the containers. On 5 August 2016, Veolia responded to the show cause letter for an alleged breach of conditions, presenting a case for minor breach and low potential harm.</p> <p>On 21 March 2016, NSW EPA wrote to Veolia alleging that Tarago School is regularly impacted by waste laden trains destined for the IMF. The EPA directed Veolia to report back on the quality assurance program (QAP) for container integrity and the measures taken to prevent offensive odour impacting on the Tarago Public School. On 8 April 2016, Veolia responded with their QAP and identified further improvements. No further action was taken.</p>
<b>4</b>	<b>Operating Conditions</b>		
<b>01</b>	<b>Activities must be carried out in a competent manner</b>		
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.	Compliant	<p>Operations at the site are conducted in accordance with the <b>LEMP and Veolia's ISO 9001 quality management system.</b></p> <p><b>A selection of Veolia's internal policies and their maintenance schedule and the training and competency records for operators were viewed as part of the audit.</b></p>
<b>02</b>	<b>Maintenance of plant and equipment</b>		

<b>Table 6: Conditions of EPL 11455 - Veolia Crisps Creek Intermodal</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
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.	Compliant	<b>Veolia's maintenance schedule and the training and competency</b> records for operators were viewed onsite. Veolia also participates in the National Heavy Vehicle Accreditation Scheme. Maintenance and operational performance is audited under the scheme.
<b>O3</b>	<b>Dust Control</b>		
O3.1	The operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.	Compliant	The auditors did not witness dust being generated at the IMF site during the audit site visit, with the exception of wheel generated dust from trucks leaving the site.
O3.2	Trucks entering or leaving the premises and carrying excavated dusty materials including clays, sands and soils must be covered at all times, except during loading and unloading.	Not triggered	All trucks carry containerised waste (enclosed)
O3.3	All sealed and unsealed surfaces must be managed to minimise the quantity of wind blown dust emissions.	<b>Non-compliant</b>	Truck wheel track out was evident at the intermodal facility (IMF) site access onto Bungadore road and fugitive dust emissions were observed as trucks exited the site. However, it is noted that this was an existing issue at the time of the Audit with corrective actions being implemented by Veolia. Veolia has informed the auditors that the track out observed during the Audit site visit was a result of high rainfall in the days preceding the audit and corrective actions are ongoing
<b>O4</b>	<b>Stormwater and wastewater management – operating phase</b>		
O4.1	Paved and sealed areas must be provided with a first flush stormwater management system designed to capture the first 15 millimetres of stormwater for each square metre of catchment area. The paved and sealed areas must also extend to include any rail unloading areas.	Compliant	Described in the 2016 draft LEMP
O4.2	All areas that involve the handling of containerised waste including container transfer and handling areas, clean container storage areas and internal roadways must be sealed.	Compliant	All areas are sealed

<b>Table 6: Conditions of EPL 11455 - Veolia Crisps Creek Intermodal</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
O4.3	Contaminated stormwater and any sludges collected at the premises must be disposed of at the Woodlawn Bioreactor Facility (Environment Protection Licence No. 11436).	Compliant	
O4.4	There must be no vehicle or container wash down at the premises.	Compliant	No wash down facilities are available. Containers washed down at bioreactor.
O4.5	All sewage generated on the premises must be disposed of into the sewerage system at the Woodlawn Bioreactor Facility (Environment Protection Licence No. 11436).	Not verified	AEMR 2016 reports no sewage removed in reporting period.
O4.6	<p>Uncontaminated stormwater collected by the first flush system may be applied to vegetated areas at the premises in a manner that does not exceed the capacity of the areas to effectively utilise the stormwater.</p> <p><b>For the purpose of this condition, "effectively utilise" includes the use of stormwater for the irrigation of grassed areas and planted trees or shrubs as well as the ability of the vegetation and soil to absorb the nutrient, salt and hydraulic loads and organic material in the stormwater.</b></p>	Noted	
<b>O5</b>	<b>Tracking of mud and waste</b>		
O5.1	Vehicles leaving the premises must not track materials to external surfaces.	<b>Non-compliant</b>	Truck wheel track out was evident at the intermodal facility (IMF) site access onto Bungadore road and fugitive dust emissions were observed as trucks exited the site. However, it is noted that this was an existing issue at the time of the Audit with corrective actions being implemented by Veolia. Veolia has informed the auditors that the track out observed during the Audit site visit was a result of high rainfall in the days preceding the audit and corrective actions are ongoing
<b>O6</b>	<b>Waste transportation</b>		

<b>Table 6: Conditions of EPL 11455 - Veolia Crisps Creek Intermodal</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
O6.1	All containers must be designed, constructed and maintained to prevent the emission of offensive odour and be water tight to prevent the leakage of leachate from waste containers during transport and handling activities.	Observation	On 15 July 2016, the DPE and EPA inspected 20 waste shipping containers at the IMF and found that 18 were leaking from poor door seals or faulty welds. Veolia have responded to and addressed this through an assessment of their Container maintenance quality assurance program and improvements are ongoing. There was no evidence of leaking containers observed during the Audit site visit
O6.2	All pressure relief valves on the containers must be fitted with appropriate mechanisms to filter and remove odours.	Compliant	The independent odour audit found that measures employed at the IMF are effective at mitigating odour. The DPE / EPA inspection did not identify issues with the odour filters.
<b>O7</b>	<b>Fire extinguishment</b>		
O7.1	The licensee must extinguish fires at the premises as soon as possible.	Compliant	Fire and Emergency Management Plan included in the LEMP
<b>O8</b>	<b>Fire fighting capability</b>		
O8.1	The licensee must have adequate fire prevention measures in place, and ensure that facility personnel are able to access fire-fighting equipment and manage fire outbreaks at any part of the premises.	Compliant	Fire and Emergency Management Plan included in the LEMP
<b>5</b>	<b>Monitoring and recording conditions</b>		
<b>M1</b>	<b>Monitoring records</b>		
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	Compliant	<b>Auditors viewed samples of Veolia's monitoring database and records.</b>
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.	Compliant	<b>Auditors viewed samples of Veolia's monitoring database and records.</b>

<b>Table 6: Conditions of EPL 11455 - Veolia Crisps Creek Intermodal</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
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.	Compliant	Auditors viewed samples of Veolia’s monitoring database and records.
M2	<b>Requirement to monitor concentration of pollutants discharged</b>		
M2.1	For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns: <i>Refer to tables in the EPL</i>	Compliant	Monitoring requirements are documented in the Landfill Environmental Management Plan (LEMP). Monitoring results are reported in the Annual Return.
M2	<b>Testing methods - concentration limits</b>		

<b>Table 6: Conditions of EPL 11455 - Veolia Crisps Creek Intermodal</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
M3.1	<p>Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with:</p> <p>(a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or</p> <p>(b) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or</p> <p>(c) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.</p> <p>Note: The Protection of the Environment Operations (Clean Air) Regulation 2002 requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".</p>	Not triggered	No testing for concentration limits required for the IMF site.
M3.2	Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.	Compliant	Monitoring requirement are documented in the Landfill Environmental Management Plan (LEMP).
<b>M4</b>	<b>Recording of pollution complaints</b>		
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.	Compliant	Odour complaints register reviewed.

<b>Table 6: Conditions of EPL 11455 - Veolia Crisps Creek Intermodal</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
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.	Compliant	Odour complaints register reviewed.
M4.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	Compliant	Odour complaints register dates back to 2010
<b>M5</b>	<b>Telephone complaints line</b>		
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.	Compliant	Reported in Tarago Times monthly publication
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.	Compliant	Reported in Tarago Times monthly publication
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.	Noted	
<b>M6</b>	<b>Requirement to monitor volume or mass</b>		
M6.1	Not applicable.	Noted	

<b>Table 6: Conditions of EPL 11455 - Veolia Crisps Creek Intermodal</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
<b>6</b>	<b>Reporting conditions</b>		
<b>R1</b>	<b>Annual return documents</b>		
	<b>What documents must an Annual Return contain?</b>		
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. At 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.	Compliant	Annual return for past 3 years reviewed. Includes statement of compliant and monitoring summary
	<b>Period covered by Annual Return</b>		
R1.2	An Annual Return must be prepared in respect of each reporting period.	Compliant	Annual return for past 3 years reviewed.
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.	Not triggered	
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.	Not triggered	

<b>Table 6: Conditions of EPL 11455 - Veolia Crisps Creek Intermodal</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	<b>Deadline for Annual Return</b>		
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.	Compliant	Documented on EPA website.
	<b>Notification where actual load cannot be calculated</b>		
R1.6	Not applicable.	Noted	
	<b>Licensee must retain copy of Annual Return</b>		
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.	Not verified	The annual return for 2012-2013, 2013-2014 and 2014-2015 has been provided and reviewed (3 years). The annual return for 2011/2012 has not been provided for review.
	<b>Certifying of Statement of Compliance and signing of Monitoring and Complaints Summary</b>		
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.	Compliant	Annual return for past 3 years reviewed.
	A person who has been given written approval to certify a certificate of compliance under a licence issued under the Pollution Control Act 1970 is taken to be approved for the purpose of this condition until the date of first review of this licence.	Noted	
	<b>R2 Notification of environmental harm</b>		
R2.1	Notifications must be made by telephoning the Environment Line service on 131 555. Note: The licensee 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.	Not triggered	

<b>Table 6: Conditions of EPL 11455 - Veolia Crisps Creek Intermodal</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
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.	Not triggered	
<b>R3</b>	<b>Written report</b>		
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.	Noted	
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.	Not triggered	

<b>Table 6: Conditions of EPL 11455 - Veolia Crisps Creek Intermodal</b>		
<b>Condition</b>	<b>Compliant</b>	<b>Comments</b>
R3.3	Noted	
R3.4	Noted	
<b>G1</b>		
G1.1	Noted	
G1.2	Noted	

<b>Table 7: Action Plan</b>					
<b>Item No.</b>	<b>Reference</b>	<b>Recommendation</b>	<b>Timeframe for Completion/ Implementation</b>	<b>Action to be Taken</b>	<b>Date Completed</b>
<b>Project Approval 10_0012</b>					
1	Condition 6, Schedule 7	Use internal audit tracking system to record dates for commissioning and submission of reports and audits.	31 December 2016		
2	Condition 7 Schedule 7	Consider formalising complaints handling in a standalone procedure and presenting to the CLC.	31 December 2016		
3	Condition 22, Schedule 4	Review siting for the existing meteorological station for compliance with the siting standard	Next scheduled quarterly check		
4	Condition 7, Schedule 4, point (b)	Ensure that future IOA provide further investigation and verification of community odour complaints.	2017 Odour Audit		
<b>EPL 11436 &amp; EPL 11455</b>					
5	Condition L7.1 of 11455	Apply for a revision to EPL 11455 so that hours of operation match the new approval.	31 December 2016		
6	Condition O6.16 of EPL 11436	Include destruction efficiency testing for odour & VOCs for gas engines in accordance with.	Next scheduled annual testing		
<b>Observation</b>					
7	To assist in the investigation of community complaints.	To facilitate investigating odour complaints, it is recommended that an alternative or additional weather station location be considered.	31 December 2016		

## 6. LIMITATIONS

### 6.1 Limitations of this Report

Ramboll Environ prepared this report in accordance with the scope of work as outlined in the proposal (P3178) to Veolia dated 19 February 2016 and approved on 24 June 2016 and in accordance with our understanding and interpretation of current regulatory standards.

Sampling and laboratory analyses were not undertaken as part of this investigation.

Site conditions may change over time. This report is based on conditions encountered at the site at the time of the audit and Ramboll Environ disclaims responsibility for any changes that may have occurred after this time.

**The conclusions presented in this report represent Ramboll Environ's professional judgement based on information made available during the course of this assignment and are true and correct to the best of Ramboll Environ's knowledge as at the date of the assessment.**

Ramboll Environ did not independently verify all of the written or oral information provided to Ramboll Environ during the course of this investigation. While Ramboll Environ has no reason to doubt the accuracy of the information provided to it, the report is complete and accurate only to the extent that the information provided to Ramboll Environ was itself complete and accurate.

This report does not purport to give legal advice. This advice can only be given by qualified legal advisors.

### 6.2 Reliance

This report has been prepared exclusively for Veolia for submission to the NSW Department of Planning and Environment and may not be relied upon by any other person or entity without Ramboll Environ's express written permission.

**APPENDIX 1**  
**DPE APPROVAL OF AUDIT TEAM**



Ms Christine Hodgkiss  
General Manager - Strategic Planning, Development and Projects  
Veolia Australia and New Zealand  
Cnr Unwin and Shirley Streets  
Rosehill NSW 2142

Dear Ms Hodgkiss

**Veolia Woodlawn Bioreactor - Independent Audit Team Approval**

I refer to your correspondence dated 21 April 2016, seeking approval for an audit team comprising Mr Shaun Taylor, Mr Ronan Kellaghan and Ms Victoria Sedwick of Ramboll to undertake the independent environmental audits required under Condition 19, Schedule 2 of DA-31-02-99 and Condition 6, Schedule 7 of MP10\_0012.

The Department has reviewed the qualifications and experience of the nominated team members and approves the team. This approval is conditional upon the team members' continued independence from the project.

In carrying out the audits and preparing the audit reports, you must ensure that they:

- are conducted in accordance with ISO 19011 Guidelines for auditing management systems;
- include a compliance table indicating the compliance status of each approval condition (and any other statutory instrument required to be audited);
- avoid terms such as "partial compliance". The audits are to make findings of either "compliance" or "non-compliance";
- include recommended actions in response to non-compliances; and
- identify opportunities for improved environmental management and performance.

The two audits may be combined in one report and the Department recommends that you review the report to ensure it complies with the relevant approval conditions, prior to submission to the Department.

Finally, the audit report should be accompanied by an action plan detailing your implementation response to any recommendations outlined in the report.

Should you have any queries in relation to this matter, please contact Kate Masters on 9228 6321 or via email at [kate.masters@planning.nsw.gov.au](mailto:kate.masters@planning.nsw.gov.au)

Yours sincerely

Chris Ritchie  
**Director**  
**Industry Assessments**  
as delegate of the Secretary

28/4/16.

**APPENDIX 2**  
**PROJECT APPROVAL 10\_0012**

# Project Approval

## Section 75J of the *Environmental Planning and Assessment Act 1979*

As delegate of the Minister for Planning and Infrastructure under delegation dated 14 September 2011, we the Planning Assessment Commission of New South Wales (the Commission) approve the application referred to in Schedule 1, subject to the conditions in Schedules 2 to 7.

These conditions are required to:

- Prevent and minimise adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the Project.



Member of the Commission



Member of the Commission

Sydney 16 March 2012

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### SCHEDULE 1

<b>Application No:</b>	10_0012
<b>Proponent:</b>	Veolia Environmental Services (Australia) Pty Ltd
<b>Approval Authority:</b>	Minister for Planning and Infrastructure
<b>Land:</b>	Woodlawn Bioreactor site: Lot 19 DP 827588, Lots 25, 30, 88 & 91 DP 754919  Crisps Creek Intermodal Facility site: Lot 1 DP 1045652
<b>Project:</b>	Woodlawn Waste Expansion Project

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## SCHEDULE 2 DEFINITIONS

BCA	Building Code of Australia
Construction	The demolition of buildings or works, carrying out of works and erection of buildings and other infrastructure covered by this approval
Council	Palerang and Goulburn Mulwaree Councils
Crisps Creek IMF	Crisps Creek Intermodal Facility (see definition of site)
Department	Department of Planning and Infrastructure
Director-General	Director-General of the Department (or delegate)
DPI	Department of Primary Industries – Minerals and Petroleum
EA	Environmental assessment titled Environmental Assessment - Woodlawn Expansion Project dated August 2010 and the associated response to submissions, dated March 2011.
ED3	Evaporation Dam No. 3 as referred to in the EA
EPA	Environment Protection Authority of OEH
EP&A Act	Environmental Planning & Assessment Act 1979
EP&A Regulation	Environmental Planning & Assessment Regulation 2000
EPL	Environmental Protection Licence
Expanded operations	The point at which waste input at the Landfill exceeds 500,000 tonnes per annum.
Feasible	Feasible relates to engineering considerations and what is practical to build
Heavy Vehicle	Any vehicle with a gross vehicle mass of 5 tonnes or more
Incident	An incident causing or threatening material harm to the environment, and/or an exceedance of the limits or performance criteria in this approval
Land	In general, the definition of land is consistent with the definition in the EP&A Act.
Landfill	The Woodlawn Bioreactor (see definition of site)
LEMP	Landfill Environmental Management Plan
LGA	Local government area
Material harm to the environment	Harm to the environment is material if it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial
Minister	Minister for Planning and Infrastructure
Mitigation	Activities associated with reducing the impacts of the Project
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
NOW	Department of Primary Industries – NSW Office of Water
OEH	Office of Environment and Heritage
Operations	Operations are triggered by the receipt of waste on site
Regional waste	Waste from Goulburn Mulwaree, Palerang, Queanbeyan, Bega Valley, Upper Lachlan, Yass Valley, Eurobodalla and the Australia Capital Territory, or other interested regional LGAs
POEO Act	Protection of the Environment Operations Act 1997
Privately owned land	Land not owned by the Proponent or a related party
Private residential receiver	Residence in Privately owned land
Project	The development described in the EA
Proponent	Veolia Environmental Services (Australia) Pty Ltd, or its successor
Reasonable	Reasonable relates to the application of judgment in arriving at a decision, taking into account: mitigation benefits, costs of mitigation versus benefits provided, community views, and the nature and extent of potential improvements.
Rehabilitation	The treatment or management of land disturbed by the project for the purpose of establishing a safe, stable and non-polluting environment
RMS	Roads and Maritime Services
Site	Both the Woodlawn Bioreactor Site and the Crisps Creek Intermodal Facility Site as described in Schedule 1, unless referred to separately
Statement of Commitments	The Proponent's Statement of Commitments in Appendix 1
Tpa	Tonnes per annum

## SCHEDULE 3 ADMINISTRATIVE CONDITIONS

### OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

1. The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation or decommissioning of the Project.

### TERMS OF APPROVAL

2. The Proponent shall carry out the Project generally in accordance with the:
  - (a) EA;
  - (b) statement of commitments (see Appendix 1);
  - (c) site layout plans and drawings in the EA (see Appendix 2); and
  - (d) conditions of this approval.
3. If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.
4. The Proponent shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of:
  - a) any reports, plans, strategies, programs or correspondence that are submitted in accordance with this approval; and
  - b) the implementation of any actions or measures contained in these reports, plans, strategies, programs or correspondence.

### LIMITS OF APPROVAL

#### Woodlawn Bioreactor

5. The Proponent shall not exceed the maximum annual input rates in Table 1 for the Landfill, unless otherwise agreed to by the Director-General in accordance with condition 6 below.

*Table 1: Maximum waste input rates at the Landfill*

Putrescible waste received by rail from Sydney	Received as residual waste from Woodlawn AWT	Putrescible regional waste received by road
900,000 tpa	100,000 tpa	50,000 tpa

6. Prior to the receipt of more than 50,000 tpa of regional waste by road at the Landfill, the Proponent shall obtain approval in writing from the Director-General to vary the limit for the receipt of regional waste not exceeding 130,000 tpa at the Landfill. Any such request must demonstrate to the satisfaction of the Director-General that the receipt of the additional regional waste from each LGA state or territory government:
  - would result in a net environmental benefit, including but not limited to:
    - the permanent closure of a smaller municipal landfill facility with poor environmental performance;
  - is not inconsistent with and would not undermine any resource recovery strategy, target/s or initiative of the source local, state or territory government; and
  - would not significantly impact on the capacity of the Landfill and its primary purpose to accept waste from Sydney.

*Note: this condition is linked to condition 3 in schedule 6 of this approval which restricts the haulage of regional waste by road to certain routes (see Appendix 4), unless otherwise approved by the Director-General.*

7. In any event, no more than 1.13 million tpa of waste shall be accepted at the Landfill.

#### Crisps Creek IMF

8. The Proponent shall not exceed the annual throughput rates in Table 2 for the Crisps Creek IMF.

*Table 2: Maximum putrescible waste throughput rates at the Crisps Creek IMF*

Received by rail from Sydney	Received by rail from Sydney for processing at the Woodlawn AWT
900,000 tpa	280,000 tpa

## **STRUCTURAL ADEQUACY**

9. The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures are constructed in accordance with the relevant requirements of the BCA.

### *Notes:*

- *Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works.*

## **TRANSITIONAL ARRANGEMENTS**

10. This approval does not affect the rights or obligations under DA No. 31-02-99 except in the event of any inconsistency between DA No. 31-02-99 and this approval, this approval shall prevail.
11. The Proponent shall ensure that the receipt of waste at the Landfill is restricted to 500,000 tpa until all conditions of this approval relating to the commencement of expanded operations have been satisfied.
12. All existing environmental management plans that apply to the site under DA No. 31-02-99 shall continue to be fully applied until replaced under this approval.

## **DEMOLITION**

13. The Proponent shall ensure that all demolition work is carried out in accordance with *Australian Standard AS 2601:2001: The Demolition of Structures*, or its latest version.

## **OPERATION OF PLANT AND EQUIPMENT**

14. The Proponent shall ensure that all plant and equipment used for the Project is:
  - a) maintained in a proper and efficient condition; and
  - b) operated in a proper and efficient manner.

## **STAGED SUBMISSION OF PLANS OR PROGRAMS**

15. With the approval of the Director-General, the Proponent may submit any plan or program required by this approval on a progressive basis.

## **COMPLIANCE**

16. The Proponent must assess and manage project-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedules 3, 4, 5 and 6. Any exceedance of these criteria and/or performance measures constitutes a breach of this approval and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation. Where any exceedance of these criteria and/or performance measures has occurred, the Proponent must, at the earliest opportunity:
  - a) take all reasonable and feasible steps to bring the operation back into compliance;
  - b) ensure that the exceedance does not recur;
  - c) consider all reasonable and feasible options for remediation (where relevant) and how to prevent a recurrence and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
  - d) implement remediation and prevention measures as directed by the Director-General,

to the satisfaction of the Director-General.

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**SCHEDULE 4**  
**SPECIFIC ENVIRONMENTAL CONDITIONS – LANDFILL SITE**

**WASTE MANAGEMENT**

**Restrictions of the Receipt, Storage, Handling and Disposal of Waste**

1. The Proponent shall only receive waste on site that is authorised for receipt by an EPL.

**Cover Material**

2. The Proponent shall ensure that all waste cover material used on site is virgin excavated natural material and/or alternative daily cover, as approved in writing by the OEH.

**Litter Control**

3. The Proponent shall:
  - (a) implement suitable measures to prevent the unnecessary proliferation of litter both on and off site, including the installation and maintenance of a mesh fence of not less than 1.8 metres high around the landfill; and
  - (b) inspect daily and clear the site (and if necessary, surrounding area) of litter on at least a weekly basis.

**AIR**

**Landfill Gas Limits**

4. The Proponent shall ensure that landfill gas engine (LGE) emissions at the Bioreactor comply with the requirements of the *POEO (Clean Air) Regulation 2010*.

**Greenhouse Gas**

5. The Proponent shall implement all reasonable and feasible measures to minimise:
  - (a) energy use on site; and
  - (b) the greenhouse gas emissions produced on site, to the satisfaction of the Director-General

**Odour**

**Discharge Limits**

6. The Proponent shall not cause or permit the emission of offensive odours from the site, as defined under Section 129 of the POEO Act.

**Independent Odour Audit**

7. Within 3 months of the date of this project approval, and annually thereafter, unless otherwise agreed to by the Director-General pursuant to Condition 8 of this Schedule, the Proponent shall commission and pay the full cost of an Independent Odour Audit of the project. This audit must be conducted by a suitably qualified, experienced and independent expert whose appointment has been endorsed by the Director-General. During the audit, this expert must:
  - (a) consult with OEH and the Department;
  - (b) audit the effectiveness of the odour controls on site in regard to protecting receivers against offensive odour;
  - (c) review the Proponent's production data (that are relevant to the odour audit) and complaint records;
  - (d) review the relevant odour sections of the Air Quality and Greenhouse Gas Management Plan for the project and assess the effectiveness of the odour controls;
  - (e) measure all key odour sources on site including:
    - i. consideration of wet weather conditions providing all raw sampling data used in this analysis;
    - ii. consideration of (but not limited to) all liquid storage areas, active tipping faces, waste cover area, aged waste areas and recirculation of leachate onto waste in the void; and
    - iii. a comparison of the results of these measurements against the predictions in the EA;
  - (f) determine whether the project is complying with the requirements in this approval to protect receivers against offensive odour;
  - (g) outline all reasonable and feasible measures (including a cost/benefit analysis, if required) that may be required to improve odour control at the site; and
  - (h) recommend and prioritise (mandatory and non-mandatory) recommendations for their implementation.
8. The Director-General may vary the frequency of the audit after 5 years depending on the performance of the project and demonstrated compliance with Condition 6 of Schedule 4. This condition is linked to condition 9 in Schedule 5.

9. Within 6 weeks of the completion of an odour audit, the Proponent shall submit a copy of the audit report to both OEH and the Department with a response to any recommendations contained in the audit report.
10. Unless otherwise directed by the Director-General, the Proponent shall implement all the mandatory odour controls and recommendations of any Independent Odour Audit/s. Recommendations of the first Independent Odour Audit required under this approval shall be implemented prior to the commencement of expanded operations.

This audit must be documented in the Landfill EMP (see condition 3 in schedule 7).

### Dust Limits

11. The Proponent shall ensure that dust generated by the project does not exceed the criteria listed in Tables 3 to 5 at any private residential receiver, or on more than 25 percent of any privately owned land surrounding the site.

Table 3: Long term criteria for particulate matter

<b>Pollutant</b>	<b>Averaging period</b>	<b><sup>d</sup>Criterion</b>
Total suspended particulate (TSP) matter	Annual	<sup>a</sup> 90 µg/m <sup>3</sup>
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	<sup>a</sup> 30 µg/m <sup>3</sup>

Table 4: Short term criterion for particulate matter

<b>Pollutant</b>	<b>Averaging period</b>	<b><sup>d</sup> Criterion</b>
Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	<sup>a</sup> 50 µg/m <sup>3</sup>

Table 5: Long term criteria for deposited dust

<b>Pollutant</b>	<b>Averaging period</b>	<b>Maximum increase in deposited dust level</b>	<b>Maximum total<sup>1</sup> deposited dust level</b>
<sup>c</sup> Deposited dust	Annual	<sup>b</sup> 2 g/m <sup>2</sup> /month	<sup>a</sup> 4 g/m <sup>2</sup> /month

Notes for Tables 3 -5:

- <sup>a</sup>Total impact (i.e. incremental increase in concentrations due to the project plus background concentrations due to other sources);
- <sup>b</sup> Incremental impact (i.e. incremental increase in concentrations due to the project on its own);
- <sup>c</sup> Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method; and
- <sup>d</sup> Excludes extraordinary events such as bushfires, prescribed burning, dust storms, fire incidents or any other activity agree to by the Director-General in consultation with OEH.

### Air Quality Monitoring, Management and Validation

12. The Proponent shall prepare and implement an Air Quality and Greenhouse Gas Management Plan for the Landfill to the satisfaction of the Director-General. This plan must:
  - (a) be prepared in consultation with OEH by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General;
  - (b) be approved by the Director-General prior to the commencement of expanded operations;
  - (c) describe in detail the measures that would be implemented on site to manage the air quality (particularly odour) and greenhouse gas impacts of the project to ensure compliance with this approval and other relevant statutory controls;
  - (d) include a program for monitoring the air quality impacts of the project, in particular:
    - LGE specifications and monitoring of LGE emissions against the requirements of the *POEO (Clean Air) Regulation 2010* including measures that would be taken to ensure compliance with this regulation;
  - (e) be revised to consider mandatory odour controls and recommendations of any Independent Odour Audit required by this approval; and
  - (f) detail the remedial actions to be taken in the event that a non-compliance is identified.

This plan must be documented in the Landfill EMP (see condition 3 in schedule 7).

## **SOIL AND WATER**

### **Pollution of Waters**

13. Except as may be expressly provided in the EPL for the site, the Proponent shall comply with Section 120 of the POEO Act.

### **Soil**

14. The Proponent shall:
- (a) minimise any soil loss through erosion on site;
  - (b) where possible, set aside any topsoil won on site for the proposed revegetation and rehabilitation of the site; and
  - (c) ensure that any topsoil stockpiles on site are suitably managed to ensure that the topsoil in these stockpiles can be beneficially used in the proposed revegetation and rehabilitation of the site.

### **Bunding**

15. The Proponent shall store all chemicals, fuels and oils used on site in appropriately banded areas, with impervious flooring and sufficient capacity to contain 110% of the largest container stored within the bund, unless double-skinned tanks are used. Any bunds shall be designed and installed in accordance with the requirements of all relevant Australian Standards, and/or OEH's Environmental Protection Manual: *Technical Bulletin Bunding and Spill Management*.

### **Erosion and Sediment Control**

16. During the construction, the Proponent shall implement suitable erosion and sediment control measures on site, in accordance with the relevant requirements in the latest version of the *Managing Urban Stormwater: Soils and Construction guideline*.

### **Soil and Water Management Plan**

17. The Proponent shall prepare and implement a Soil & Water Management Plan for the Landfill to the satisfaction of the Director-General. This plan must:
- (a) be prepared in consultation with OEH and NOW by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General;
  - (b) be approved by the Director-General prior to the commencement of expanded operations;
  - (c) must specifically consider soil and water management (including leachate management) at the Landfill and ED3;
  - (d) include a water balance for the project;
  - (e) include a surface water monitoring program;
  - (f) include a groundwater monitoring program; and
  - (g) ensure that suitable measures are implemented to minimise water use, control soil erosion, prevent groundwater contamination, and comply with any surface water discharge limits.

This plan must be documented in the Landfill EMP (see condition 3 in schedule 7).

### **Leachate Management**

18. The Proponent shall prepare and implement a Leachate Management Plan for the Landfill to the satisfaction of the Director-General. This plan must:
- (a) be prepared in consultation with OEH and NOW by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General;
  - (b) be approved by Director-General prior to the commencement of expanded operations;
  - (c) describe in the detail the leachate barrier system installed on site;
  - (d) detail measures to collect and store all leachate generated by the landfill;
  - (e) detail measures to prevent leachate from escaping to surface water, groundwater or the surrounding subsoils;
  - (f) ensure all surface water from areas not subject to waste disposal or leachate disposal is directed away from the leachate management system; and
  - (g) treat all water that has entered areas filled with waste, or been contaminated by leachate, as leachate.

This plan must be documented in the Landfill EMP (see condition 3 in schedule 7).

## NOISE

### Limits

19. The Proponent shall ensure that the noise generated by the operations on-site does not exceed the limits in Table 6 at any private residential receiver.

Table 6: Noise impact assessment criteria dB(A)

Receiver	6am – 10pm	10pm – 6am	
	L <sub>Aeq</sub> (15 minute)	L <sub>Aeq</sub> (15 minute)	L <sub>Amax</sub>
Any private residential receiver	35	35	45

- Noise generated by the project is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.

### Operating Hours

20. The Proponent shall comply with the operating hours in Table 7 for the site, unless otherwise agreed in writing by the OEH.

Table 7: Operating Hours

Activity	Day	Hours
Construction	Monday - Friday	7 am – 6 pm
	Saturday	7 am – 1 pm
	Sunday & Public Holidays	Nil
Operations	Monday - Saturday	6am – 10 pm
	Sunday & Public Holidays	Nil

### Monitoring and Management

21. The Proponent shall prepare and implement a Noise Monitoring and Management Plan for the Landfill to the satisfaction of the Director-General. This Plan must:
- be prepared in consultation with OEH by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General;
  - be approved by the Director-General prior to the commencement of expanded operations;
  - include a noise monitoring protocol for evaluating compliance with the noise impact assessment criteria in this approval;
  - details all reasonable and feasible measures to minimise noise at the site;
  - consider road traffic noise management and include a revised road traffic noise protocol;
  - describe mitigation measures that would be implemented in the event that a non-compliance is identified with the noise impact assessment criteria in this approval.

This plan must be documented in the Landfill EMP (see condition 3 in schedule 7).

### Meteorological Monitoring

22. During the life of the project, the Proponent shall ensure that there is a suitable meteorological station in the vicinity of the site that complies with the requirements in the latest version of *Approved Methods for Sampling of Air Pollutants in New South Wales guideline*.

## FLORA AND FAUNA

### Vegetation Management Plan

23. The Proponent shall prepare and implement a Landscaping and Vegetation Management Plan for the Landfill. This plan must:
- be prepared in consultation with OEH and NOW by a suitably qualified and experienced expert;
  - be approved by the Director-General prior to the commencement of expanded operations;
  - include measures to minimise such vegetation loss and additional tree planting to offset this loss;
  - detail any landscaping treatments at the Landfill, with particular attention to minimising the visibility of the site/s from residences and public vantage points;
  - describe the on-going maintenance regime for rehabilitation and vegetation management in the rehabilitation area/s.

This plan must be documented in the Landfill EMP (see condition 3 in schedule 7).

## **Pest, Vermin & Noxious Weed Management**

24. The Proponent shall:

- (a) implement suitable measures to manage pests, vermin and declared noxious weeds on site; and
- (b) inspect the site on a regular basis to ensure that these measures are working effectively, and that pests, vermin or noxious weeds are not present on site in sufficient numbers to pose an environmental hazard, or cause the loss of amenity in surrounding area.

*Note: For the purposes of this condition, noxious weeds are those species subject to an order declared under the Noxious Weed Act 1993.*

These measures must be documented in the Landfill EMP (see condition 3 in schedule 7).

## **FIRE AND EMERGENCY MANAGEMENT**

25. The Proponent shall prepare and implement a Fire and Emergency Management Plan for the Landfill. This plan must:

- (a) be prepared by a suitably qualified and experienced expert;
- (b) be approved by the Director-General prior to the commencement of expanded operations;
- (c) identify all threats to the environment and public health that could arise from the operation of the project (e.g. fire, overflow or dam failure);
- (d) identify strategies to contain and minimise the effects of any threats to the environment and public health such as (but not limited to);
  - measures to minimise the risk of fire on site, including in the landfill area;
  - actions to extinguish any fires on site promptly;
  - measures to ensure adequate fire-fighting capacity on site, including a fire fighting tanker; and
- (e) detail a communication strategy for notifying the relevant government agencies and potentially affected community in the event of an emergency.

This plan must be documented in the Landfill EMP (see condition 3 in schedule 7).

## **VISUAL AMENITY**

### **Lighting**

26. The Proponent shall ensure that the lighting associated with the project:

- (c) complies with the latest version of *AS 4282(INT) - Control of Obtrusive Effects of Outdoor Lighting*; and
- (d) is mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties or the public road network.

## **SECURITY**

27. The Proponent shall:

- (a) install and maintain a perimeter stock fence and security gates on the site; and
- (b) ensure that the security gates on site are locked whenever the site is unattended.

## **LANDFILL CLOSURE AND REHABILITATION**

28. The Proponent shall prepare and implement a Closure Plan for the Landfill to the satisfaction of the Director-General. This plan must:

- (a) be prepared in consultation with the OEH and other relevant agencies by suitably qualified and experienced experts whose appointment has been endorsed by the Director-General;
- (b) be submitted to the Director-General for approval within six (6) months of the date of this approval;
- (c) ensure that the final landform of the site is consistent with the figure in Appendix 3 of this approval; and
- (d) include details of the post closure management measures for all aspects of the Project.

This plan must be documented in the Landfill EMP (see condition 3 in schedule 7).

29. The Proponent shall prepare and implement a Rehabilitation Management Plan for the Landfill to the satisfaction of the Director-General. This plan must:

- (a) be prepared in consultation with the OEH by a suitably qualified and experienced expert;
- (b) be submitted to the Director-General for approval within six (6) months of the date of this approval;
- (c) be undertaken in a manner which is complementary with the rehabilitation of the Woodlawn mine site; and
- (d) must ensure rehabilitation of the site does not impede or limit the rehabilitation works on any part of the Woodlawn Mine site.

This plan must be documented in the Landfill EMP (see condition 3 in schedule 7).

**SCHEDULE 5  
SPECIFIC ENVIRONMENTAL CONDITIONS – CRISPS CREEK IMF SITE**

**WASTE MANAGEMENT**

**Restrictions of the Receipt, Storage, Handling and Disposal of Waste**

1. The Proponent shall only receive waste on site that is authorised for receipt by an EPL.
2. The Proponent shall ensure that any contaminated stormwater and sludges collected at the Crisps Creek IMF are disposed of at the landfill site, unless otherwise approved by OEH.
3. The Proponent shall ensure that there is no storage of sludges or overnight storage of containerised waste, on the Crisps Creek IMF site, unless otherwise approved by the OEH.

**Waste Transportation**

4. The Proponent shall ensure that all waste containers are designed, constructed and maintained to prevent the emission of offensive odour and be water-tight to prevent the leakage of leachate during transport and handling activities.

**Litter Control**

5. The Proponent shall inspect daily and clear the site (and if necessary, surrounding area) of litter on at least a weekly basis.

**Pest, Vermin & Noxious Weed Management**

6. The Proponent shall:
  - (a) implement suitable measures to manage pests, vermin and declared noxious weeds on site; and
  - (b) inspect the site on a regular basis to ensure that these measures are working effectively, and that pests, vermin or noxious weeds are not present on site in sufficient numbers to pose an environmental hazard, or cause the loss of amenity in surrounding area.

These measures must be documented in the Crisps Creek IMF EMP (see condition 4 in schedule 7).

*Note: For the purposes of this condition, noxious weeds are those species subject to an order declared under the Noxious Weed Act 1993.*

**AIR**

**Greenhouse Gas**

7. The Proponent shall implement all reasonable and feasible measures to minimise:
  - (a) energy use on site; and
  - (b) the greenhouse gas emissions produced on site, to the satisfaction of the Director-General

**Odour**

**Discharge Limits**

8. The Proponent shall not cause or permit the emission of offensive odours from the site, as defined under Section 129 of the POEO Act.

**Independent Odour Audit**

9. The Proponent shall include consideration of the Crisps Creek IMF site in any Independent Odour Audit required by condition 7 in schedule 4.

**SOIL AND WATER**

**Pollution of Waters**

10. Except as may be expressly provided in the EPL for the site, the Proponent shall comply with Section 120 of the POEO Act.

## Wastewater Management

11. The Proponent shall ensure that there is no vehicle or container wash down at the Crisps Creek IMF.
12. The Proponent shall ensure that:
  - (a) the on-site sewage treatment system at the Crisps Creek IMF is operated in accordance with a Network Operator's Licence under the *Water Industry Competition Act 2006*, if required;
  - (b) the design of the sewerage system is consistent with Council's DCP (if applicable); and
  - (c) the disposal and irrigation of treated sewage is consistent with the *Environmental Guidelines Use of Effluent by Irrigation* (DECC) and the Australian guidelines for water recycling: *managing health and environmental risks (phase1) – 2006*.

## Bunding

13. The Proponent shall store all chemicals, fuels and oils used on site in appropriately banded areas, with impervious flooring and sufficient capacity to contain 110% of the largest container stored within the bund, unless double-skinned tanks are used. Any bunds shall be designed and installed in accordance with the requirements of all relevant Australian Standards, and/or OEH's Environmental Protection Manual: *Technical Bulletin Bunding and Spill Management*.

## Erosion and Sediment Control

14. During the construction, the Proponent shall implement suitable erosion and sediment control measures on site, in accordance with the relevant requirements in the latest version of the *Managing Urban Stormwater: Soils and Construction* guideline.

## NOISE

### Limits

15. The Proponent shall ensure that the noise generated by the operations on-site, other than freight train activities, does not exceed the limits in Table 8 at any private residential receiver.

Table 8: Noise impact assessment criteria dB(A)

Receiver	6am – 10pm	10pm – 6am	
	L <sub>Aeq</sub> (15 minute)	L <sub>Aeq</sub> (15 minute)	L <sub>Amax</sub>
Any private residential receiver	35	35	45

- Noise generated by the project is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.

16. Noise emissions from freight trains entering and leaving the site must not exceed the noise limit of 45 dB(A) L<sub>Aeq</sub> (15 minute) prior to 7:00 am and 50 dB(A) L<sub>Aeq</sub> (15 minute) after 7:00 am.

- Noise generated by the project is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.

## Operating Hours

17. The Proponent shall comply with the operating hours in Table 9 for the site, unless otherwise agreed in writing by the OEH.

Table 9: Operating Hours

Activity	Day	Hours
Construction	Monday - Friday	7 am – 6 pm
	Saturday	7 am – 1 pm
	Sunday & Public Holidays	Nil
Operations	Monday - Saturday	6am – 10 pm
	Sunday & Public Holidays	Nil

## **VISUAL AMENITY**

### **Lighting**

18. The Proponent shall ensure that the lighting associated with the project:
  - (a) complies with the latest version of *AS 4282(INT) - Control of Obtrusive Effects of Outdoor Lighting*; and
  - (b) is mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties or the public road network.

### **SECURITY**

19. The Proponent shall:
  - (a) install and maintain a perimeter stock fence and security gates on the site; and
  - (b) ensure that the security gates on site are locked whenever the site is unattended.

### **RAIL TRAFFIC**

20. The Proponent shall ensure that only 2 trains (4 movements) in total are permitted to ingress and egress from the Crisps Creek IMF per day from Monday to Saturday.
21. The tonnage of waste delivered to the IMF by train must not exceed 780 000 tpa, until the electronic signalling system has been implemented so as to eliminate the need for waste trains to stop across the road crossing at Tarago.
22. The Proponent shall prepare and implement a Rail Transport Code of Conduct for the Crisps Creek IMF in consultation with ARTC and Countrylink and to the satisfaction of the Director-General. This Plan must:
  - (a) be submitted to the Director-General for approval prior to the commencement of expanded operations;
  - (b) detail operational rail traffic management measures including driver code of conduct, locomotive arrival and departure procedures (e.g. reduced locomotive speed);
  - (c) outline measures to minimise rail traffic noise; and
  - (d) detail measures to minimise rail traffic related conflicts with existing rail operations.

## **SCHEDULE 6 TRAFFIC AND ROAD UPGRADES**

### **TRAFFIC AND TRANSPORT**

#### **Delivery of Waste from the IMF to the Landfill**

1. The Proponent shall ensure that at all times heavy vehicles transporting waste from the Crisps Creek IMF to the Landfill travel via the Crisps Creek IMF site access road, onto Bungendore Road, onto Collector Road and then onto the Landfill site access road.
2. The Proponent shall ensure that the reverse of the route specified in condition 1 of this schedule above is used to egress from the Landfill site at all times.

#### **Delivery of Regional Waste by Road**

3. The Proponent shall ensure that all regional waste is transported to the Landfill by road along those routes specified in Appendix 4 of this approval, unless otherwise approved by the Director-General. Alternative transport routes may be considered where they can be shown to be more efficient, if new roads are constructed in the region, where suitable upgrades occur along other transport routes to the Landfill or where they are required to allow waste to be delivered from a new locality.

*Note: this condition is linked to condition 6 in schedule 3.*

#### **Transport Code of Conduct**

4. Prior to the receipt of more than 50,000 tpa of regional waste by road at the Landfill, the Proponent shall prepare and implement a Transport Code of Conduct for the project to the satisfaction of the Director-General. This protocol must:
  - (a) be prepared in consultation with the RMS, Goulburn Mulwaree Council, Palerang Council and the Community Liason Committee, and be submitted to the Director-General for approval;
  - (b) describe the measures to be implemented to:
    - minimise the impacts of the project on the local and regional road network including traffic noise;
    - ensure truck drivers only use road shoulders to encourage overtaking at locations where it is acceptable to do so (i.e. in terms of safety and pavement strength), as determined by Council;
    - minimise conflicts with other road users e.g. school bus operators; and
  - (c) include measures to ensure truck drivers are aware of the approved routes for the transport of waste by road.

### **ROAD UPGRADES**

#### Palerang LGA

5. Within 12 months of the date of this approval, the Proponent shall undertake a detailed pavement analysis/road safety audit of the section of Main Road 268 (Bungendore/Tarago Road) to the south of the intersection of Collector Road and Main Road 268 (Bungendore/Tarago Road) where the bitumen seal of the road is currently less than 7 metres wide. The audit shall:
  - (a) be prepared by a suitably independent and qualified expert whose appointment has been endorsed by the Director-General;
  - (b) be prepared in consultation with Palerang Council and the RMS;
  - (c) establish the mandatory road upgrades and traffic management measures required to address all road pavement and safety issues associated with the project on this section of road; and
  - (d) determine the full cost of undertaking any upgrades, and the Proponent's proportional contribution to these works based on heavy vehicle usage along Main Road 268 (Bungendore/Tarago Road).

*Note: the Proponent must submit a copy of this audit to the Department within 2 weeks of its completion. See Appendix 4 for reference to the intersection of Collector Road and Main Road 268.*

6. Prior to the receipt of more than 30,000 tpa of regional waste at the Landfill by road from the south of the intersection of Collector Road and Main Road 268 (Bungendore/Tarago Road), the Proponent shall:
  - (a) implement all mandatory pavement and traffic management measures required to address all road pavement/safety issues associated with the project on Main Road 268 (Bungendore/Tarago Road) recommended by the audit required by condition 5 of this schedule; and
  - (b) forward fund the full cost of and provide (on Main Road 268 - Bungendore/Tarago Road) any mandatory road upgrades recommended by the audit required by condition 5 of this schedule, to the satisfaction of the Director-General.

*Note: a mechanism for recovering a proportion of the costs for undertaking any of the above measures is provided in condition 11 of this schedule. See Appendix 4 for reference to the intersection of Collector Road and Main Road 268.*

7. In any case, the Proponent shall ensure that all mandatory road upgrades measures provided as part of condition 6 of this schedule are completed prior to the receipt of more than 30,000 tpa of regional waste at the Landfill by road from the south of the intersection of Collector Road and Main Road 268 (Bungendore/Tarago Road).

*Note: the Proponent must notify the Department within 2 weeks of the completion of all road upgrades required as part of this condition. See Appendix 4 for reference to the intersection of Collector Road and Main Road 268.*

#### Goulburn Mulwaree LGA

8. Prior to the commencement of expanded operations, the proponent shall assess the need for road upgrades, on the section of Main Road 268 (Bungendore/Tarago Road) between the Crisps Creek IMF site access and the intersection of Collector Road and Bungendore/Tarago Road. This assessment shall:
- be prepared to the satisfaction of the Director-General;
  - be prepared by a suitably independent and qualified expert whose appointment has been endorsed by the Director-General in consultation with RMS;
  - evaluate the suitability of the provision of a climbing lane or other suitable road upgrade alternative/s on this section of road in terms of road traffic safety and the safety of the Proponent's truck drivers negotiating the right-hand turn into Collector Road;
  - based on the above, identify the most suitable road upgrade option for this section of road; and, if identified as the most suitable road upgrade option by this condition 8(d)
  - assess the need for a climbing lane against *Austrroads Guide to Road Design Part 3: Geometric Design* based on heavy vehicle usage associated with the Bioreactor on this section of road.

*Note: Within 2 weeks of its completion, a report on this assessment shall be submitted to the Department for review. See Appendix 4 for reference to the intersection of Collector Road and Main Road 268.*

9. Depending on which road upgrade option is identified as most suitable under condition 8(d) above, prior to the commencement of expanded operations, or a time otherwise agreed to by the Director-General, the Proponent shall provide that road upgrade on the above section of Main Road 268 (Bungendore/Tarago Road), to the satisfaction of Goulburn Mulwaree Council.

*Note: these works must be provided at no cost to Goulburn Mulwaree Council or RMS.*

#### **ROAD MAINTENANCE CONTRIBUTIONS**

10. From the date of this approval, the Proponent shall pay a minimum quarterly contribution of 4.1 cents per kilometre per tonne to:
- Palerang Council for waste hauled to the Landfill along Palerang Council maintained roads; and
  - Goulburn Mulwaree Council for waste hauled to the Landfill along Goulburn Mulwaree Council maintained roads.

The contribution rate shall be adjusted every year from the date of this approval to account for the effects of inflation (RMS Road Cost Index).

11. The Proponent shall receive a reduction in road maintenance contributions paid to Palerang Council (in cents per kilometre per tonne of waste hauled) as required by condition 10 of this schedule based on the difference between the full cost of undertaking any mandatory road upgrades along Main Road 268 (Bungendore/Tarago Road) and what the Proponent's proportional contribution should be (as determined by the audit required by condition 5 (d) of this schedule) unless other arrangements are made with Palerang Council, to the satisfaction of the Director-General.

*Note: at any time either party may refer the matter to the Director-General for dispute resolution.*

**SCHEDULE 7**  
**ENVIRONMENTAL MANAGEMENT, REPORTING & AUDITING**

**COMMUNITY LIASON COMMITTEE**

1. The Proponent shall continue to operate a Community Liaison Committee (CLC) comprising representatives of the Proponent, the local community, Council and Supervisory Licensee. Representatives of relevant government agencies may be invited to attend meetings of the Committee as required.

The Chairperson and procedures for the Committee including frequency of meetings shall be determined by the Committee.

2. Within six (6) months of the date of this approval, the Proponent must submit details of the CLC members including the Chairperson and frequency of meetings to the Department for the Director-General's endorsement.

**ENVIRONMENTAL MANAGEMENT**

3. The Proponent shall prepare and implement an Environmental Management Plan (EMP) for the Landfill to the satisfaction of the Director-General. This plan must:
  - a) be submitted to the Director-General for approval prior to the commencement of expanded operations;
  - b) be prepared in consultation with the OEH and other relevant agencies by a suitably qualified and experienced expert/s;
  - c) provide the strategic framework for environmental management of the Landfill including all plans specified for inclusion in schedule 4;
  - d) identify the statutory approvals that apply to the Landfill;
  - e) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the Landfill;
  - f) include procedures to keep the local community informed about the operation and environmental management of the Landfill;
  - g) describe the procedure for stakeholder consultation and complaints handling; and
  - h) include a clear plan depicting all the monitoring currently being carried out within and around the Landfill.
4. The Proponent shall prepare and implement an Environmental Management Plan (EMP) for the Crisps Creek IMF to the satisfaction of the Director-General. This plan must:
  - a) be submitted to the Director-General for approval prior to the commencement of expanded operations;
  - b) be prepared in consultation with the OEH and other relevant agencies by a suitably qualified and experienced expert/s;
  - c) provide the strategic framework for environmental management of the Crisps Creek IMF including:
    - i. water management including any surface and groundwater monitoring programs, measures to minimise water use, control soil erosion, prevent groundwater contamination, and comply with any surface water discharge limits;
    - ii. noise management and monitoring protocols for evaluating compliance with the noise impact assessment criteria in this approval;
    - iii. landscaping treatment at the Crisps Creek IMF to minimise visibility of the site from residences and public vantage points;
    - iv. details of the on-going maintenance regime ('Works Plan') for riparian stream rehabilitation and vegetation management along the Mulwaree River;
    - v. identify all threats to the environment and public health that could arise from the operation of the Crisps Creek IMF, measures to minimise these risks and notify the relevant government agencies and community in the event of an emergency;
  - d) identify the statutory approvals that apply to the Crisps Creek IMF;
  - e) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the Crisps Creek IMF;
  - f) include procedures to keep the local community informed about the operation and environmental management of the Crisps Creek IMF;
  - g) describe the procedure for stakeholder consultation and complaints handling; and
  - h) include a clear plan depicting all the monitoring currently being carried out within and around the Crisps Creek IMF.

**Annual Environmental Management Review**

5. One (1) year after the commencement of expanded operations, and annually thereafter, the Proponent shall prepare an Annual Environmental Management Report (AEMR) to review the environmental performance of the project to the satisfaction of the Director-General. This review must:
  - a) describe the operations that were carried out in the past year;

- b) analyse the monitoring results and complaints records of the Project over the past year, which includes a comparison of these results against the
  - relevant statutory requirements, limits or performance measures/criteria;
  - monitoring results of previous years; and
  - relevant predictions in the EA;
- c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
- d) identify any trends in the monitoring data over the life of the Project; and
- e) describe what measure will be implemented over the next year to improve the environmental performance of the Project.

#### **INDEPENDENT ENVIRONMENTAL AUDIT**

- 6. Every three (3) years after the first Independent Odour Audit required under condition 7 of schedule 4 of this approval, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the Project. This audit must:
  - a) be conducted by a suitably qualified, experienced, and independent team of experts, including both traffic and odour experts, whose appointment has been endorsed by the Director-General;
  - b) incorporate and consider the findings/mandatory recommendations of any Independent Odour Audit required by this approval.
  - c) assess the environmental performance of the Project, and its effects on the surrounding environment;
  - d) assess whether the Project is complying with the relevant standards, performance measures, and statutory requirements;
  - e) review the adequacy of any strategy/plan/program required under this approval; and, if necessary,
  - f) recommend measures or actions to improve the environmental performance of the Project, and/or any strategy/plan/program required under this approval.

#### **COMPLAINTS HANDLING PROCEEDURE**

- 7. Within 6 months of the date of this approval, a complaints handling procedure must be submitted to the Director-General for approval. The procedure shall be prepared in consultation with the Department, Goulburn-Mulwaree Council, the EPA and the Community Liaison Committee. The complaints handling procedure must include:
  - a formal complaint/incident reporting procedure;
  - an investigation procedure; and
  - a complaint resolution procedure.

A report of the complaint and the response/action taken to resolve the complaint must be made publicly available on the proponent's website within 7 days of a complaint being made. *Note: The level of detail contained in the report of the complaint shall be determined in consultation with the Department, Goulburn-Mulwaree Council, the EPA and the Community Liaison Committee.*

#### **INCIDENT REPORTING**

- 8. Upon detecting an exceedance of the limits/performance criteria in this approval or the occurrence of an incident that causes (or may cause) material harm to the environment, the Proponent shall immediately (or as soon as practical thereafter) notify the Department and other relevant agencies of the exceedance/incident. Within 7 days of the date of the incident, the Proponent shall provide the Director-General and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.

#### **Revision of Plans & Programs**

- 9. Within three (3) months of the submission of any:
  - a) audit required under this approval;
  - b) incident report under condition 8 of this schedule; or
  - c) annual review under condition 5 of this schedule,

The Proponent shall review, and if necessary revise the plans and programs required under this approval to the satisfaction of the Director-General.

*Note: This is to ensure the plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the Project.*

#### **ACCESS TO INFORMATION**

- 10. From the commencement of expanded operations, the Proponent shall make the following information publicly available on its website as it is progressively required by the approval:
  - a) a copy of all current statutory approvals;
  - b) a copy of the Environmental Management Plan required under this approval;

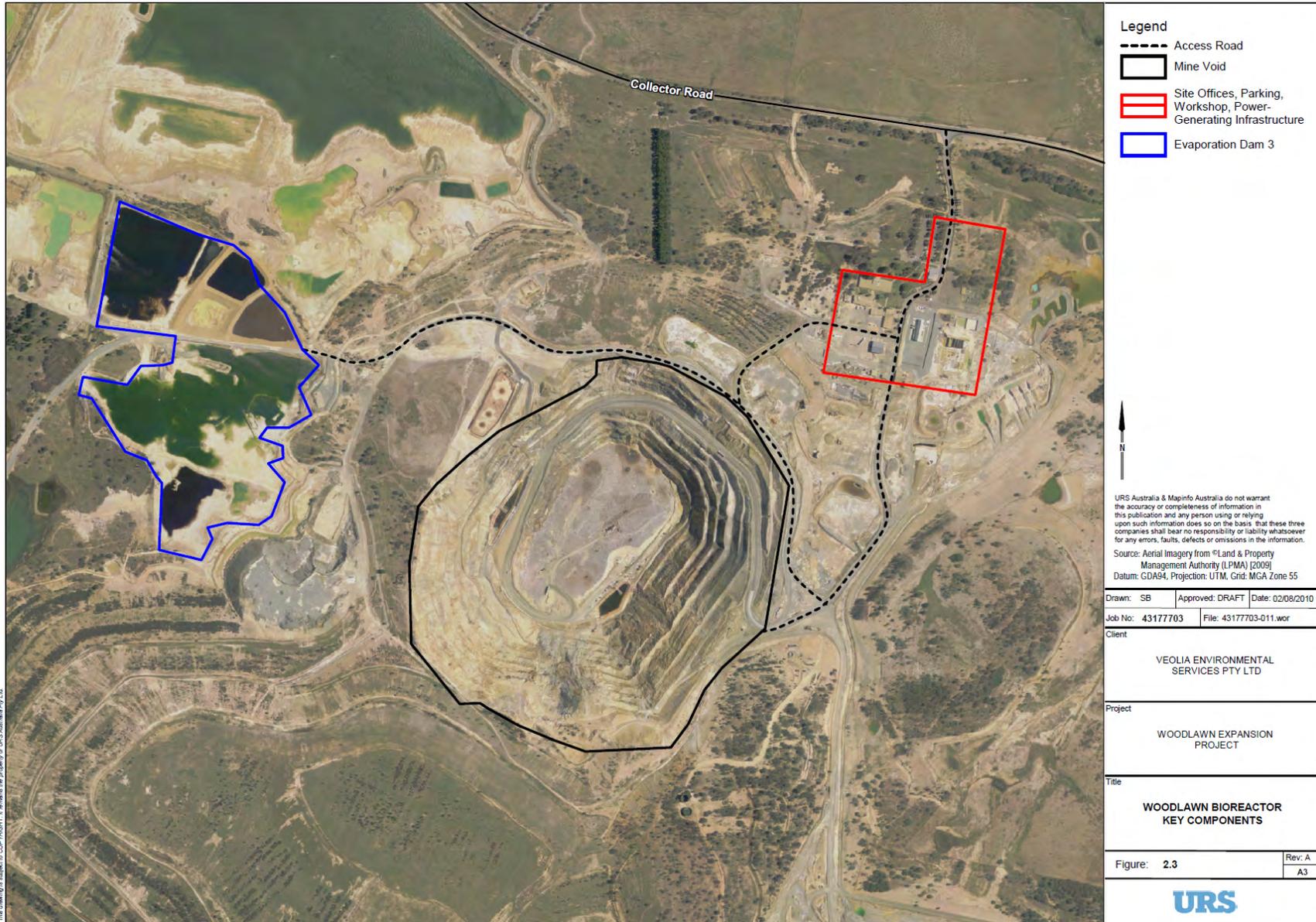
- c) a copy of any Annual Environmental Management Report including monitoring results (over the last 5 years);
- d) a copy of any Independent Environmental or Odour Audit, and the Proponent's response to the recommendations in any audit; and
- e) any other matter required by the Director-General.

**APPENDIX 1  
PROPONENT'S STATEMENT OF COMMITMENTS**

Mitigation Measure	Implementation -
	Operation
<b>General Operation and Maintenance</b>	
<i>Ongoing Environmental Management</i>	
The existing Environmental Management Plan for Bioreactor and the Crisps Creek IMF, including the suite of supporting documents, will continue to be the primary tools in relation to Veolia's ongoing environmental management for all operations. Where required, these management plans will be amended to take into account the provisions of the approval to increase the maximum input rate for the Bioreactor to 1.13 million tpa and the maximum throughput rate for the Crisps Creek IMF to 1.18 million tpa.	✓
<i>Nature of Waste</i>	
The Bioreactor and the Crisps Creek IMF will only receive General Solid Waste (putrescible) as defined by DECCW.	✓
<i>Hours of operation</i>	
Hours of operation for the Bioreactor and the Crisps Creek IMF are 6am to 10pm, Monday to Saturday and no work on Sundays, Good Friday or Christmas Day. Hours of operation may be varied with the written approval of DECCW.	✓
<i>Community Engagement</i>	
Veolia will continue to operate a 24 hour contact hotline for the duration of operations for both the Bioreactor and the Crisps Creek IMF.	✓
Veolia will continue to hold regular meetings with the Community Liaison Committee, so as to provide ongoing information to stakeholders and to resolve any operational issues that may arise from time to time.	✓
Establish additional electronic communication avenues for operational updates to the local community.	✓
<b>Soils, Geology and Water</b>	
<i>Erosion</i>	
Restrict traffic to defined site access roads where possible.	✓
Use a wheel wash to remove soil adhering to the wheels and undercarriage of trucks prior to departure from the landfill site.	✓
Install diversion drains and erosion and sediment control structures around the site to divert clean water from contaminated areas.	✓
Mitigation Measure	Implementation -
	Operation
<i>Groundwater and Surface water</i>	
Divert rainfall runoff from the sides of the pit before it comes in contact with the waste.	✓
Management of leachate in accordance with the Leachate Management Plan.	✓
Recirculate leachate on top of the waste, ensuring maximum evaporative discharge capacity.	✓
Dewatering of groundwater from the base of the pit in accordance with the Leachate Management Plan.	✓
Routinely assess rainfall, evaporation, groundwater levels, piezometer levels, pond levels, pump hours, flow meters, surface water chemistry, groundwater chemistry.	✓
Clean any drains that have become blocked through sediment pollution.	✓
Check that drains are operating as intended.	✓
Check that rehabilitated lands have established sufficient groundcover to reduce the erosion hazard effectively and initiate repair as appropriate.	✓
Control emissions of dust from unsealed roads and other exposed surfaces by use of surface sealants and/or water spray carts or other appropriate equipment. Keep surfaces moist rather than wet.	✓

Keep all sediment detention systems in good, working condition.	✓
Dispose of any pollutants removed from sediment basins in areas where further pollution to downslope lands and waterways should not occur.	✓
Construct additional erosion and/or sediment control works as might become necessary to ensure the desired protection is given to downslope lands and waterways.	✓
<b>Air Quality and Odour</b>	
Odour control and Air Quality Management at the facility is to be carried out in accordance with the existing Ambient Air Quality Management Plan (AAQMP).	✓
Veolia will maintain their established odour incident management system. Should any odour complaints be received, these would be recorded with the details of the location, time, odour character and duration. Details of subsequent corrective actions would be documented.	✓
Truck speed and movements on site is minimised to reduce wheel generated dust emissions.	✓
Traffic is restricted to designated sealed access roads within and around the site.	✓
Waste within the bioreactor is covered at days end.	✓
Water carts for dust suppression continue to be utilised as required.	✓
Existing monitoring and reporting requirements of the AAQMP will continue to operate.	✓
Provide odour diaries to local community members to assist in monitoring the occurrence of odour events on the site.	✓
<b>Mitigation Measure</b>	<b>Implementation -</b>
	<b>Operation</b>
<b>Traffic and Transport</b>	
Update the Traffic Management Plan for the existing operation activities to include the increased hours of operation and increased haulage activities	✓
Assess pavement condition and provide financial contributions to Council for repair of haulage routes	✓
Update Code of Conduct for additional regional waste movements	✓
Veolia will work with the local community to advocate for local road improvements with the relevant road authorities in addressing existing road safety concerns	✓
<b>PHA</b>	
An assessment of the impact of the increase in methane capture rate on the existing plant. Hazard and Operability (HAZOP) study technique or other similar methodology may be required to assess the impact of the change on plant systems to ensure that the risks associated with the methane handling is reduced to As Low As Reasonably Practicable levels.	✓
A review of the safety-implications of the increased waste transfer on on-site populations and determine whether any further safety measures are required to maintain a low level of safety risk to on-site population	✓
<b>Landform and Site Rehabilitation</b>	
At the conclusion of operations at the Bioreactor, infrastructure will be removed and the site will be rehabilitated and replanted with pasture species as outlined in the existing Post Closure Landfill Rehabilitation Management Plan.	✓

## APPENDIX 2 - SITE LAYOUT THE LANDFILL



- Legend**
- Access Road
  - Mine Void
  - Site Offices, Parking, Workshop, Power-Generating Infrastructure
  - Evaporation Dam 3



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Datum: GDA94, Projection: UTM, Grid: MGA Zone 55

Drawn: SB	Approved: DRAFT	Date: 02/08/2010
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Job No: 43177703	File: 43177703-011.wor
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Client

VEOLIA ENVIRONMENTAL SERVICES PTY LTD

Project

WOODLAWN EXPANSION PROJECT

Title

**WOODLAWN BIOREACTOR KEY COMPONENTS**

Figure: 2.3	Rev: A
	A3



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# CRISPS CREEK IMF



- Legend**
- Access Road
  - Rail Sidings
  - Site Office, Equipment Storage
  - Hardstand Area, Container Storage



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Source: Aerial Imagery from ©Land & Property Management Authority (LPMA) [2009]  
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Client  
VEOLIA ENVIRONMENTAL SERVICES PTY LTD

Project  
WOODLAWN EXPANSION PROJECT

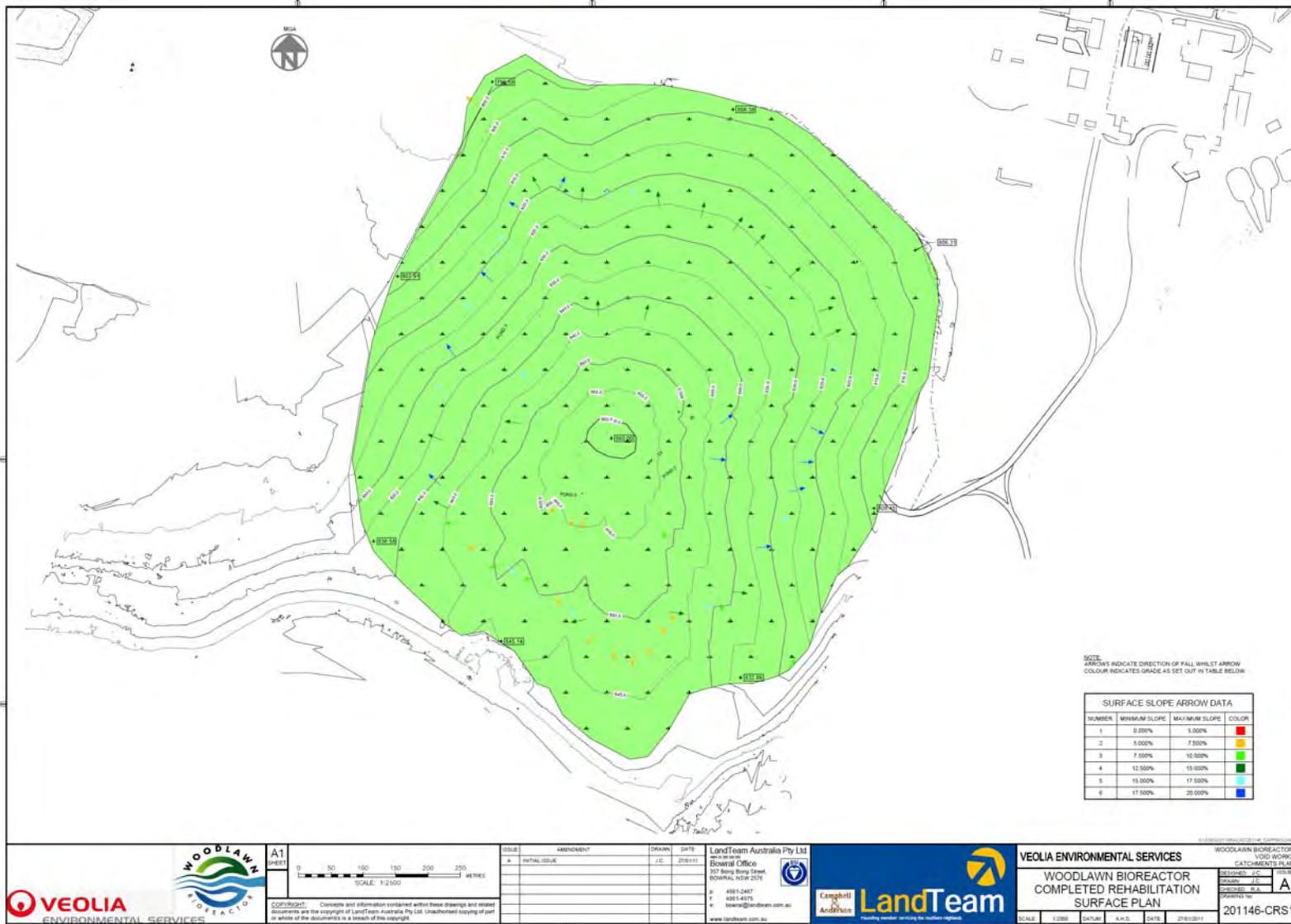
Title  
CRISPS CREEK IMF KEY COMPONENTS

Figure: 2.8 | Rev: A3

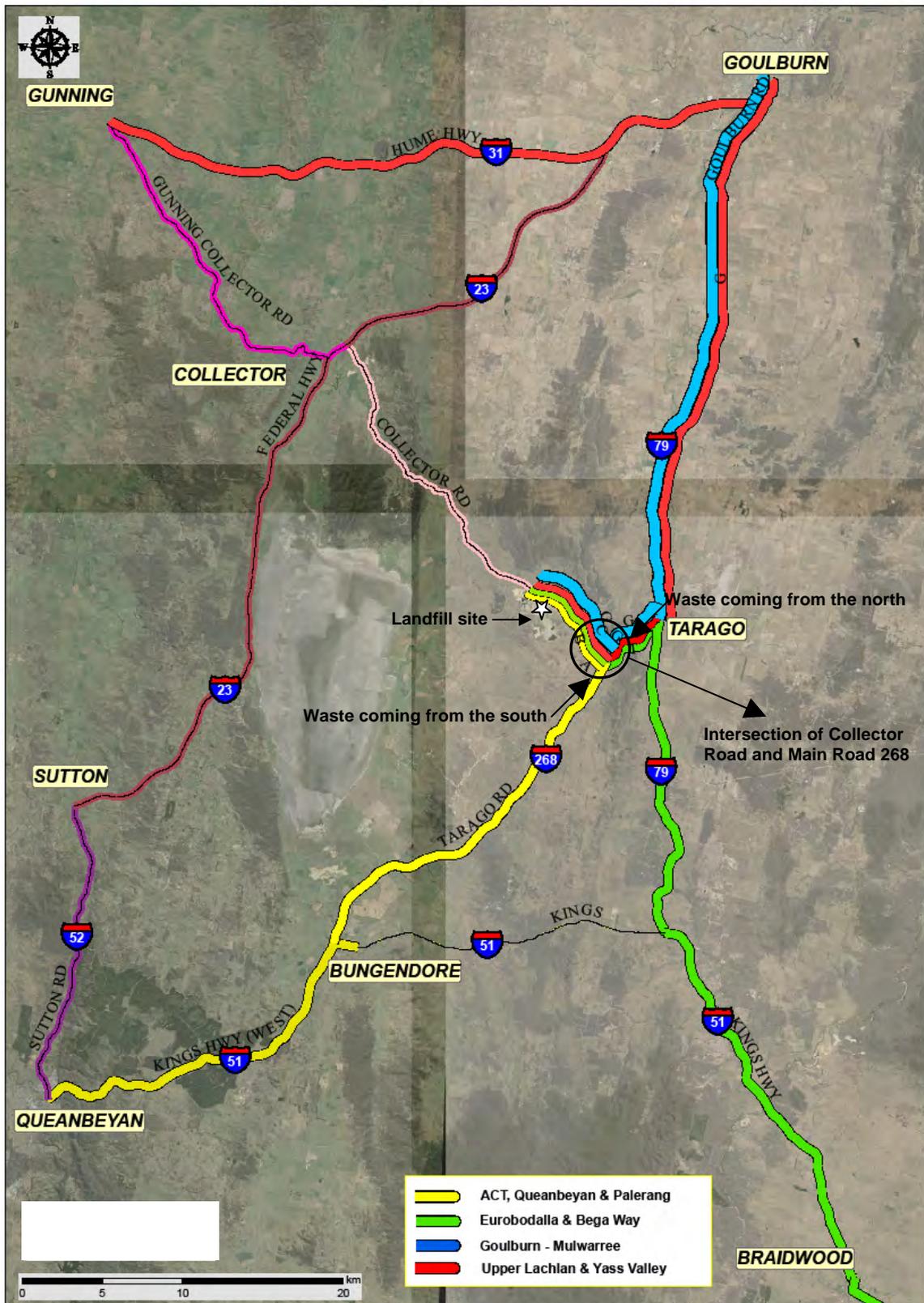


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### APPENDIX 3 - FINAL LANDFORM



## APPENDIX 4 TRUCK HAULAGE ROUTES FOR REGIONAL WASTE



**APPENDIX 3**  
**DEVELOPMENT APPLICATION DA NO. 31-02-99**

**ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979**

**DETERMINATION OF A DEVELOPMENT APPLICATION UNDER SECTION 80(1) OF  
THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979**

I, the Minister for Urban Affairs and Planning, under Section 80(1) of *the Environmental Planning and Assessment Act, 1979* ("the Act") determine the Development Application ("the Application") referred to in Schedule 1 by granting consent to the Application subject to the conditions set out in Schedule 2.

The reason for the imposition of conditions is to minimise any adverse environmental effects of the development, consistent with the objectives of the Act.

Andrew Refshauge MP

**Minister for Urban Affairs and Planning**

Sydney

30 November 2000

File No. Q91/00233

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**SCHEDULE 1**

**Application made by:** Collex Waste Management Pty Ltd ("the Applicant").

**To:** The Minister for Urban Affairs and Planning ("the Minister").

**In respect of:** Lots 5-6 in DP830765, Lots 8-9 in DP534616, Lot 19 in DP827588, Lots 14, 25, 30, 70, 86, 88, 91, and 92 in DP754919, part of the land comprising Lot 10 in DP703260 and part of the land comprising Lot 3 in DP754894.

**For the following:** The Woodlawn Waste Management Facility.

**Development Application:** DA No. 31-02-99 lodged with the Department of Urban Affairs and Planning on 16 February 1999, accompanied by a Environmental Impact Statement prepared by Woodward-Clyde and dated March 1999; EIS supplementary Report prepared by Woodward-Clyde Pty Ltd, dated March 1999; and amended DA and accompanying information prepared by Woodward-Clyde, dated 12 November 1999.

**Determination:**

- 1) To ascertain the date upon which the consent becomes effective, refer to Section 83 of the Act.
- 2) To ascertain the date upon which the consent is liable to lapse, refer to Section 95 of the Act.
- 3) Under section 89A of the Act, the Minister's determination is final and appeal rights under sections 97 and 98 of the Act do not apply.

## **SCHEDULE 2**

### **CONDITIONS OF DEVELOPMENT CONSENT**

#### **ABBREVIATIONS AND INTERPRETATION**

The Act	Environmental Planning and Assessment Act 1979, as amended
The Applicant	Collex Waste Management Pty Ltd
AEMR	Annual Environmental Management Report
BCA	Building Code of Australia
CLC	Community Liaison Committee
Council	Mulwara Shire Council
DA	Development Application
The Department	The Department of Urban Affairs and Planning
The Director-General	The Director-General of the Department of Urban Affairs and Planning
DLWC	Department of Land and Water Conservation
EIS	Environmental Impact Statement
EMP	Environmental Management Representative
EPA	Environment Protection Authority
EPA Licence	means a licence under the <i>Protection of the Environment Operations Act 1997</i>
EPL	Environment Protection Licence
GTA	General Term of Approval
Leachate	means any liquid released by, or water that has percolated through waste, and that contains dissolved and/or suspended liquids and/or solids and/or gases and includes old fill leachate and new fill infiltrate
L <sub>A10</sub> (15 minute)	is the sound pressure level that is exceeded for 10% of the time when measured over a 15 minute period.
LEMP	an environmental waste management plan prepared in accordance with Section 75 of the <i>Protection of the Environment Operations Act 1997</i>
NPWS.	National Parks and Wildlife Service
PCA	Principal Certifying Authority
Subject Land	The land to which the DA and this consent apply.

#### **INTEGRATED DEVELOPMENT**

Integrated development is development (not being complying development) that, in order for it to be carried out, requires Development Consent and one or more of the approvals

set out in the Act. The proposal is integrated development, as it requires several other approvals, including: the consent of the National Parks and Wildlife Service under section 90 of the National Parks and Wildlife Act 1974; licensing by the Environment Protection Authority under sections 47 and 48 of the Protection of the Environment Operations Act 1997<sup>1</sup>; the approval of the Department of Land and Water Conservation under Part 3A of the Rivers and Foreshores Improvement Act 1948 and section 10 of the Water Act 1912; and the consent of Mulwaree Shire Council with the concurrence of the Roads and Traffic Authority under section 138 of the Roads Act 1993. The general terms of approval of the relevant approval bodies therefore form part of this consent.

## **GENERAL CONDITIONS**

### ***Adherence to Terms of DA and EIS***

1. Development shall be carried out in accordance with:
  - (a) DA No. 31-02-99;
  - (b) the EIS prepared by Woodward-Clyde Pty Ltd, dated February 1999;
  - (c) the EIS Supplementary Report prepared by Woodward-Clyde Pty Ltd, dated March 1999; and
  - (d) the Amended DA and accompanying information prepared by Woodward-Clyde, dated 12 November 1999,

except as modified by the following conditions.

In the event of an inconsistency between this consent and DA No. 31.02.99 (and accompanying EIS and other supporting documents), this consent shall prevail.

*Note: The Department of Mineral Resources (DMR) has advised that, upon granting of Development Consent, it will recommend that the mining lease for the Woodlawn site be amended to require compliance with the conditions of consent.*

### ***Deferred Commencement***

2. In accordance with section 80(3) of the EP&A Act, this consent shall not operate until the Applicant satisfies the Minister that it has been awarded a valid contract for the long-term supply of waste, sourced from Sydney, at a rate of at least 150,000 tonnes per annum.

### ***Duration of The Consent***

3. Approval is granted for 20 years from the date of commencement of landfilling operations, subject to the input rate variations as specified in Condition 4.

*Note: Extension of further landfilling activities beyond 20 years would be subject to further approvals applicable at the time.*

### ***Input Rate Variations***

4. The proposed landfill shall not exceed the annual input rates in Table 1, unless otherwise approved by the Minister. The Minister shall give such approval if the need for additional capacity is demonstrated by an independent public assessment of landfill capacity and demand in the Sydney Region. The assessment shall:

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<sup>1</sup> At the time of DA lodgement, the proposal required licensing by the Environment Protection Authority under the Pollution Control Act 1970 and the Waste Minimisation and Management Act 1995. These requirements have since been superseded by licensing requirements under the Protection of the Environment Operations Act 1997, which commenced on 1 July 1999.

- (a) take into account the status of alternative technologies for putrescible waste management and be undertaken at five-yearly intervals;
- (b) be completed one year before commencement of each five year period, as set out in Table 1, or at any other time at the request of the Applicant, with the first review due four years from the date of operational commencement; and
- (c) be undertaken by an independent person or organisation, to be appointed by the Minister, with the costs to be funded by the Applicant.

**Table 1: Maximum Input Rates**

<b>Years from date of operational commencement</b>	<b>Maximum Input Rate</b>
0-5	400,000 tpa
6-10	360,000 tpa
11-15	325,000 tpa
16-20	290,000 tpa

- 5. In any event, no more than 500,000 tonnes shall be landfilled at the site in any one year.

***Compliance with Requirements of the Director-General and Prescribed Conditions***

- 6. The Applicant shall comply with all reasonable requirements of the Director-General in respect of the implementation of any measures arising from reports submitted in accordance with the conditions of this consent, within such time as the Director-General may agree.
- 7. The Applicant shall comply with all relevant conditions prescribed in Part 7 of the Environmental Planning and Assessment Regulation 1994, as required by Section 80A (11) of the Act.

***Obligation to Prevent and Minimise Harm to the Environment***

- 8. The Applicant shall:
  - (a) take all practicable measures to prevent and minimise harm to the environment as a result of the construction, operation, post closure and, where relevant, the decommissioning of the development; and
  - (b) take all practicable measures to operate the landfill as a bioreactor, to ensure to the maximum extent practicable, the biological decomposition of all organic waste and productive capture of methane.

***Structural Adequacy***

- 9. Detailed plans and specifications relating to the design and construction of all structural elements associated with the proposed development shall be submitted to the Principal Certifying Authority (PCA) prior to the commencement of construction works. Such plans and specifications shall be accompanied by certification provided by a practicing professional structural engineer or an accredited certifier certifying the structural adequacy of the proposed building design and compliance with the Building Code of Australia (BCA).

### ***Verification of Construction***

10. Upon completion of building works and prior to the issue of an occupation certificate, a certificate prepared by a suitably qualified person or a compliance certificate issued by an accredited certifier, is to be submitted to the PCA certifying that the following building components, where relevant, have been completed in accordance with approved plans and specifications:
- (a) footings;
  - (b) concrete structures, including ground floor and any subsequent floors, and retaining walls and columns;
  - (c) framing and roof structure;
  - (d) fire protection coverings to building elements required to comply with the BCA; and
  - (e) mechanical ventilation.

The certificate/s shall demonstrate at what stage of construction inspections were undertaken.

### ***Dispute Resolution***

11. In the event that the Applicant, Council, a government authority other than the Department or the PCA cannot agree on the specification or requirements applicable under this consent, the matter shall be referred by either party to the Director-General or, if not resolved, to the Minister, whose determination of the disagreement shall be final and binding on the parties.

## **ENVIRONMENTAL MANAGEMENT**

### ***Environmental Services***

12. The Applicant shall employ or contract suitably qualified environmental services throughout the duration of landfilling/construction and rehabilitation activities. The Applicant shall nominate an Environmental Management Representative/s (EMR/s) as the principle person responsible for overseeing environmental management of the project and supervision of environmental services. The EMR's/EMRs' qualifications, experience and appointment shall be to the satisfaction of the Director-General. The EMR/s shall have the authority to stop work if an adverse impact on the environment has occurred or is likely to occur.

The EMR/s shall:

- (a) be responsible for the preparation or certification of all environmental management plans and procedures;
- (b) be responsible for considering and advising on matters specified in the conditions of this consent and compliance with such matters;
- (c) oversee the receipt of, and response to, complaints about the environmental performance of the project;
- (d) facilitate an induction and training program in environmental awareness and responsibility required under the Environment Protection Licence (EPL), both generally and specific to the Applicant's activities for all persons involved with construction, operation, monitoring and rehabilitation activities at all sites. The training program must be implemented annually from the commencement of the development and evaluated every three years; and

- (e) be present on-site during any critical construction or operational activities as defined in the relevant Landfill Environmental Management Plan (LEMP).

### **Landfill Environmental Management Plan**

- 13. Prior to the Applicant applying to the EPA for an EPL under the Protection of the Environment Operations Act 1997, the Applicant must prepare a comprehensive Landfill Environmental Management Plan (LEMP) in accordance with the EPA's *Environmental Guidelines: Solid Waste Landfills*. The LEMP shall incorporate all relevant plans and protocols as required by the conditions of this consent.

The LEMP shall accompany the application for an EPL. (EPA GTA)

*Note: The EPA will review the LEMP and may, as a result, attach conditions to the EPL which are not inconsistent with the Development Consent.*

### **Licence Applications**

- 14. Prior to applying to the EPA for an EPL, the Applicant must be able to demonstrate that all works required to be addressed to ensure the geo-technical stability of the premises have been undertaken in accordance with:

- (a) the recommendations of the report prepared by BFP Consultants P/L, dated 17 December 1998, entitled Woodlawn Landfill – Geo-technical Study; and
- (b) the requirements of the NSW Department of Mineral Resources. (EPA GTA)

- 15. The Applicant must prepare a post closure landfill rehabilitation management plan (PCLRMP). The PCLRMP must be documented in the LEMP and must address the following:

- (a) closure strategies in the event that landfilling activities conclude prior to filling of the mine void;
- (b) site capping and revegetation in accordance with benchmark technique 28 of the *Environmental Guidelines: Solid Waste Landfills*;
- (c) post closure environmental monitoring;
- (d) post closure management of surface water in the event that the void is not filled with waste.

*Note: The creation of a "crater lake" as proposed in the DA is not approved as a satisfactory strategy for post-closure management.*

- (e) post closure management of Evaporation Dam No 3 (ED3);
- (f) post closure leachate management, including the management of the bioreactor processes;
- (g) post closure landfill gas management;
- (h) post closure maintenance; and
- (i) the estimated costing for these works must be provided and should be based on a nominal period of at least 50 years after the landfill ceases to accept waste. The actual duration of this period will be determined from actual monitoring data at the time. (EPA GTA)

*Notes: An application under sections 53 and 87 of the Protection of the Environment Operations Act 1997 for a supervisory licence must be made at the same time as the application for an EPL.*

*The Applicant must charge for the disposal of putrescible waste at the premises in accordance with the directions of the public authority that holds the supervisory licence in respect of the waste facility.*

*The disposal of waste at the premises is subject to section 88 of the Protection of the Environment Operations Act 1997 and clause 18(1)(d) of the Protection of the Environment Operations (Waste) Regulation 1996.*

### **Community Liaison Committee**

16. Prior to the commencement of construction, the Applicant shall establish a Community Liaison Committee (CLC) comprising representatives of the Applicant, the local community, Council and Supervisory Licensee. Representatives of relevant government agencies may be invited to attend meetings of the Committee as required.

The Chairperson and procedures for the Committee including frequency of meetings shall be determined by the Committee.

### **Annual Environmental Management Report**

17. In order to facilitate the integration of the environmental management of the subject land and the Woodlawn mine site, the Applicant shall liaise with the holder of the Woodlawn mining lease in relation to the formulation and review of the Annual Environmental Management Report (AEMR) for the mine. The AEMR shall comply with the requirements of the Director-General of the Department of Mineral Resources and be subject to review by all relevant government agencies.

### **Conditions Compliance Reports**

18. The Applicant shall submit to the Director-General, the EPA, DLWC and Council Conditions Compliance Reports as follows:
- (a) at least one month prior to the commencement of construction works for the purposes of landfilling, or within such period as otherwise agreed to by the Director-General;
  - (b) at least one month prior to the commencement of construction works for the purposes of the intermodal transfer facility, or within such period as otherwise agreed to by the Director-General;
  - (c) every two years following the date of commencement of construction for the purposes of landfilling activity, or within such period as otherwise agreed to by the Director-General.

*Note: the requirements of (a) and (b) above may be satisfied by the same report if appropriate.*

### **Independent Environmental Audits**

19. Every three years following the date of this consent, or at periods otherwise agreed to by the Director-General, and until such time as agreed to by the Director-General, the Applicant shall arrange for an independent audit of the environmental performance of the development. The audits shall:
- (a) be conducted pursuant to ISO 14010 – Guidelines and General Principles for Environmental Auditing, ISO 14011 – Procedures for Environmental Monitoring and any specifications of the Director-General;
  - (b) be conducted by a suitably qualified independent person approved by the Director-General;
  - (c) assess compliance with the requirements of this consent;
  - (d) assess the implementation of the LEMPs and review the effectiveness of the environmental management of the development; and

(e) be carried out at the Applicants' expense.

The audits shall be submitted to the Director-General, the EPA, DLWC, Council and the Community Liaison Committee.

The Applicants shall comply with all reasonable requirements of the Director-General in respect of any measures arising from or recommended by the audits and within such time as agreed to be the Director-General.

## **SITE REHABILITATION**

### ***Whole of Site Rehabilitation***

20. The filling of the Woodlawn mine void with waste and the final rehabilitation of the land subject to the DA shall be undertaken in a manner which is complementary with the rehabilitation of the Woodlawn mine site. Details of integrated rehabilitation shall be provided in the Rehabilitation Management Plan prepared in accordance with Condition 22.
21. Activities associated with landfilling must not impede or limit the rehabilitation works on any part of the Woodlawn Mine site.

### ***Rehabilitation Management Plan***

22. The Applicant shall prepare and implement a Rehabilitation Management Plan (RMP) which addresses areas designated for revegetation and rehabilitation as well as areas deemed not to require such treatment. The RMP shall address, but not necessarily be limited to the following matters:
  - (a) clear identification of proposed the new rehabilitation works to be undertaken by the Applicant, details of the Woodlawn Mine site rehabilitation works being undertaken by the mine leaseholder, and a clear definition of the respective obligations of the parties;
  - (b) an outline of financial arrangements for site rehabilitation works proposed in the plan;
  - (c) the rehabilitation standards to be adopted;
  - (d) a rehabilitation schedule (to be reviewed on a regular basis);
  - (e) a post-establishment maintenance and monitoring program for rehabilitated areas;
  - (f) procedures for the removal of all derelict buildings and infrastructure;
  - (g) closure strategies in the event that landfilling activities conclude prior to the capacity of the mine void being filled; and
  - (h) integration of rehabilitation works with the rehabilitation of the Woodlawn mine site.

The RMP shall be included in the LEMP.

23. The Applicant must obtain approval from the End of Mine Life Steering Committee and the EPA to disturb, obtain or use materials from the Woodlawn Mine site for the construction, operation and rehabilitation of the landfill, intermodal facility, haul roads and any other infrastructure at the premises.
24. The Applicant shall liaise with the holder of the Woodlawn mining lease in the preparation of a Mining Operations Plan (MOP) in accordance with the requirements of the Department of Mineral Resources

## **Financial Assurance for integration of whole of mine site rehabilitation**

*Notes: A financial assurance will be maintained by the mine lease holder and held by the Department of Mineral Resources for the duration of the consent. The financial security will relate to the Applicant's obligations under the conditions of this consent for the acquisition, compensation, remedial works and any requirements for the integration of landfilling activities with any existing mine rehabilitation obligations.*

*The amount and structure of the financial security will be agreed to the satisfaction of the Director-General of the Department of Mineral Resources. Evidence of the security deposit will be provided in each AEMR, whereby the value of the security deposit can be adjusted for rehabilitation works completed and the remaining rehabilitation liability.*

### **EPA Financial Assurance**

25. The Applicant shall provide to the EPA financial assurance commensurate with the ongoing environmental management and rehabilitation responsibilities for the landfill and associated activities. The financial assurance shall consist of:

- (a) an unconditional and irrevocable bank guarantee, or other form of financial assurance acceptable to the EPA. The financial assurance is to be adjusted annually so that it keeps pace with inflation for so long as the EPA requires it to remain in place. The amount of the assurance will be determined by an independent review of the costings applicable to activities identified in the LEMP and Conditions 55 and 159; and
- (b) an accumulating fund generated by monies set aside annually on deposit, or other form of financial assurance acceptable to the EPA which will have to be increased in a similar way, in respect of post closure works and responsibilities. The initial and ongoing annual deposit into this fund will be determined by an independent expert review of the costings applicable to activities identified in Condition 15.

The financial assurance shall be maintained during the operation of the facility and thereafter until such time as the EPA notifies the Applicant in writing that it is satisfied that the premises have been appropriately rehabilitated and are environmentally secure.

Written approval must be obtained from the EPA for any changes to the financial assurance detailed in this condition.

*Note: The EPA will require the lodgment of a nominal financial assurance prior to the commencement of landfilling activities. This financial assurance can be amended in line with the environmental risk associated with the premises and independent expert review of costings.*

### **WASTE SOURCES AND TYPES**

26. All waste shall be sourced from the Sydney region. All waste received at the waste management facility shall be transported by rail to the intermodal facility.

27. The only wastes that can be disposed of at the premises are as follows:

- (a) inert waste and solid waste defined in Schedule 1 of the Protection of the Environment Operations Act 1997 or waste that is assessed and classified as inert or solid waste following the technical assessment procedure outlined in Technical Appendix 1 of the Waste Guidelines;
- (b) asbestos waste (including asbestos waste in bonded matrix and asbestos fibre and dust waste resulting from the removal of thermal or acoustic insulating materials or from processes involving asbestos material, and dust from

ventilation collection systems) disposed of in accordance with clause 29 (5) of the Protection of the Environment Operation (Waste) Regulation 1996;

- (c) tyres in accordance with the EPA's tyre disposal specification; and
- (d) other types of waste as expressly approved by the EPA. *(EPA GTA)*

## **WASTE MANAGEMENT PROCEDURES**

28. There shall be no storage of sludges nor overnight storage of containerised waste, on the intermodal facility site. This condition may be varied with the written approval of the EPA if it is required by police; and /or because the operation, personnel or equipment are endangered. *(EPA GTA)*

### ***Waste Transportation***

29. All containers must be designed, constructed and maintained to prevent the emission of offensive odour and be water tight to prevent the leakage of leachate from waste containers during transport and handling activities. *(EPA GTA)*
30. All pressure relief valves on the containers must be designed to meet the environmental requirements of condition 29. *(EPA GTA)*
31. A Quality Assurance Program must be developed and implemented to ensure compliance with Condition 29. The program must include but need not necessarily be limited to the following:
- (a) Container integrity;
  - (b) Integrity and performance of rubber seals;
  - (c) Performance of mechanisms to filter and remove odour where required including cleaning and performance testing; and
  - (d) Container cleaning. *(EPA GTA)*

### **Spillage Response**

32. A protocol must be developed and implemented to manage incidents involving spillage of waste. The protocol must include but should not necessarily be limited to procedures identifying immediate cleaning of the site, disinfection and reporting protocols. *(EPA GTA)*

### ***Control of Incoming Wastes***

33. The Applicant must develop procedures to screen deliveries of waste to ensure compliance with Condition 27. The procedure must be documented in the LEMP. *(EPA GTA)*
34. The Applicant shall use its best endeavours to ensure that all waste received at the intermodal facility is containerised.

## **OPERATIONAL STAGING AND LANDFILL MANAGEMENT**

35. The Applicant shall prepare a landfilling schedule consistent with the concept detailed in figure 4.10 in the EIS. Details of the landfill schedule and shall be provided in the LEMP.

### ***Cover Material***

36. Cover material must be virgin excavated natural material, unless otherwise approved in writing by the EPA. *(EPA GTA)*

*Note: The Applicant is encouraged to identify alternative daily cover materials and examine the feasibility of adopting such materials so as to minimise impacts of utilising virgin excavated natural material.*

37. Cover material must be of a quality that will not inhibit the biological decomposition of the landfilled waste. (EPA GTA)
38. 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, unless otherwise approved in writing by the EPA. (EPA GTA)

*Note: This condition does not exclude removal of daily cover at the beginning of each day to provide for the efficient operation of the bioreactor and to avoid perching of leachate within the landfilled waste mass.*

39. Cover material must be applied to a depth of 30 centimetres over surfaces of the landfilled waste which are exposed for more than 90 days, unless otherwise approved in writing by the EPA. (EPA GTA)

*Note: This condition does not exclude removal of cover prior to recommencement of active landfilling to provide for the efficient operation of the bioreactor and to avoid perching of leachate within the landfilled waste mass.*

40. At least two weeks supply of cover material must be available at the premises under all weather conditions, unless otherwise approved in writing by the EPA. (EPA GTA)

*Note: The environmental management objectives of cover material including limiting run-on and infiltration of water, controlling and minimising the risk of fire, minimising the emission of landfill gas, suppressing odour, reducing fly propagation and rodent attraction and decreasing litter generation.*

### **Landfill Gas**

41. The Applicant shall ensure to the maximum practical extent the quantity of landfill gas that is collected and treated.
42. The Applicant must ensure that any flare, power station or other proposed landfill gas treatment or beneficial re-use system is designed to provide a destruction efficiency of hydrocarbons, organic air toxics and odours of not less than 98%. (EPA GTA)

*Note: Emissions of pollutants must comply with the standards of concentrations prescribed in the Clean Air (Plant and Equipment) Regulation 1997.*

43. The flare system must be designed, installed and operated so that hydrocarbons, organic air toxics and odours are destroyed in accordance with Condition 42. The system must be provided with automatic ignition system and automatic shut-off gas valve. Scrubbers or other suitable treatment must be provided if it is required to remove hydrogen sulfide in order to comply with Condition 42.

The system must be installed progressively during the operation of the landfill. (EPA GTA)

44. Any landfill gas condensate must be collected and returned to the leachate recycling system. (EPA GTA)
45. The landfill gas extraction and utilisation system must be designed and installed to withstand forces created by the weight and settlement of waste in the landfill.
46. All pipe work carrying landfill gas adjacent to the haul road must be designed and installed so it is protected from damage as a result of haulage activities. (EPA GTA)

## **WATER QUALITY AND MANAGEMENT**

### ***Waste Management Facility Site***

47. The premises and the activities carried out therein must not pollute surface water or groundwater. *(EPA GTA)*

### Groundwater and Leachate Management

48. The mine void must be managed to ensure the groundwater gradient directs groundwater flows towards the mine void, unless otherwise approved in writing by the EPA. *(EPA GTA)*
49. Maintenance of the groundwater gradient post closure of active landfill operations (including a period of after-care) must ensure that impact of any degraded residue from the landfill on groundwater represents no threat to human health or the environment.

*Note: The height of the water saturation level in the waste will be the primary means of ensuring that this condition is complied with.*

50. A leachate collection/storage/recirculation/treatment system must be designed, installed and operated to:
- (a) accept other waste-waters and contaminated storm-waters generated as a result of the operation of the facility;
  - (b) efficiently operate, notwithstanding the settlement of the waste;
  - (c) ensure that all liquid (including rainwater, surface water, groundwater and leachate) introduced into the waste is monitored to determine its chemical composition and quantity;
  - (d) ensure that liquid is not deliberately stored in the landfilled waste, unless it is necessary for the efficient decomposition of the landfilled waste.
  - (e) ensure that leachate can be recirculated within the biologically active zones of the landfilled waste; and
  - (f) comply with Conditions 48 and 8(b).

Details of this system must be documented in the LEMP. *(EPA GTA)*

51. A barrier system must be designed and installed on the surfaces identified in condition 52 to limit the quantity of groundwater flowing into the mine void and to contain leachate over the period of time that the landfilled waste poses a potential environmental risk. The system must be documented in the LEMP. *(EPA GTA)*
52. The Applicant shall install the barrier system on the following surfaces of the mine void wherever these surfaces do not meet the performance requirements of Condition 53:
- (a) the base and the top elevation of the mine void; and
  - (b) the localised joints, fracture zones and adits/portals.
53. The barrier system must at least achieve the performance of a 900 mm thick re-compacted clay liner with an in-situ coefficient of permeability of less than  $10^{-9}$  metres per second.
54. A Construction Quality Assurance Plan (CQAP) for the barrier system shall be prepared and included in the LEMP.
55. The Applicant shall prepare a Leachate Contingency Management Plan (LCMP) that addresses, but not necessarily be limited to the following matters:

- (a) the removal of leachate from the waste and its treatment to remove any metals or compounds at concentrations which may inhibit the biological processes of the bioreactor landfill, prior to discharging the leachate back into the landfilled waste;
  - (b) the storage of leachate external to the landfilled waste in the mine void;
  - (c) method/s for removing leachate from the waste and disposing of it to ensure effective operation of the bioreactor landfill and to ensure that the groundwater gradient directs groundwater flows into the mine void; and
  - (d) an estimate of the full costs for implementing each aspect of this plan. (EPA GTA)
56. The Applicant must not import water or other liquids into the mine void, unless otherwise approved by the EPA, except for first flush waters collected at the Intermodal Facility site and waters contained in ED3. (EPA GTA)
57. The Applicant shall develop a plan (known as bioreactor water management plan) which addresses the treatment of water, prior to any water being added (other than by direct rainfall) to the landfilled waste. This plan shall be included in the LEMP.

*Note: The goals of this plan are to ensure that water which is of a low pH and contains heavy metals and other inorganic substances does not inhibit the biological degradation of the landfilled waste and that the groundwater gradient direction is maintained into the void.*

#### Surface Water Management

58. There must be no discharge of waters from the area subject to the Development Application, unless more than 210mm of rain falls within a 72 hour time period (1 in 100 year ARI of 72 hours duration). (EPA GTA)
59. At the commencement of waste being received into the mine void the volume of water stored in ED3 shall be no greater than 40 ML.
60. The Applicant shall install drainage so that the West Ridge Catchment shall not drain into the mine void.
61. Contaminated water shall only be applied for dust suppression in the mine void, and in any areas around the perimeter of the void where any contaminated water will drain back into the void.
62. The evaporation of water by spraying shall not result in the drifting of the sprayed liquid from the area subject to the DA and also shall not cause any adverse impact to public health. The proposed method for the spray evaporation of water shall be documented in the LEMP.
63. ED3 shall not receive water stored in the Waste Rock Dam.
64. Stormwater in the mine void must only be discharged into ED3, or otherwise used for operational purposes within the landfill, as approved in writing by the EPA. (EPA GTA)
65. Stormwater collected in the mine void may only be transferred into ED3 provided that:
- (a) The Applicant can always comply with condition 58;
  - (b) the concentration of ammonia in the stormwater to be transferred does not exceed 0.03 mg/L and the concentration of total organic carbon in the stormwater does not exceed 1 mg/L; and
  - (c) the stormwater to be transferred contains no leachate, unless otherwise approved in writing by the EPA. (EPA GTA)

66. The Applicant must design and implement a Stormwater Management Scheme for the premises demonstrating compliance with Conditions 47, 48, 58, 63, 64, 65, and 8(b). This plan must be documented in the LEMP. (EPA GTA)

*Note: The scheme will need to consider the method of the removal of excessive quantities of rainwater that falls in the mine void.*

67. Vehicles leaving the area subject to the DA shall not track materials to external surfaces.

Details of the equipment or facilities must be specified in the LEMP (EPA GTA)

68. Containers used for transporting waste must only be washed at the container wash facility as frequently as is necessary to minimise environmental impacts from the containers. The container wash down facility must be designed, installed and operated with the aim to collect, treat and dispose of any wash down waters to the leachate collection system. Any collected solids must be returned to the active tipping face. The container wash down facility must be documented in the LEMP. (EPA GTA)

69. Impervious bunds must be constructed around all fuel, oil and chemical storage areas and the bund volume must be large enough to contain 110 per cent of the volume held in the largest container. The bund must be designed and installed in accordance with the requirements of the EPA Environment Protection Manual Technical Bulletin *Bunding and Spill Management*. (EPA GTA)

### ED3 – Management

70. The Applicant must prepare a management plan for ED3 to ensure that:
- the dam is maintained to prevent the leakage of stored acid mine drainage waters in order to protect groundwater and surface water;
  - adequate capacity is retained in ED3 to meet the environmental performance requirements in condition 58
  - measures are identified to maintain adequate capacity within a suitable time period after receiving water from a rainfall event;
  - there is an emergency plan for the management of water in excess of the capacity of ED3;
  - the sources of water that are collected or received in ED3 are identified; and
  - the quantity of water (in cubic metres per hour) from each source that reports to ED3 is monitored and compared in graphical format with rainfall data.

The plan must be documented in the LEMP.

### Waste-water Management

71. The sewage management system must be designed, installed and operated to meet the following criteria:
- Prevention of Public Health Risk.** Unacceptable public health risks must not occur resulting from human contact with the waste-water or flows discharged from the waste-water management system. Indicator faecal coliforms must be reduced to acceptable levels by an acceptable disinfection method determined in consultation with the EPA and NSW Department of Health. Consultation must be undertaken with NSW Health on the performance of the system.
  - Protection of Lands.** The application of waste-water to land must not result in the deterioration of the quality of the land through soil structure degradation, salinisation, waterlogging, chemical contamination or soil erosion.

- (c) **Protection of Surface Waters.** Surface waters must not become contaminated by any flows discharged from the waste-water management system including waste-water, rainfall runoff, contaminated subsurface runoff or contaminated groundwater.
  - (d) **Protection of Groundwaters.** Underground water resources must not become contaminated by either the waste-water, or any flows discharged from the waste-water management system.
  - (e) **Community Amenity.** Unreasonable interference and nuisance to the public, due to odour, dust, insects, and noise above existing background levels and arising from the operation of the waste-water management system must be avoided.
  - (f) **Resource Utilisation.** The useful resources of waste-water, including nutrients, organic matter and water must be identified and utilised to the maximum extent possible within the bounds posed by the other environmental and health performance criteria referred to in (a) to (e) above. *(EPA GTA)*
72. Waste-water must only be applied to utilisation areas in conformance with Condition 71. *(EPA GTA)*
73. Spray from waste-water application must not drift beyond the boundary of the waste-water utilisation area to which it is applied. *(EPA GTA)*
- Note: The EPA may include a buffer area for spray as part of a waste-water utilisation area.*
74. Waste-water utilisation areas must effectively utilise the waste-water applied to those areas. This includes the use for pasture or crop production, as well as ensuring the soil is able to absorb the nutrients, salts, hydraulic load and organic materials in the solids or liquids. Monitoring of land and receiving waters to determine the impact of waste-water application may be required by the EPA. *(EPA GTA)*

### ***Intermodal Facility Site***

75. The Applicant shall prepare and implement a Stormwater Management Scheme for the premises in accordance with the environment protection licence. The Scheme shall include measures to mitigate the impacts of stormwater run-off from and within the premises following the completion of construction activities and meet Condition 76 *(EPA GTA)*
76. Container handling, transfer and storage areas including any hardstand areas must be paved and sealed and be provided with a first flush stormwater management system designed to capture 15mm of stormwater for each square meter of catchment area. The paved and sealed areas including first flush system must also extend to include any rail unloading areas, stormwater detention pond, oil/water separator and container loading areas. *(EPA GTA)*
77. There must be no discharge of contaminated stormwater from the premises under dry weather conditions or storm event(s) of less than 1:100 year, 24 hour duration, average recurrence interval. *(EPA GTA)*
78. All areas that involve the handling of containerised waste including container transfer and handling areas, clean container storage areas and internal roadways must be sealed. *(EPA GTA)*

### **Waste Water Management**

79. Contaminated stormwater and any sludges collected at the Crisps Creek intermodal facility must be disposed of at the landfill site. *(EPA GTA)*

80. There must be no vehicle or container wash down at the premises. (EPA GTA)
81. The on-site sewerage waste water management system must be designed installed and operated in a manner consistent with the guidelines Environment and Health Protection for On-site Sewage Management for Single Households. (EPA GTA)

### ***Rivers and Foreshore Improvement Act 1948 – Part 3A Permit (DLWC GTAs)***

*Note: A permit under Part 3A of the Rivers and Foreshores Improvement Act 1948 is required to carry out bridge construction, stormwater discharge works and stream bank stabilisation within 40 m of the top of the bank of the Mulwaree River at Tarago, being works associated with the establishment of the intermodal facility. A Part 3A Permit is not required for works at the mine site.*

#### General

82. If any work is being carried out in such a manner that it may damage or detrimentally affect the stream, or damage or interfere in any way with any work, the operation on that section of the stream shall cease immediately upon the oral or written direction of the officer.
83. The Applicant may request in writing any reasons for any direction to cease operations which must be provided within 24 hours of such a request.
84. If the permit conditions have been breached, the permit holder shall restore the site to the satisfaction of the Department. If the necessary works are not completed then the permit holder shall pay a fee prescribed by the Department for the initial breach inspection and all subsequent breach inspections.
85. Operations shall be conducted in such a manner as not to cause damage or increase the erosion of adjacent stream banks. The permit holder shall carry out any reasonable instructions given by DLWC with a view to preventing damage to the banks.
86. Any vegetation or other material removed from the area of operations shall be disposed of to an appropriate site where the debris cannot be swept back into the river during a flood.

#### Conditions Specific to the DA

87. Operations shall be conducted in such a manner that is in accordance with the permit as not to cause damage or increase the erosion of adjacent stream banks. The permit holder shall carry out any reasonable instructions given by DLWC with a view to preventing damage to the banks.
88. Prior to the commencement of construction, the Applicant shall submit for the approval of DLWC a Soil and Water Management Plan. The Plan shall be prepared by a suitably qualified person and shall cover all works in and near the stream, staging and maintenance requirements. The Plan shall meet the requirements outlined in the NSW Department of Housing's publications (1998) *Managing Urban Stormwater: Soils and Construction* and *Managing Urban Stormwater: Treatment Techniques*.
89. The Applicant shall establish, to the satisfaction of DLWC, a riparian zone on the intermodal facility side of the Mulwaree River for the length of the intermodal facility and any associated works. The riparian zone shall be at least 40 metre in width (measured horizontally from the top of the bank) and consist of local native plant species but shall exclude bridge approaches, bridge, access roads and associated infrastructure in accordance with the Intermodal Construction Works Plan, and Soil and Water Management Plan

90. No exotic trees are to be planted within the stream or within 40 metres from the top of the bank of the stream.
91. Prior to commencing construction works the Applicant shall prepare to the satisfaction of DLWC a "Works Plan" to include Stream Rehabilitation and Vegetation Management. The Plan shall describe the proposed rehabilitation of the stream wherever disturbed, methods to stabilise the bed and banks of the stream, vegetation to be retained, additional plantings of local native vegetation, vegetation maintenance and performance criteria
92. The Applicant shall ensure that the design of the bridge over the Mulwaree River is sensitive to the corridor functions (including current and future functions) of the river and piered approaches or equivalent are to be incorporated into the design.
93. Drainage lines to the Mulwaree River are to be in accordance with the requirements of DLWC and designs included in the Intermodal Facility Works Plan are to be approved by DLWC prior to the commencement of construction works

## **NOISE**

### ***Hours of Construction and Operation***

#### Construction

94. All construction work at the waste management facility and intermodal facility site that creates audible noise at residential premises must only be conducted between 7:00 am to 6:00 pm on Mondays to Fridays and between the hours of 8:00 am to 1:00 pm on Saturdays. There shall be no construction activities on Sundays or public holidays. *(EPA GTA)*
95. The delivery of material outside the hours of operation permitted by Condition 94 may take place if that delivery is required by police or other authorities for safety reasons; and/or because the operation, personnel or equipment are endangered. In such circumstances, prior notification is to be provided to the EPA and affected residents as soon as possible, or within a reasonable period in the case of an emergency. *(EPA GTA)*
96. The hours of construction specified in Condition 94 may be varied with the written consent of the EPA if the EPA is satisfied that the amenity of the residents in the locality will not be adversely affected. *(EPA GTA)*

#### Operation

97. All operational activities at the waste management landfill site may only be conducted between the hours of 6:00am and 7:00pm on Mondays to Saturdays and at the intermodal facility site including road haulage, may only be conducted between the hours of 7:00am to 6:00pm on Mondays to Saturdays other than train operations which may be conducted from 6:00am to 6:00pm. There must be no activities on Sundays, Good Friday or Christmas Day (Commission of Inquiry Report, January 2000). *(EPA GTA)*
98. The hours of operation specified in Condition 97 may be varied with the written consent of the EPA if the EPA is satisfied that the amenity of the residents in the locality will not be adversely affected. *(EPA GTA)*

### ***Noise Limits***

#### Waste Management Facility Site

99. Noise from the premises must not exceed an  $L_{A10 (15 \text{ minute})}$  noise emission criterion of 35 dB(A)  $L_{A10 (15 \text{ minute})}$  at the most affected residential receiver. *(EPA GTA)*

*Note: Noise measurement*

*For the purpose of noise measures required for this condition, the  $L_{A10}$  noise level must be measured or computed at the most affected residential receiver over a period of 15 minutes using "FAST" response on the sound level meter.*

*For the purpose of the noise criteria for this condition, 5dB(A) must be added to the measured level if the noise is substantially tonal or impulsive in character. Measurement locations are:*

- 1 metre from the facade of the residence for night time (10 pm to 7 am) assessment;
- at the residential boundary or 30 metres from the residence (rural situations) where boundary is more than 30 metres from residence for day time (7 am to 10 pm) assessment.

*For the purpose of noise measurements required for this condition the noise emission limits identified apply for prevailing meteorological conditions, winds up to 3m/s.*

100. The noise emission limits identified in Condition 99 apply for prevailing meteorological conditions, except under conditions of temperature inversions. Noise impacts that may be enhanced by temperature inversions must be addressed by:
- (a) documenting noise complaints received to identify any patterns of temperature inversions or increased level of impacts from temperature inversions;
  - (b) where levels of noise complaints indicate a higher level of impact then actions to quantify and ameliorate any enhanced impacts under conditions of temperature inversions should be developed and implemented. (EPA GTA)

Intermodal Facility Site

101. Except as provided in Condition 102, noise from the premises must not exceed an  $L_{A10}$  (15 minute) noise emission criterion of 35 dB(A) at the most affected residential receiver. (EPA GTA)
102. Noise emissions from freight trains entering and leaving the premises must not exceed the noise limit of 45 dB(A)  $L_{A10}$  (15 minutes) prior to 7am and 50 dB(A)  $L_{A10}$  (15 minutes) after 7am. These limits apply only where there are no more than two freight trains entering and leaving the premises per day, otherwise the limit in condition 101 applies. (EPA GTA)
103. Noise from the premises is to be measured at the most affected residential receiver to determine compliance with Conditions 101 and 102. (EPA GTA)

*Notes: Noise measurement*

*For the purpose of noise measures required for these conditions, the  $L_{A10}$  noise level must be measured or computed at the most affected residential receiver using "FAST" response on the sound level meter over a period of:*

- 15 minutes for condition 101; or
- 15 minutes (duration of train entering and/or leaving site) for condition 102. (to comply with condition 102)

*For the purpose of the noise criteria for conditions 101 and 102, 5dBA must be added to the measured level if the noise is substantially tonal or impulsive in character. Measurement locations are:*

- one metre from the facade of the residence for night time (10 pm to 7 am) assessment;
- at the residential boundary or 30 metres from the residence (rural situations) where boundary is more than 30 metres from residence for day time (7 am to 10 pm) assessment.

*For the purpose of noise measurements required for this condition the noise emission limit identified apply for prevailing meteorological conditions, winds up to 3m/s.*

104. The noise emission limits identified in conditions 101 and 102 apply for prevailing meteorological conditions, except under conditions of temperature inversions. Noise impacts that may be enhanced by temperature inversions must be addressed by:
- (a) documenting noise complaints received to identify any higher level of impacts or patterns of temperature inversions; and
  - (b) where levels of noise complaints indicate a higher level of impact then actions to quantify and ameliorate any enhanced impacts under conditions of temperature inversions should be developed and implemented. (*EPA GTA*)

### **Noise Management**

105. The Applicant shall prepare and implement a Road Traffic Noise Management Protocol. The Applicant shall aim to meet the noise criteria set out in the EPA's *Environmental Guidelines for Road Traffic Noise*. The Protocol shall include, but not necessarily be limited to details about:
- (a) scheduling movements outside critical time periods (for example, 6:00am to 7:00am);
  - (b) more stringent limits for noise emission from vehicles (eg. using specially designed "quiet" trucks and/or trucks required to use air bag suspension);
  - (c) driver education;
  - (d) limiting usage of exhaust brakes;
  - (e) type of road surface;
  - (f) in consultation with Mulwaree Shire Council exploring opportunities to reduce speed limits for trucks;
  - (g) regular maintenance of road surface;
  - (h) ongoing community liaison to monitoring complaints; and
  - (i) phasing in the increased road use; and
  - (j) options for overnight parking of haulage trucks.
106. The Applicant, with input from the rail service provider, shall prepare and implement an Operational Noise Management Protocol for the Intermodal facility. The Protocol shall include, but not necessarily be limited to details about:
- (a) the incorporation of all reasonable and feasible noise mitigation methods for trains entering the site from the main line, shunting, rail movements on site, container movements, and truck movements;
  - (b) scheduling of train movements outside critical time periods;
  - (c) using the quietest trains possible;
  - (d) employee education;
  - (e) using quiet couplings for trains
  - (f) using quiet forklifts;
  - (g) regular maintenance of rail track, roads, hard stand areas, equipment;
  - (h) ongoing community liaison to monitoring complaints (eg. complaints line); and
  - (i) negotiated agreements for noise complaints if noise issues become unresolvable.

107. A Construction Noise Management Protocol must be prepared and submitted with the LEMP and implemented by the Applicant. The Protocol must include but is not necessarily limited to details about:

- (a) compliance standards;
- (b) community consultation;
- (c) complaints handling monitoring/system;
- (d) site contact person to follow up complaints;
- (e) mitigation measures;
- (f) the design and operation of the proposed mitigation methods demonstrating best practice;
- (g) construction times;
- (h) contingency measures where noise complaints are received; and
- (i) monitoring methods and programs.

## **NOISE IMPACTS**

### ***Consultation with Pylara Pty Ltd***

108. In the event that Pylara Pty Ltd considers that road traffic noise (relating to the subject development) at any dwelling on its property is in excess of relevant noise criteria set out in this consent, the Applicant shall, upon a written request from Pylara:

- (a) undertake direct consultation with Pylara Pty Ltd on the issues raised;
- (b) make arrangements for and fund an independent noise investigation to quantify noise levels and sources; and
- (c) if adverse impacts are identified, modify where practicable road transport operations in order to mitigate such impacts.

### ***Land Acquisition***

109. Within six months of receipt of a written request from Pylara Pty Ltd (ACN 000 077 672), the Applicant shall purchase the whole of the property known as "Pylara", via Tarago. The request may be made at any time after this approval, despite any other conditions. The purchase, including acquisition price, shall be on the terms agreed between the Applicant and Pylara Pty Ltd. The acquisition price shall be fair and reasonable, shall take into account all relevant matters, and shall, at least, include payment for :

- (a) a sum not less than the current market value of Pylara Pty Ltd's interest in Pylara at the date of this consent, having regard to:
  - (i) the existing use and permissible use of the land in accordance with the applicable planning instruments at the date of the written request; and
  - (ii) the presence of improvements at Pylara and/or any Council approved building or structure which although substantially commenced at the date of request is completed subsequent to that date; and
  - (iii) as if Pylara was unaffected by the Applicant's Development Proposal.

- (b) reasonable compensation to Pylara Pty Ltd for disturbance allowance and relocation costs within the Mulwaree Shire, or within such other location as may be determined by the Director-General in exceptional circumstances; and
  - (c) Pylara Pty Ltd's reasonable costs for obtaining legal advice and expert witnesses for the purposes of establishing the acquisition price of Pylara and the terms upon which Pylara Pty Ltd is seeking for it to be acquired.
110. In the event that the Applicant and Pylara Pty Ltd cannot agree within three months upon the acquisition price of Pylara and/or the terms upon which it is to be acquired under the terms of this consent, then:
- (a) either party may refer the matter to the Director-General, who shall request the President of the Australian Property Institute to appoint a qualified independent valuer or Fellow of the Institute, who shall determine, *after consideration of any submissions from the owner's and the Applicant, a fair and reasonable* acquisition, price for Pylara as described in sub-clause (a) and/or terms upon which it is to be acquired;
  - (b) in the event of a dispute regarding outstanding matters that cannot be resolved, the independent valuer shall refer the matter to the Director-General, recommending the appointment of a qualified panel. The Director-General, if satisfied that there is a need for a qualified panel, shall arrange for the constitution of the panel. The panel shall consist of:
    - (i) the appointed independent valuer,
    - (ii) the Director-General or nominee, and
    - (iii) the president of the Law Society of NSW or nominee.
  - (c) The qualified panel shall advise the independent valuer on the outstanding matters that the independent valuer refers for it's consideration, following which the independent valuer shall determine a fair and reasonable acquisition price as described in condition 109 and/or the terms upon which Pylara is to be acquired.
111. The Applicant shall bear the costs of any valuation or survey assessment requested by the independent valuer, panel or the Director-General.
112. The Applicant shall, within fourteen days of receipt of a determination by the independent valuer, offer in writing to Pylara Pty Ltd to acquire the relevant land at a price no less than the said acquisition price as determined, and upon any terms set out by the independent valuer.

## **AIR QUALITY**

### ***Odour***

#### Waste Management Facility Site

113. There shall be no offensive odour emitted from the premises, in accordance with Section 129 of the Protection of the Environment Act 1997, nor emissions to the atmosphere from the landfill that may adversely affect the health or amenity of the community. (*EPA GTA*)
114. A meteorological station shall be installed and operated on the landfill site in accordance with the following Australian Standards:
- (a) AS 2922-1987 Ambient air – Guide for the siting of sampling units; and

- (b) AS 2923-1987 Ambient air – Guide for measurement of horizontal wind for air quality applications.

The meteorological station shall measure and electronically log wind speed, wind direction, ambient temperature, sigma theta (standard deviation of the horizontal wind direction fluctuation), solar radiation. All parameters must be logged at 15 minute intervals to provide 1-hour average values and the station must be able to provide instantaneous wind speed and direction to assist in investigation of complaints.

The meteorological station shall also measure rainfall and evaporation. *(EPA GTA)*

#### Intermodal Facility Site

115. There shall be no offensive odour emitted from the premises, in accordance with Section 129 of the Protection of the Environment Act 1997. *(EPA GTA)*

#### **Dust**

##### Waste Management Facility Site

116. Activities occurring on the waste management facility site during the construction and operational phases must be carried out in a manner that will minimise emissions of dust from the premises. *(EPA GTA)*
117. The Applicant must take all practical steps to manage dust emissions during the construction and operational phase of the waste management facility to minimise off-site impacts of total suspended particulates, lead and dust deposition. *(EPA GTA)*
118. The LEMP must detail a system to prevent and suppress all dust emissions to meet the requirements in conditions 116 and 117. *(EPA GTA)*
119. Trucks which are entering and leaving the premises and carrying loads must be sealed or covered at all times, except during loading and unloading. *(EPA GTA)*
120. All internal permanent roadways between the container transfer area and Collector Road must be sealed. *(EPA GTA)*
121. All sealed surfaces intended to carry vehicular traffic must be managed to minimise the quantity of wind blown dust emissions. *(EPA GTA)*
122. All unsealed roads must be treated so that there are no visible dust emissions. Details of treatment measures must be documented in the LEMP.
123. A progressive rehabilitation strategy must be prepared and implemented for any unsealed areas of the site to prevent both wind blown dust emissions and contaminated stormwater runoff. This strategy must be documented in the LEMP. *(EPA GTA)*

#### Intermodal Facility Site

##### *Construction and Operational Phases*

124. Activities occurring at the premises must be carried out in a manner that will minimise emissions of dust from the premises. *(EPA GTA)*
125. The Applicant shall prepare a dust management plan that outlines measures to prevent wind blown dust. The dust management plan must be included as a component of the LEMP. The dust management plan must specify measures to prevent wind blown dust during the construction and operational phases. *(EPA GTA)*

126. Trucks entering and leaving the premises that are carrying excavated dusty materials including clays, sands and soils must be covered at all times, except during loading and unloading. (EPA GTA)
127. All sealed and unsealed surfaces shall be managed to minimise the quantity of wind blown dust emissions. (EPA GTA)

## **ENVIRONMENTAL MONITORING (EPA GTAs)**

### ***Waste Management Facility Site***

#### Odour Monitoring

128. The Applicant must prepare and implement an odour monitoring plan. The plan must be developed in consultation with the EPA and documented in the LEMP.

#### Ambient Air Quality Monitoring

129. The Applicant must prepare and implement an ambient air quality-monitoring plan. The ambient air quality monitoring plan must be documented in the LEMP. The plan must address but may not necessarily be limited to the following:

- (a) Monitoring methodologies and standards;
- (b) Monitoring for concentrations of total suspended particulates (TSP), lead and dust deposition rates;
- (c) Locations where monitoring will be carried out;
- (d) Detailed monitoring cycle and the duration of each monitoring cycle; and
- (e) Reporting.

Monitoring is to be carried out in accordance with *Approved Methods for the Sampling and Analysis of Air Pollutants* NSW December 1999, or other methods stipulated in the EPL.

#### Landfill Gas Monitoring

130. The Applicant must prepare and implement a system of monitoring surface and subsurface landfill gas concentrations. Details of the surface and subsurface landfill gas monitoring system must be documented in the LEMP.

At a minimum, landfill gas shall be monitored for methane, carbon dioxide, and oxygen. The EPL may require other substances to be monitored.

#### Groundwater Monitoring

131. The Applicant shall prepare and implement a groundwater monitoring program that can detect groundwater flow and direction and any occurrence of groundwater pollution. The groundwater monitoring program must be documented in the LEMP.

*Note: The specific requirements of the monitoring program will be stipulated in the EPL.*

The program must include details on:

- (a) location of bore holes around the perimeter of the mine void and ED3—including the depth at which they are screened to enable access of groundwater;
- (b) monitoring the height of the groundwater table;
- (c) monitoring the groundwater gradient and to determine the direction of groundwater flow;
- (d) monitoring methodologies and standards to be employed;

- (e) reporting and assessment of results;
- (f) opportunities to integrate the monitoring program with other monitoring programs in the vicinity;
- (g) the parameters and substances that are proposed to be monitored, including sampling and analysis frequencies; and
- (h) groundwater height should be reported against water table contours around the site to assess any variation over time.

*Note: The exploration drill holes around the perimeter of the void should be investigated as monitoring sites in the development of the groundwater monitoring program.*

*The EPA will require a more extensive listing of elements and compounds to be monitored for a period, prior to the landfilling of the first load of waste. The purpose of this program will be to establish a robust baseline of the quality of the groundwater. This comprehensive monitoring will then be required on an annual basis.*

### Surface Water Monitoring

132. The Applicant shall prepare and implement a surface water-monitoring program to monitor the environmental performance of the construction, operation and rehabilitation of the development on surface water. The surface water-monitoring program must be documented in the LEMP.

*Note: The specific requirements of the monitoring program will be stipulated in the EPL.*

The program must include details on:

- (a) Monitoring locations including:
  - (i) Crisps Creek ;
  - (ii) Allianoyonyiga Creek ;
  - (iii) ED3; and
  - (iv) rainwater collected in the mine void;
- (b) monitoring methodologies and standards to be employed;
- (c) monitoring frequency based on rainfall events and creek flow assessment;
- (d) an assessment of the contribution of surface water pollution from the Woodlawn Waste Management Facility as distinct from the Woodlawn Mine site;
- (e) the quantity of water relocated from the mine void into ED3;
- (f) the quantity of water relocated from ED3 into the mine void;
- (g) the chemical composition of liquids added to the landfilled waste;
- (h) the quantity of water that reports to ED3 , including its sources;
- (i) the quantity of water removed and/or discharged from ED3, including its destination;
- (j) the total quantity of water contained in ED3;
- (k) the parameters and substances that are proposed to be monitored, including sampling and analysis frequencies;
- (l) reporting and assessment of results; and
- (m) opportunities to integrate the monitoring program with other monitoring programs in the vicinity.

*Notes: The EPA will require a broader range of elements and compounds to be monitored for a short period, prior to waste being received at the site. This comprehensive monitoring will then be required to be conducted on an annual basis.*

*The monitoring of ED3 will initially be at weekly intervals and will be reviewed 12 months after commencement of landfilling operations.*

### Leachate Monitoring

133. The Applicant shall prepare and implement a leachate quality and quantity monitoring program. The program must be documented in the LEMP.

*Note: The specific requirements of the monitoring program will be stipulated in the EPL.*

The program must include details on:

- (a) monitoring locations;
  - (b) monitoring methodologies and standards to be employed;
  - (c) monitoring frequency
  - (d) the height of the saturation level in the waste;
  - (e) the parameters and substances which are proposed to be monitored (eg redox potential, metals); and
  - (f) reporting and assessment of results.
134. The Applicant shall notify the EPA as soon as practicable after becoming aware that the height of the saturation level in the waste is above the height of the groundwater table that surrounds the mine void.

### Environmental Performance of the Bioreactor Landfill

135. A Bioreactor Performance Monitoring Program (BPMP) must be developed and implemented which will:

- (a) assess the efficiency of the decomposition of the landfilled waste;
- (b) assess the optimum leachate recirculation program;
- (c) assess the optimum water injection program;
- (d) assess the effect of the saturation depth of the leachate on bioreactor performance; and
- (e) assess the quantity of methane and carbon dioxide (and the relative proportions) that are emitted by the biological decomposition of the landfilled waste;

The BPMP must also include monitoring of the quantity of rainwater that passively infiltrates into the landfilled waste, the quantity and chemical composition of water that is deliberately added to the landfilled waste, and the quantity of leachate in the landfilled waste.

The Bioreactor Performance Monitoring Program must be documented in the LEMP.

*The specific requirements of the monitoring program will be stipulated in the EPL.*

### Noise Monitoring

136. Noise levels must be monitored to confirm performance and to assess compliance with Condition 99, A noise-monitoring program must be developed and implemented. The noise-monitoring program must be submitted to the EPA for review. The program must be documented in the LEMP.

The program must include details on:

- (a) methodologies for noise monitoring;
- (b) location of noise monitoring; and
- (c) frequency of noise monitoring.

#### Geo-technical Stability

137. The geo-technical stability of the premises must be monitored in accordance with the recommendations of the report prepared by BFP Consultants P/L dated 17 December 1998, titled *Woodlawn Landfill – Geo-technical Study*. The monitoring program must be documented in the LEMP.

#### Reporting

138. The Applicant must provide an annual return to the EPA in relation to the development as required by any licence under the POEO Act 1997 in relation to the development. In the return, the Applicant must report on the annual monitoring undertaken (where the activity results in pollutant discharges), provide a summary of complaints relating to the development, report on compliance with licence conditions and provide a calculation of licence fees (administrative fees and, where relevant, load based fees) that are payable. If load based fees apply to the activity the Applicant will be required to submit load-based fee calculation work-sheets with the return.

#### ***Intermodal Facility Site***

##### Water Monitoring Program

139. A surface water-monitoring program must be developed and implemented. The program must include details on but need not necessarily be limited to the following:

- (a) monitoring locations including:
  - (i) Crisps Creek ;
  - (ii) Mulwaree River; and
  - (iii) the bypass from the first flush structure(s);
- (b) the monitoring methodologies and standards to be employed;
- (c) monitoring frequency based on rainfall event and creek flow assessment;
- (d) the quantity of water collected weekly in the first flush structure;
- (e) reporting and assessment of results;
- (f) the parameters and substances which are proposed to be monitored; and
- (g) opportunities to integrate the monitoring program with other monitoring programs in the vicinity.

The monitoring program must be documented in the LEMP.

*Note: The specific requirements of the monitoring program will be stipulated in the EPL.*

##### Noise Monitoring

140. Noise levels must be monitored to confirm performance and to assess compliance with Conditions 100 and 101. A noise-monitoring program must be developed and implemented. The program must include details on:

- (a) methodologies for noise monitoring;
- (b) location of noise monitoring; and

(c) frequency of noise monitoring.

The monitoring program must be documented in the LEMP.

*Note: The specific requirements of the monitoring program will be stipulated in the EPL.*

## **ROADWORKS**

141. Prior to the commencement of construction, the Applicant shall undertake and submit to Council a detailed pavement analysis on the affected sections of Main Road 268 (Bungendore Road) and Collector Road. The Applicant shall fund any necessary rehabilitation work identified in the pavement analysis.

142. The Applicant shall fund and provide on Main Road 268 (Bungendore Road) a minimum bitumen sealed width of 9.0 metres, incorporating marked fog lines and centre-line as well as any required bus stops.

*Note: This has been agreed between Mulwaree Shire Council and the Applicant. It has been accepted there will be a 7.0m wide road with 1m shoulders either side of the road which will be primed and sealed only.*

143. The intermodal facility access road shall be constructed in accordance with Auspec specifications and shall have a 7.0 metre wide sealed bitumen pavement for two way roads and 5.0 metres on one way roads.

144. In accordance with the "Mulwaree Section 94 Contributions Plan", the Applicant shall provide a financial contribution to Council towards extraordinary road damage accept as may be waived by Council. The contribution is to be paid quarterly in arrears.

*Note: the above contribution is current at the time of consent and will be indexed at six monthly intervals in accordance with any increase in the Consumer Price Index (All Groups) Sydney following publication by the Australian Bureau of Statistics.*

145. Prior to the commencement of landfilling operations, the Applicant shall fund and undertake to the satisfaction of Council and the Roads and Traffic Authority the following works:

- (a) rehabilitation of the pavement at the intersection of Bungendore and Collector Roads;
- (b) provision of a right turn bay at the intersection of Bungendore and Collector Roads for south-bound traffic turning into Collector Road;
- (c) construction of a right turn bay on Bungendore Road for right-turning traffic into the Intermodal Facility. *(MSC GTA); and*
- (d) paving of the following areas with an asphalt concrete overlay:
  - (i) intersection of the Intermodal access road and Main Road 268
  - (ii) intersection of Main Road 268 and the Collector Road
  - (iii) intersection of the Collector Road and the access road to the landfill site.

146. The access point to the Intermodal Facility at Bungendore Road shall be constructed to a design and standard to the Roads and Traffic Authority (RTA) and Council specifications and shall have a minimum sight distance of 225 metres in both directions. *(MSC GTA)*

147. The access point to the Waste Management Facility site at Collector Road shall be constructed to accommodate B-doubles. *(MSC GTA)*

148. The Applicant shall liaise with Council in relation to upgrading the existing warning signposting at the junction of Bungendore and Collector Roads to better inform through traffic of the side road junction and turning trucks. (MSC GTA)

## **LANDSCAPING AND VEGETATION MANAGEMENT**

149. The Applicant shall prepare a Landscaping and Vegetation Management Plan for both the Waste Management Facility and Intermodal Facility sites. The Plan shall be prepared by a suitably qualified person and shall address, but not be limited to, the following matters:
- (a) details of likely vegetation loss, means to minimise such loss and additional tree planting to offset this loss;
  - (b) proposed plant species; and
  - (c) details on landscaping treatment at the intermodal facility site, with particular attention to minimising the visibility of the facility from residences and public vantage points.
150. The Plan shall be prepared to the satisfaction of the Director-General and Council and shall be submitted at least three months prior to the commencement of landfilling operations.

## **AGRICULTURAL RISKS**

151. The Applicant shall prepare to the satisfaction of NSW Agriculture a contingency plan for agricultural risks in the event of an incident such as an accident during the transportation of waste from Sydney.
152. As part of the LEMP, the Applicant shall prepare a plan to manage pests, diseases, vermin, and declared noxious weeds. The plan shall also address measures to manage bird pests in order to minimise the risk of any transfer of contaminants from the waste management facility site to regional waterways and water supply reservoirs. The plan shall also address the recommendations of the report prepared by Kinsella Consulting entitled “*Potential for Transport of Pests and Diseases of Plants and Animals from North Sydney to Tarago in Municipal Wastes*”, dated February 1999 and included as Appendix L of the EIS. (EPA GTA)

## **FLORA AND FAUNA**

### ***Terrestrial Flora and Fauna***

153. The Applicant shall consult with NPWS on measures to conserve the population of the vulnerable orchard (*Diuris aequalis* – Buttercup Doubletail) in retained natural woodland on land within the Woodlawn mine site that is subject to the DA or areas potentially affected by the operation of the waste management facility.

### ***Aquatic Flora and Fauna***

154. The Applicant shall consult NSW Fisheries prior to the commencement of any works (including, but not limited to channel realignment, dredging, reclamation, culverts, road crossings, pipelines and weirs) in or adjacent to aquatic habitats.
155. The Applicant shall undertake all practicable measures to maintain and, where possible, enhance existing habitat features in the Mulwaree River and Crisps Creek, including gravel beds, riffles, pools, snags and aquatic and riparian vegetation.

156. The Applicant shall, in consultation with NSW Fisheries, ensure that the bridge from the Intermodal Facility over Mulwaree River is designed so that fish passage, in-stream flow and stream bed continuity are maintained.

## **HERITAGE AND ARCHAEOLOGY**

### ***Aboriginal Heritage***

*Note: The Applicant has been given Consent to Destroy for sites Crisps Creek 1 and 2, Tarago, NSW under section 90 of the National Parks and Wildlife Act 1974. Artefacts from Crisp Creeks sites 1, 2 and 4 have been salvaged, in accordance with the conditions of NPWS Permit #SCHU 0071.*

### ***Non-Aboriginal Heritage***

157. In the event that any items potentially of non-Aboriginal heritage significance are identified on the subject land during the carrying out of works, the Applicant shall arrange for a suitably qualified archaeologist to inspect the item/s, determine the level of significance of the item/s and advise on appropriate management measures.

## **CONTINGENCY PLANNING**

### ***Emergency Management Plan***

158. In relation to activities, which in the event of a disruption to operations may result in significant pollution being emitted, the Applicant must:
- (a) conduct an assessment to determine the potential internal and external causes of disruption of operations at the premises;
  - (b) determine how these disruptions would impact on operations; and
  - (c) identify the pollution that would result due to the disruption of operations and what impact the pollution would have on the health of the community and the environment.
159. In relation to matters identified in Condition 158, as part of the LEMP, the Applicant must prepare an Emergency Management Plan. The Plan shall address, but not necessarily be limited to:
- (a) identification of threats to the environment and/or public health that could arise in relation to the construction and operation of Waste Management Facility and Intermodal Facility including the transportation of waste. These threats may include fire (waste transportation or within the landfill), overflow, dam failure, power or other utility failure, natural disaster etc;
  - (b) identification of strategies to minimise and ameliorate the effects of any groundwater surface water pollution identified from the groundwater and surface water monitoring programs;
  - (c) an estimate of the cost of implementation;
  - (d) actions to effectively respond to the disruption of operations so the risk of pollution is minimised;
  - (e) a communications strategy for alerting relevant agencies and the potentially affected community in the event of the disruption to operations leading to significant pollution; and

- (f) ensuring that all relevant employees are familiar with the emergency management plan.

The Applicant should regularly review the adequacy of the plan obtaining expert advice as required.

*Note: When developing this emergency plan, opportunities may exist to integrate with the Woodlawn Mine site emergency management plans.*

## **COMPLAINTS PROCEDURES**

- 160. Prior to the commencement of construction, the Applicant shall establish a free-call telephone line that operates 24 hours per day 7 days per week on which complaints about the subject development can be registered. The Applicants shall record details of all complaints received and actions taken in response to complaints in an up-to-date log book. The Applicants shall ensure that an initial response to complainants is provided within 24 hours and detailed response within 10 days of the complaint being lodged. The system must also be provided with a complaint verification procedure which correlates potential sources of odours with an operation or activity by assessing relevant meteorological data.
- 161. The complaints register shall be available for inspection upon request by the Director-General, EPA, DLWC, and the CLC.

## ATTACHMENT A

### GENERAL AND MANDATORY CONDITIONS FOR ALL EPA LICENCES

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#### **Administrative Conditions**

The Applicant must, in the opinion of the EPA, be a fit and proper person to hold a licence under the POEO (POEO) Act 1997, having regard to the matters in S.83 of that Act.

#### **Limit Conditions**

##### Pollution of waters

Except as may be expressly provided by a licence under the POEO Act 1997 in relation to the development, Section 120 of the POEO Act 1997 must be complied with.

#### **Operating Conditions**

##### 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.

##### 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.

#### **Waste**

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 a licence under the POEO Act 1997.

This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if it requires an environment protection licence under the POEO Act 1997.

## **MONITORING AND RECORDING CONDITIONS**

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### **Testing Methods – Concentration Limits**

Monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation areas must be done in accordance with:

- the Approved Methods Publication; or
- if there is no methodology required by the Approved Methods Publication or by the general terms of approval or in the licence under the POEO Act 1997 in relation to the development or the relevant load calculation protocol, a method approved by the EPA in writing before any tests are conducted,

unless otherwise expressly provided in the GTAs or Licence Conditions.

### **Monitoring records**

The results of any monitoring required to be conducted by the EPA's general terms of approval (GTAs), or a licence under the POEO Act 1997, in relation to the development or in order to comply with the load calculation protocol must be recorded and retained as set out in GTAs or Licence Conditions.

All records required to be kept by the licence must be:

- in a legible form, or in a form that can readily be reduced to a legible form;
- kept for at least four years after the monitoring or event to which they relate took place; and
- produced in a legible form to any authorised officer of the EPA who asks to see them.

The following records must be kept in respect of any samples required to be collected: the date(s) on which the sample was taken;

- the time(s) at which the sample was collected;
- the point at which the sample was taken; and
- the name of the person who collected the sample.

### **Recording of pollution complaints**

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

The record must include details of the following:

- (a) the date and time of the complaint;
- (b) the method by which the complaint was made;
- (c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
- (d) the nature of the complaint;
- (e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
- (f) if no action was taken by the licensee, the reasons why no action was taken.

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

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

### **Telephone complaints line**

The licensee must operate a 24 hour telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.

The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.

This condition does not apply until 3 months after this condition takes effect.

## **REPORTING CONDITIONS**

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The Applicant must provide an annual return to the EPA in relation to the development as required by any licence under the POEO Act 1997 in relation to the development. In the return the Applicant must report on the annual monitoring undertaken (where the activity results in pollutant discharges), provide a summary of complaints relating to the development, report on compliance with licence conditions and provide a calculation of licence fees (administrative fees and, where relevant, load based fees) that are payable. If load based fees apply to the activity the Applicant will be required to submit load-based fee calculation work sheets with the return.

### **Annual Return documents**

#### **What documents must an Annual Return contain?**

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**

An Annual Return must be prepared in respect of each reporting, 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.

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.

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**

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').

### **Licensee must retain copy of Annual Return**

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**

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.

A person who has been given written approval to certify a Statement 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 this licence.

### **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.

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

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

### **Written report**

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.

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.

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.

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.

#### **GENERAL CONDITIONS**

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Copy of licence kept at the premises or on the vehicle or mobile plant.

A copy of this licence must be kept at the premises or on the vehicle or mobile plant to which the licence applies.

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

The licence must be available for inspection by any employee or agent of the licensee working at the premises or operating the vehicle or mobile plant.

**ATTACHMENT B**  
**DEFINITIONS RELEVANT TO EPA LICENCES**

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In the EPA GTAs, except in so far as the context or subject matter otherwise indicates or requires:

*“Applicant”* means Collex Waste Management Pty Limited.

*“Approved”* means approved in writing by the EPA or as specified in a condition in a licence.

*“End of Mine Life Steering Committee”* means the steering committee formed from the MREMP process to oversee environmental issues relating to mine closure. The Committee consists of representatives from Denehurst P/L, Price Waterhouse Coopers P/L (Administrators Appointed), NSW Department of Mineral Resources, NSW Department of Land and Water Conservation, NSW Environment Protection Authority and Mulwaree Shire Council. *“EPA Tyre Disposal Specifications”* means the current approved EPA procedure for disposal of tyres. As at 31/8/99, this approved procedure is (for tyres less than 1.2 metres in diameter which originate in the Sydney Metropolitan area) shredding tyres into pieces which measure no more than 250 mm in any direction or removing the walls in tyres prior to disposal.

*“Independent review”* means a review that is undertaken by a suitably qualified Environmental Consultant of monitoring, reporting, testing and the environmental performance of a company in meeting Licence requirements.

*“landfill gas”* means the gas that is generated by the decomposition of waste.

*“Landfill Guidelines”* means the EPA's "Environmental Guidelines: Solid Waste Landfills", or as otherwise amended by the EPA

*“Landfill site”* means a waste facility used for the purposes of disposing of waste to land.

*“Leachate”* means the polluted liquid that is released by or has percolated through waste. Pollutants contained in leachate include dissolved and suspended solids, organic chemicals, and dissolved gases.

*$L_{A10} T$*  means the sound pressure level (A weighted) that is exceeded for 10 percent of the observed time “T”.

*“LEMP”* means landfill environment management plan.

*“Licence”* means an environment protection licence issued under the Protection of the Environment Operations Act 1997

*“MREMP”* means the Mining Rehabilitation Environmental Management Plan prepared by Denehurst P/L for the Woodlawn Mine site to meet mining lease requirements and overseen by the NSW Department of Mineral Resources.

*“mg/L”* means milligrams per litre

*“Offensive odour”* means odour:

- (a) that, by reason of its strength, nature, duration, character or quality, or the time at which it is emitted, or any other circumstances:
  - (i) is harmful to (or is likely to be harmful to) a person who is outside the premises from which it is emitted, or
  - (ii) interferes unreasonably with (or is likely to interfere unreasonably with) the comfort or repose of a person who is outside the premises from which it is emitted, or

- (b) that is of a strength, nature, duration, character or quality prescribed by the regulations or that is emitted at a time, or in other circumstances, prescribed by the regulations.

**It is a defence in proceedings against a person for an offence against this section if the person establishes that:**

- (a) 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 the licence directed at minimising the odour; or
- (b) the person affected by the odour were a person engaged in the management or operation of the premises.

A person who contravenes this section is guilty of an offence.

“*POEO*” means the Protection of the Environment Operations Act 1997

“*Putrescible waste*” has the same meaning as in the *Waste Minimisation and Management Act 1995*, which is waste being food or animal matter (including dead animals or animal parts) or unstable or untreated biosolids.

“*:g*” means micrograms

“*:g/m<sup>3</sup>*” means micrograms per cubic metre

“*:S/cm*” means micro siemens per centimetre

“*Void*” means the former open-cut mine pit at the Woodlawn mine site.

“*waste*” includes:

- (a) any substance (whether solid, liquid or gaseous) that is discharged, emitted or deposited in the environment in such volume, constituency or manner as to cause an alteration in the environment, or
- (b) any discarded, rejected, unwanted, surplus or abandoned substance, or
- (c) any otherwise discarded, rejected, unwanted, surplus or abandoned substance intended for sale or for recycling, reprocessing, recovery or purification by a separate operation from that which produced the substance, or
- (d) any substance prescribed by the regulations to be waste for the purposes of the *Waste Minimisation and Management Act, 1995*.

A substance is not precluded from being waste for the purposes of the *Waste Minimisation and Management Act, 1995* merely because it can be reprocessed, re-used or recycled.

“*Waste Guidelines*” means the EPA's *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes*, or as otherwise amended by the EPA.

“*Woodlawn Waste Management Facility*” means the landfill (mine void), intermodal facility, evaporation dam 3 (ED3) and includes other areas of the Woodlawn Mine site subject to the Development Application.

“*Woodlawn Mine site*” means the area bounded by the Woodlawn Mine property boundary nominated in figure 6.1 of the EIS titled Topography of Landfill Site and Surrounding Area in Woodlawn Waste Management Facility EIS Volume 1-Main Report prepared by Woodward Clyde P/L dated February 1999.

**APPENDIX 4**  
**EPL 11436**

**APPENDIX 5**  
**EPL 11455**

## **APPENDIX 6 ANALYSIS OF ODOUR COMPLAINTS**

### **Analysis of odour complaints**

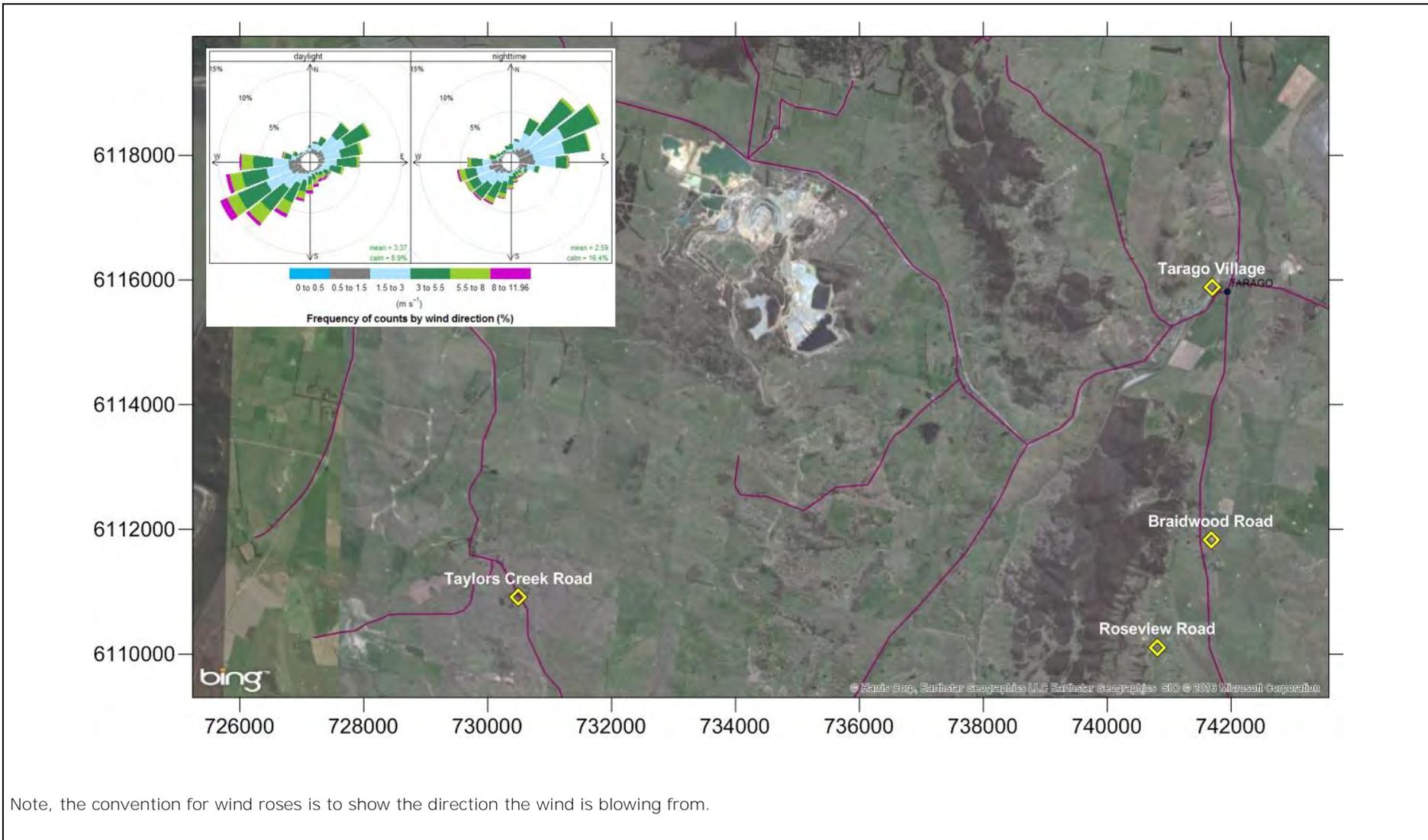
In the calendar year 2015, a total of 80 discrete odour complaints were logged. In 2016 (January to June) a total of 32 discrete odour complaints were logged. Analysis of the 2015 complaints data reveals 60% of complaints are logged from the same location (Braidwood Rd) and 51% from the same individual. In 2016, 69% of complaints are logged from the same location (Braidwood Rd) and 63% from the same individual.

A visual summary of the approximate locations for complaints received in 2015 and 2016 is shown in **Figure A6-1**. Overlain on the image is a diurnal wind rose of the hourly data for the onsite station, for February 2015 to June 2016. The dominant wind directions for the period are a west-southwest and northeast.

With the exception of Taylors Creek Road, winds do not generally travel from the bioreactor in the direction of the main complaint locations. However, it is noted that the westerly winds measured at the site could be channelled by the terrain to the northeast, such that winds then flow southeast towards the main complainant location. However, it is also possible that winds would be channelled by the ridgeline to the southeast of the site (between the site and complainant location) and may be re-directed through the valley towards Tarago, rather than continuing in a southeast direction towards the main complainant locations on Braidwood road. It is noted that Tarago village is located downwind of the Crisps Creek Intermodal facility, based on the prevailing winds measured at the bioreactor site. It is difficult to arrive at a definitive conclusion regarding the influence of local scale terrain features on dispersion without additional meteorological monitoring (see recommendations below).

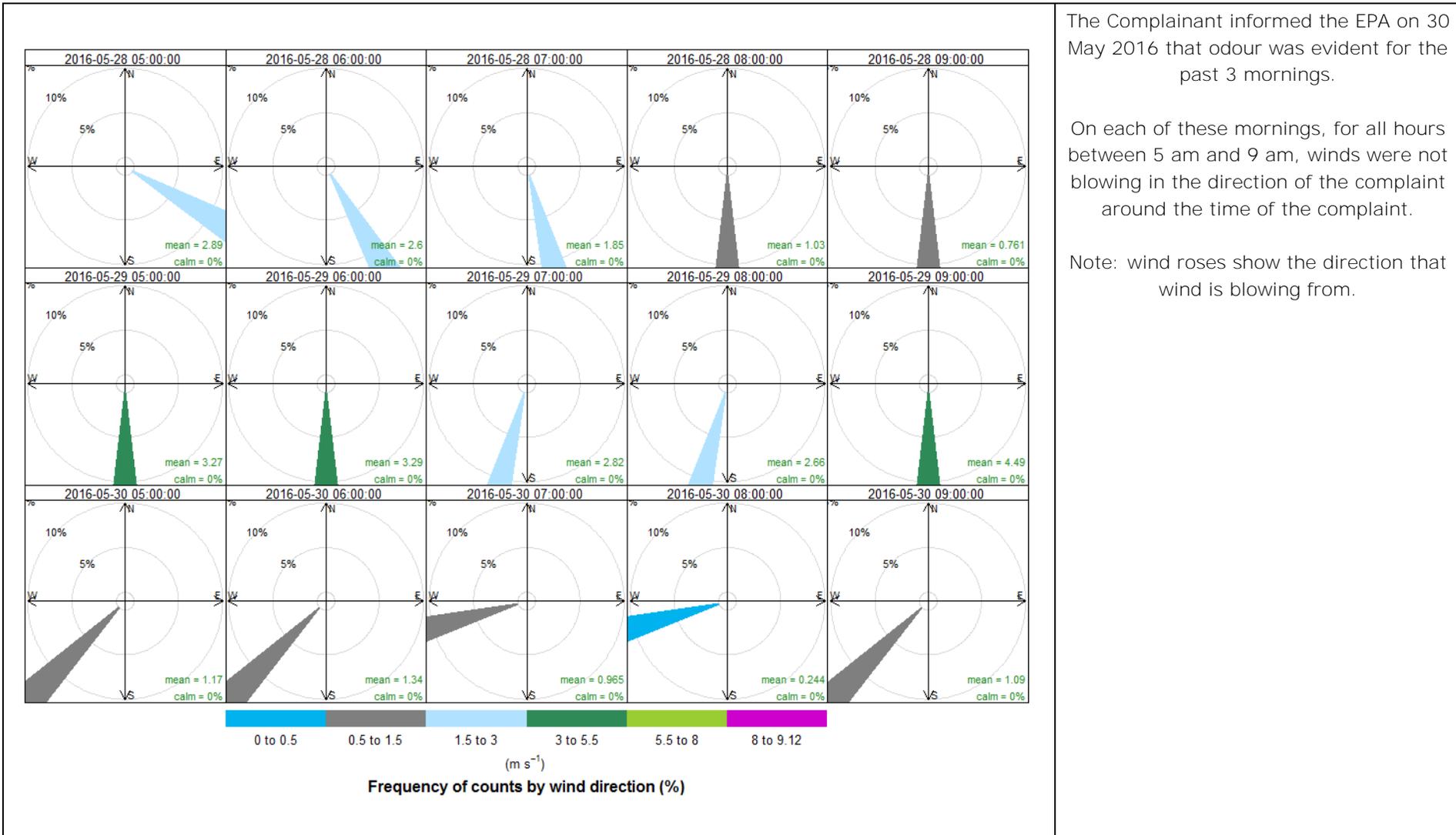
Wind conditions corresponding to some recent complaints logged from Braidwood Road (approximately 9 km southeast of the site) are reviewed in an attempt to validate the complaints. The analysis is shown in **Figure A6-1**, **Figure A6-2** and **Figure A6-3**, comparing hourly wind directions for the periods of complaints. Multiple hours leading up to the complaint are shown, because under a light wind, say 1.5 m/s, a parcel of air from the Woodlawn site would only travel 5.4 km in a single hour.

For 6 complaint periods analysed, winds were not blowing in the direction of the complaint and do not appear to be related to the bioreactor site. For 1 complaint period analysed, winds are blowing from the bioreactor towards the complainant and for another evening winds are blowing from the west, which as discussed previously, may be subsequently channelled southeast, towards the main complainant location.



Note, the convention for wind roses is to show the direction the wind is blowing from.

Figure A6-1: Summary of main complaint locations

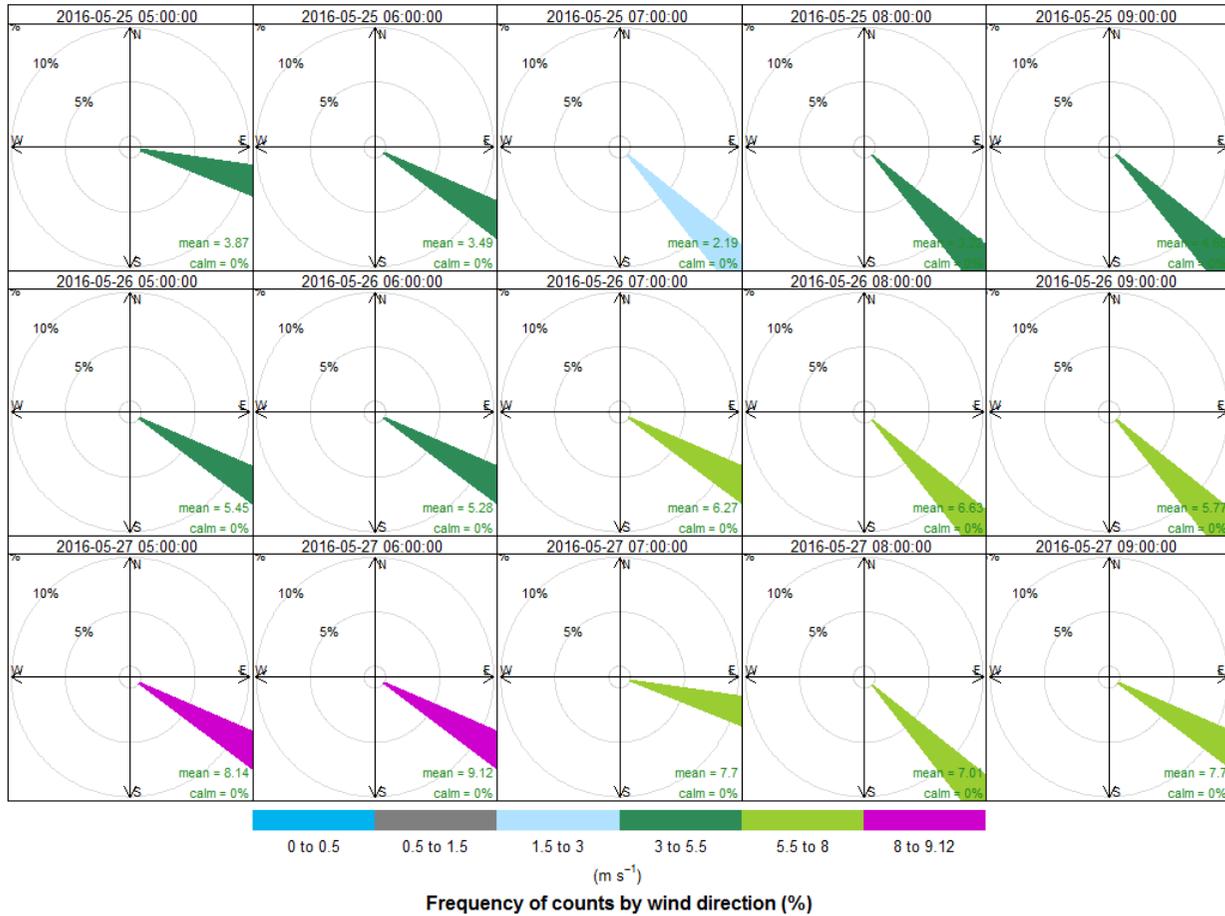


The Complainant informed the EPA on 30 May 2016 that odour was evident for the past 3 mornings.

On each of these mornings, for all hours between 5 am and 9 am, winds were not blowing in the direction of the complaint around the time of the complaint.

Note: wind roses show the direction that wind is blowing from.

Figure A6-2: Analysis of wind data for the mornings of 28/05/2016, 29/05/2016 and 30/05/2016

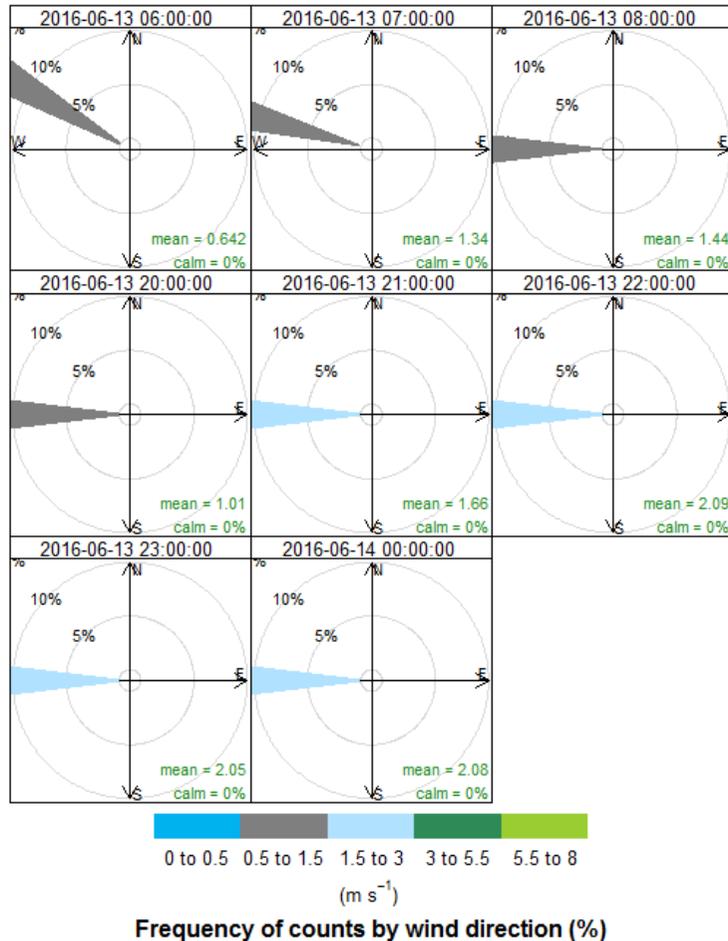


The Complainant informed the EPA on 28 May that odour was evident for the past 3 mornings. The Complainant also called EPA on 26 May (morning) and 25 May (morning).

In all cases winds were not blowing in the direction of the complaint around the time of the complaint.

Note: wind roses show the direction that wind is blowing from.

Figure A6-3: Analysis of wind data for the morning of 25/05/2016, 26/05/2016 and 27/05/2016



The Complainant reported odour at 07: 30 on Monday 13 June and later that morning at 09: 15

The Complainant rang again on Monday evening at 23: 28.

In the morning, winds are blowing from the bioreactor towards the complainant and in the evening winds are from the west, which, as discussed previously, may be subsequently channelled southeast, towards the main complainant location.

Note: wind roses show the direction that wind is blowing from.

Figure A6-4: Analysis of wind data for the morning and evening of 13/06/2013