

Prepared for  
**Veolia Environmental Services (Australia) Pty Ltd**

Prepared by  
**Ramboll Australia Pty Ltd**

Date  
**6 June 2018**

Project Number  
**318000403**

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

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

Revision	<b>Final 2</b>
Date	<b>6 June 2018</b>
Made by	<b>David Ford</b>
Checked by	<b>Victoria Sedwick</b>
Approved by	<b>Victoria Sedwick</b>
Description	<b>Audit Report</b>

Ref	318000403
-----	-----------

Ramboll Australia Pty Ltd  
Level 3  
100 Pacific Highway  
PO Box 560  
North Sydney  
NSW 2060  
Australia  
T +61 2 9954 8100  
F +61 2 9954 8150  
[www.ramboll.com](http://www.ramboll.com)

## CONTENTS

<b>1.</b>	<b>INTRODUCTION</b>	<b>1</b>
1.1	Audit objective and scope	1
1.2	Exclusions	1
1.3	Audit methodology	1
1.4	Audit Team	2
<b>2.</b>	<b>AUDIT FINDINGS</b>	<b>3</b>
2.1	General	3
2.2	Progress Against Actions From Previous IEA	3
2.3	Environmental Management	3
2.3.1	Complaints	4
2.3.2	Environmental Incidents	4
2.3.3	Environmental Management Representative	4
2.3.4	Flare Residence Time	4
2.4	Planning approvals	4
2.5	Environment Protection Licence	5
2.5.1	Licence Conditions	5
2.5.2	Pollution Studies and Reduction Program	5
2.6	Environmental issues	5
2.6.1	Odour	5
2.6.2	Air Quality (General)	6
2.6.3	Material track out	7
2.6.4	Waste management	7
2.6.5	Rail Movements	7
2.6.6	Traffic management	7
2.6.7	Barrier System and Groundwater Quality	7
2.6.8	Surface water quality	8
2.6.9	Storage and handling of chemicals and fuels	8
2.6.10	Noise and vibration	8
<b>3.</b>	<b>CONCLUSION</b>	<b>9</b>
<b>4.</b>	<b>INDEPENDENT AUDIT CERTIFICATION</b>	<b>10</b>
<b>5.</b>	<b>COMPLIANCE ASSESSMENT TABLES</b>	<b>11</b>
<b>6.</b>	<b>LIMITATIONS</b>	<b>132</b>
6.1	Limitations of this Report	132
6.2	Reliance	132

## TABLES

Table 1: Compliance Assessment Criteria.....	11
Table 2: Risk Levels for Non-compliances.....	12
Table 3: Conditions of Project Approval 10_0012 .....	13
Table 4: Conditions of Development Consent 31-02-99.....	49
Table 5: Conditions of EPL 11436 Woodlawn Bioreactor .....	95
Table 6: Conditions of EPL 11455 - Intermodal Facility .....	122
Table 7: Action Plan .....	130

## **APPENDICES**

### **Appendix 1**

DPE approval of audit team

### **Appendix 2**

Project Approval 10\_0012

### **Appendix 3**

Development Consent 31-02-99

### **Appendix 4**

EPL 11436

### **Appendix 5**

EPL 11455

## 1. INTRODUCTION

Veolia Environmental Services (Australia) Pty Ltd (Veolia) engaged Ramboll Australia Pty Ltd (Ramboll) 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 Facility (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 6 of Schedule 7 of the Project Approval 10\_0012 and Condition 19 of Development Consent 31-02-99.

The site visit component of the Audit was conducted by Victoria Sedwick and David Ford (the Auditors) on 12 March 2018. Ronan Kellaghan reviewed the Independent Odour Audit reports. Victoria Sedwick (Lead Auditor) consulted with Shaun Taylor on traffic related matters. The Audit Report was prepared by David Ford 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 Bioreactor and IMF sites, for the period since the last Independent Environmental Audit (IEA), conducted on 4 August 2016, against Project Approval 10\_0012 and Development Consent 31-02-99).

Condition 6 of Schedule 7 of Approval 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 19 of Development Consent 31-02-99 imposes a similar requirement.

### 1.2 Exclusions

The Mechanical Biological Treatment (MBT) facility, previously referred to as the Alternative Waste Treatment (AWT) facility commenced operation in March 2017. Project Approval 06\_0239 requires an Independent Environmental Audit of the MBT facility within two years of commencement of operations, i.e. by March 2019. Project Approval 06\_0239 and EPL 20476 for the MBT were 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) *Post-approval requirements for State significant developments 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).

Conditions 10 and 12 of Schedule 3 of Approval 10\_0012 outline the transitional arrangements and relationship with Development Consent 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.*

Where the same condition appears in both approvals, the Auditors considered these to be duplicate conditions. Where there is an inconsistency between conditions in the approvals, the condition in approval 10-0012 was taken as superseding the condition in Development Consent 31-02-99.

The draft Audit Report was provided to Veolia on 28 May 2018 to review for factual correctness. Drafts of Tables 3 to 6 and the Action Plan (Table 7) had been provided to Veolia progressively to review for factual correctness and to provide actions and timeframes for completion.

#### **1.4 Audit Team**

The audit team including Victoria Sedwick (Lead Auditor), David Ford (Auditor) Ronan Kellaghan (Auditor) and Shaun Taylor (Auditor) was approved in writing by the DPE in a letter to Veolia dated 15 January 2018 (**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 Consent 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 Bioreactor site has a total area of approximately 300 hectares (ha), with the Bioreactor occupying 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 is transported by rail to the IMF from Veolia's Clyde Transfer Terminal and Banksmeadow Transfer Terminal. Two trains depart Sydney daily (Monday to Saturday). The first train arrives at the IMF at approximately 6.30am and containers are unloaded and transferred to trucks for transfer to the Bioreactor. The second train arrives at the IMF in the afternoon. 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. Waste is also received by road from regional customers.

The Bioreactor is approved to receive 900,000 tonnes per annum (tpa) of waste by rail from Sydney and 50,000 tpa of regional waste by road. A further 100,000 tpa of residual waste can be received from the MBT facility.

### 2.2 Progress Against Actions From Previous IEA

Action Plan items from the 2016 IEA have been actioned as follows:

- Truck wheel track out and fugitive dust emissions were observed at the IMF site access onto Bungadore Road and corrective action was undertaken following the IEA 2016.
- The action to ensure members of the community liaison committee were endorsed by the DPE had not been undertaken but has now been completed.
- A specific complaints handling procedure was implemented in consultation with the nominated agencies and the CLC.
- A recommendation for future odour audits to focus towards investigation and verification of community odour complaints was considered and is discussed further in this Audit.
- Consideration was given to an alternative or additional location for the meteorological station and, based upon advice of the supplier, it was not considered necessary.
- Annual performance testing of the landfill gas engines now includes destruction efficiency for volatile organic compounds (VOCs).
- Veolia has implemented use of 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 as specified in the IMF EPL 11455 (7am to 6pm) have been amended to match the Project Approval 10\_0012 operating hours (6am to 10pm).

### 2.3 Environmental Management

The sites operate 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) and IMF EMP. The updated 2016 LEMP and IMF EMP have been approved by the DPE.

Veolia has developed and implemented the measures required under the Development Consent 31-02-99 and Project Approval 10\_0012 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. The overarching 2016 LEMP, IMF EMP and various sub-plans have been approved by the DEP. Veolia has advised that work has commenced to update the plans in preparation for commissioning of the Leachate Treatment Plant (LTP).

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

#### 2.3.1 Complaints

Veolia operates a complaints line with the telephone number advertised in the Tarago Times monthly publication and available on the Veolia website. 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 2016/17 Annual Return, a total of 36 complaints were logged and reported, which was a reduction from 2015/16 (88 complaints) and 2014/15 (63 complaints). Further discussion on odour complaints is provided in **Section 2.6.1**.

#### 2.3.2 Environmental Incidents

The majority of incidents recorded are in relation to the aforementioned odour complaints. In the two reporting periods since that last IEA, five environmental incidents, other than odour complaints, of a minor nature were recorded. All had been closed at the time of this Audit, except the latest incident in January 2018 relating to waste observed on a road.

#### 2.3.3 Environmental Management Representative

Development Consent 31-02-99 requires the appointment of one or more Environmental Management Representatives (EMRs) as the principle persons responsible for overseeing environmental management of the project and supervision of environmental services. The appointed EMR is not currently based at the Woodlawn site.

**Recommendation:** Consider whether a new Environmental Management Representative based at the Woodlawn site should be appointed (**Action Plan Item 5**).

#### 2.3.4 Flare Residence Time

Minimum performance of flares is deemed to be achieved based on temperature and residence time. The Auditors note that residence time has been incorrectly reported in the AEMRs and the Annual Returns as an average of <0.3 seconds, whereas it should be >0.3 seconds. Furthermore, the lowest and highest values have not been provided.

**Recommendation:** Ensure that average flare residence time is correctly reported and also provide the lowest and highest values (**Action Plan Item 7**).

### 2.4 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. Development Consent 31-02-99 (refer **Appendix 3**) remains in place and Condition 10 and 12 of Schedule 3 of Approval 10\_0012 outline the transitional arrangements and relationship between the two approvals.

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 Development Consent 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.



**Administrative Non-Compliance:** Current membership of the community liaison committee (CLC) had not been endorsed by the DPE as required by Condition 2 of Schedule 7 of Approval 10\_0012.

**Recommendation:** The Draft recommendation to verify that all members of the CLC had been endorsed by the DPE was completed on 22 May 2018 (**Action Plan Item 2**).

## 2.5 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.

### 2.5.1 Licence Conditions

A review of both EPLs was carried out as part of this Audit. The compliance findings are documented in **Table 5** and **Table 6** and summarised in the following sections.

The Auditors note that EPL 11436 limits the amount of putrescible regional waste received by road at the Bioreactor to 50,000 tpa. Veolia has written to the DPE in accordance with the conditions of Approval 10\_0012 requesting approval to increase the limit of regional waste by road to 95,000 tpa, although not all regional waste received is putrescible.

**Recommendation:** It will be necessary to modify the EPL before receiving over 50,000 tpa of putrescible regional waste by road (**Action Plan Item 10**).

The Auditors understand that leachate can be received from the newer Banksmeadow Waste Transfer Terminal as well as the Clyde Waste Transfer Terminal. The licence should be modified accordingly.

**Recommendation:** The licence should be modified to permit leachate to be received from the Banksmeadow Intermodal Facility as well as the Clyde Intermodal Facility (**Action Plan Item 11**).

**Non-Compliance:** Groundwater monitoring point 44 was decommissioned during the period and did not achieve the sampling frequency required under EPL 11436. This was reported in the Annual Return; however, no reason for decommissioning the monitoring point was given. The Auditors understand that the EPA has written to Veolia regarding this non-compliance and Veolia has submitted an application to modify EPL 11436.

**Recommendation:** Progress modification of EPL 11436 to completion (**Action Plan Item 3**).

**Non-Compliance:** A consultant's investigation into the integrity of the ED1 and ED2 liners was due to be submitted to the EPA by 30 November 2016. Veolia sought an extension to the submission date for this report; however, the extension was not granted. The report was submitted after the due date and the EPA issued Veolia with a Penalty Infringement Notice for contravening a condition of EPL 11436. **No further action required.**

### 2.5.2 Pollution Studies and Reduction Program

Veolia is in the process of implementing the Longterm Leachate Treatment Solution as required under condition U1.1 of EPL 11436. Construction of the LTP is in progress.

## 2.6 Environmental issues

### 2.6.1 Odour

In accordance with Condition 6 of Schedule 4 of Approval 10\_0012 and EPL 11436 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) in August 2016, although the number received in the latest reporting period has declined on previous periods, as noted above.

Veolia respond to and investigate each odour complaint received. There are also ongoing odour management measures being employed at the site, such as the Longterm Leachate Management Strategy prepared in consultation with the DPE and EPA.

The Auditors note that assessing 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.

An independent odour audit (IOA) is conducted annually and is required to determine whether the project is complying with the condition to protect receivers against offensive odour. The IOA is required to include the effectiveness of protecting receivers against offensive odour and to determine if receivers are protected against offensive odour.

The IOA reports generally comply with the requirements of the approval conditions; however, the Auditors observe that there are opportunities to improve how IOAs address the requirements to audit the effectiveness of the odour controls on-site in regard to protecting receivers against offensive odour and to assess whether the project is complying with the requirements in the approval to protect receivers against offensive odour. In particular:

- The focus of the IOAs is on the measurement of emissions at source but does not link this to impacts at the offsite receivers. The Auditors acknowledge that one of the stated objectives of the IOA is to compare on-site odour measurements with the predicted outcomes from the Environmental Assessment and commentary is made based on this comparison. The Auditors note the opportunity to also assess the impact of odour emissions at offsite receivers, e.g. through dispersion modelling; and
- A more detailed analysis of complaints could be undertaken as part of the IOA to assist in understanding the veracity of complaints and the material impacts in the community.

**Recommendation:** Consider changes to the IOA scope to allow for a more quantitative assessment of offensive odour impacts in the community, through dispersion modelling, detailed complaints analysis, etc. (**Action Plan Item 4**).

#### 2.6.2 Air Quality (General)

Condition 4 of Schedule 4 of Approval 10\_0012 requires that landfill gas engine emissions at the Bioreactor comply with the requirements of the POEO (Clean Air) Regulation 2010. The auditors reviewed results of 2017 annual monitoring of emissions by a NATA accredited laboratory which show compliance with Clean Air Regulation limits for NO<sub>x</sub>, SO<sub>3</sub>, VOCs and H<sub>2</sub>S.

Condition 11 of Schedule 4 of Approval 10\_0012 outlines the dust limits for the sites. The auditors have reviewed dust deposition monitoring data at locations on Veolia properties for the 2016/17 reporting period. Annual average dust deposition did not exceed the limits set for private neighbouring receivers. Veolia no longer monitors for PM<sub>10</sub> or TSP; however, however, monitoring was undertaken over four months from November 2016 to February 2017 and results did not exceed the limits set for private neighbouring receivers. The auditors did not witness dust being generated at the Bioreactor site or IMF during the site visit.

Condition P1.1 of EPL 11455 requires dust monitoring to be conducted at the “nearest sensitive receptor to the premises” to the IMF. Dust deposition gauge (location No 4/ DG18) was originally located on a property to the north-east; however, the property owner asked for it to be removed. DG18 is now located at the boundary to the east of the on-site shed away from structures and trees. The Auditors consider the selected on-site location appropriate as it is expected to provide

a more conservative measurement. However, it is shown at the western end of the IMF on the plan in the IMF EMP.

**Recommendation:** Update the IMF EMP plan to show the correct location of dust gauge DG18 (**Action Plan Item 9**).

#### 2.6.3 Material track out

Condition O3.3 of EPL 11455 requires all sealed and unsealed surfaces at the IMF must be managed to minimise the quantity of wind-blown dust emissions. Condition O6.22 of EPL 11436, Condition O5.1 of EPL 11455 and Condition 67 of Development Consent 31-02-99 require that vehicles leaving the IMF and Bioreactor must not track materials to external surfaces. No material tracking or wind-blown dust emissions were observed during the Audit site visit in March 2018.

In October 2016, the DPE issued a penalty notice to Veolia in relation to tracking of materials observed by the DPE in July 2016. The penalty notice was issued during the current Audit period; however, it is noted that the incident occurred during the previous audit period and is not considered to be a non-compliance in the current Audit period. Improvements to the wheel wash since the last IEA were discussed during the site visit.

#### 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. Veolia has a container maintenance quality assurance program and improvements are ongoing. Evidence of leaking containers was not observed during the Audit site visit.

The Emergency Response Plan includes sections on spill response. While waste is identified as a potential source of spills, the plan does not specifically address the clean-up of spilt waste.

**Recommendation:** Improve measures for the clean-up of a putrescible waste spill in the Emergency Response Plan (**Action Plan Item 6**).

#### 2.6.5 Rail Movements

Condition 20 of Schedule 5 of Approval 10\_0012 requires that 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. Two trains per day are sent from Sydney; however, to facilitate movements into IMF without impacting on rail traffic on the main line, Pacific National and Country Regional Network recommended that the second train be split into two shuttles at Goulburn. The return of this train to Sydney is in one movement from the IMF. Therefore, there are five movements per day in total at the IMF, although there are no additional waste containers and no noise complaints have been received at the facility. Following the completion of the Tarago rail upgrade works, it will be not be necessary to split the second train at Goulburn. The Tarago rail upgrade works are subject to a ministerial approval.

**Non-compliance:** Five train movements per day at the IMF does not comply with the condition.

**Recommendation:** Clarify with the DPE whether approval is required for continued splitting of the second train each day at Goulburn into two movements to the IMF until the Tarago rail upgrade works are complete (**Action Plan Item 1**).

#### 2.6.6 Traffic management

Traffic management has not been identified as significant issue for the site. The 2016 LEMP (as approved by DPE) includes details on the routes to be taken by heavy vehicles, travel routes are communicated to the drivers and vehicles are tracked via GPS.

#### 2.6.7 Barrier System and Groundwater Quality

The leachate barrier systems are described in the 2016 Leachate Management Plan approved by the DPE. Where joint fractures and drill holes require sealing, the 2004 Barrier System and

Quality Assurance Plan (BSQAP) is referred to. The Auditors note that the overarching 2016 LEMP refers to a series of other documents in relation to the barrier system.

**Recommendation:** References in the overarching 2016 LEMP to the Bioreactor barrier system and the 2004 BSQAP should be simplified (**Action Plan Item 8**).

2.6.8 Surface water quality

Surface water management is documented in the Soil and Water Management Plan. The Bioreactor site is designed as a zero discharge site, with all storm water and leachate collected and stored in evaporation dams.

Surface and storm water run-off at the IMF collected via a first flush system. Water quality testing is completed following rainfall events and prior to discharge to Mulwaree River. If polluted, water is pumped from the first flush retention basin for disposal at the Bioreactor. Surface water monitoring frequency was not achieved for some monitoring points in the 2016/17 reporting period due to insufficient flow.

2.6.9 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.

2.6.10 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 environmental practices for the site are adequate. Compliance with the offensive odour conditions at the Bioreactor has not been verified; however, it is noted that odour complaints received in the 2016/17 reporting period have reduced compared to the previous two reporting periods and Veolia is currently implementing its long term leachate management strategy.

Three non-compliances have been identified, as follows:


- At present, there are technically five train movement per day at the IMF as the second train from Sydney is split into two shuttles at Goulburn (**Action Plan Item 1**).
- Monitoring frequency at Bioreactor monitoring point 44 was not achieved as the point was decommissioned in the latest reporting period. This is being addressed through an application to modify EPL 11436 (**Action Plan Item 3**).
- A consultant's investigation into the integrity of the ED1 and ED2 liners was submitted after the due date and the EPA issued Veolia with a Penalty Infringement Notice for contravening a condition of the EPL 11436 (**No further action required**).

The following administrative non-compliance was identified during the Audit:

- At the time of the site visit, membership of the community liaison committee had not been endorsed by the DPE. A draft recommendation to verify that all members of the CLC had been endorsed by the DPE was completed on 22 May 2018 (**Action Plan Item 2**).

The following recommendations are made in response to observations during the Audit:

- Consider changes to the IOA scope to allow for a more quantitative assessment of offensive odour impacts in the community, through dispersion modelling, complaints analysis, etc. (**Action Plan Item 4**).
- Consider whether a new Environmental Management Representative based at the Woodlawn site should be appointed (**Action Plan Item 5**).
- Improve measures for the clean-up of a putrescible waste spill in the Emergency Response Plan (**Action Plan Item 6**).
- Ensure that average flare residence time is correctly reported in the AEMR and Annual Return and also provide the lowest and highest values (**Action Plan Item 7**).
- References in the overarching 2016 LEMP to the Bioreactor barrier system and the 2004 BSQAP should be simplified (**Action Plan Item 8**).
- Update the IMF EMP plan to show the correct location of dust gauge DG18 (**Action Plan Item 9**).
- It will be necessary to modify the EPL before receiving over 50,000 tpa of putrescible regional waste by road (**Action Plan Item 10**).
- The licence should be modified to permit leachate to be received from the Banksmeadow Intermodal Facility as well as the Clyde Intermodal Facility (**Action Plan Item 11**).

INDEPENDENT AUDIT CERTIFICATION	
Development Name	Woodlawn Bioreactor and Crisps Creek Intermodal Facility
Development Consent No.	Project Approval 10_0012 & Development Consent 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 Facility
<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 PO Box 560, North Sydney NSW 2060
Email Address	vsedwick@ramboll.com
Auditor Certification	Exemplar Global Lead Auditor Accreditation No.13180
Date:	6 June 2018

## 5. COMPLIANCE ASSESSMENT TABLES

Table 1: Compliance Assessment Criteria	
Assessment	Criteria
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 Project Approval 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.	Compliant	Measures to prevent and/or minimise harm to the environment are outlined in the 2016 Landfill Environmental Management Plan (LEMP). 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>TERMS OF APPROVAL</b>		
3.2	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); (d) Modification Application MP 10 0012 MOD 1; (e) Modification Application MP 10 0012 MOD 2; and (e) conditions of this approval.	Observation	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. Compliance with these requirements are audited under specific conditions below.
3.3	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.	Noted	

<b>Table 3: Conditions of Project Approval 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
3.4	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.	Noted	
	<b>LIMITS OF APPROVAL</b>		
	<b>Woodlawn Bioreactor</b>		
3.5	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. <i>Refer to table in Approval</i>	Compliant	Weighbridge records reviewed for period January to December 2017 confirm input rates were not exceeded. Landfill commenced receiving residual waste from AWT (MBT) in March 2017.
3.6	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: <ul style="list-style-type: none"> <li>would result in a net environmental benefit, including but not limited to: <ul style="list-style-type: none"> <li>- the permanent closure of a smaller municipal landfill facility with poor environmental performance;</li> </ul> </li> <li>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</li> <li>would not significantly impact on the capacity of the Landfill and its primary purpose to accept waste from Sydney.</li> </ul> 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.	Not triggered	Currently receiving approximately 45,000 tpa of regional waste by road. Veolia has written to the DPE in accordance with the condition requesting approval to increase the limit to 95,000 tpa.
3.7	In any event, no more than 1.13 million tpa of waste shall be accepted at the Landfill.	Compliant	Weighbridge records reviewed for period January to December 2017 confirm input rates were not exceeded.

<b>Table 3: Conditions of Project Approval 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	<b>Crisps Creek IMF</b>		
3.8	The Proponent shall not exceed the annual throughput rates in Table 2 for the Crisps Creek IMF. <i>Refer to table in Approval</i>	Compliant	Weighbridge records were reviewed for period January to December 2017.
	<b>STRUCTURAL ADEQUACY</b>		
3.9	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.	Compliant	Construction of the Leachate Treatment Plant is in progress. A Construction Certificate has been issued by the Principal Certifying Authority.
	<b>TRANSITIONAL ARRANGEMENTS</b>		
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.	Noted	
3.11	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.	Noted	
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.	Compliant	The updated 2016 LEMP was approved by the DPE by letter dated 9 September 2016
	<b>DEMOLITION</b>		
3.13	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.	Not triggered.	No demolition works have been undertaken under this approval.
	<b>OPERATION OF PLANT AND EQUIPMENT</b>		
3.14	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.	Compliant	Veolia's maintenance schedule and records and the training and competency records for operators were viewed onsite.

Table 3: Conditions of Project Approval 10_0012			
Condition		Compliant	Comments
	<b>STAGED SUBMISSION OF PLANS OR PROGRAMS</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	<p>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&amp;A Act or EP&amp;A Regulation. Where any exceedance of these criteria and/or performance measures has occurred, the Proponent must, at the earliest opportunity:</p> <ul style="list-style-type: none"> <li>a) take all reasonable and feasible steps to bring the operation back into compliance;</li> <li>b) ensure that the exceedance does not recur;</li> <li>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</li> <li>d) implement remediation and prevention measures as directed by the Director-General, to the satisfaction of the Director-General.</li> </ul>	Observation	One non-compliance and one administrative non-compliance with the requirements of Schedules 3, 4, 5 and 6 have been identified as further outlined in this table.

Table 3: Conditions of Project Approval 10_0012			
Condition		Compliant	Comments
SCHEDULE 4. SPECIFIC ENVIRONMENTAL CONDITIONS – LANDFILL SITE			
	<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. Waste is only received from Veolia's Sydney waste transfer 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. Signage has been erected at the entry to the Facility confirming what waste types are not to be received at the Facility.
	<b>Cover Material</b>		
4.2	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.	Not verified	Veolia advised that fresh clay is sourced from within the Facility for use as daily cover. The Auditors did not verify the source of daily cover; however, the Auditors have no reason to believe the condition is not being met. Veolia has undertaken successful trials using a polymer seal; however, the EPA has not approved this material for ongoing use.

Table 3: Conditions of Project Approval 10_0012			
Condition		Compliant	Comments
	<b>Litter Control</b>		
4.3	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.	Compliant	The Facility is maintained in good condition, with no litter observed beyond the landfill during the site visit.  A mesh fence has been installed around the landfill. Veolia personnel undertake daily inspections of the Facility. In addition, formal weekly and monthly inspections are undertaken.
	<b>AIR</b>		
	<b>Landfill Gas Limits – Woodlawn Bioreactor</b>		
4.4	The Proponent shall ensure that landfill gas engine (LGE) emissions at the Bioreactor comply with the requirements of the <i>POEO (Clean Air) Regulation 2010</i> .	Compliant	Results of 2017 annual monitoring of emissions by a NATA accredited laboratory show compliance with POEO Clean Air Regulation limits for NO <sub>x</sub> , SO <sub>3</sub> , VOCs and H <sub>2</sub> S.
	<b>Greenhouse Gas</b>		
4.5	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	Compliant	Energy saving and GHG mitigation measures are outlined in the 2016 LEMP. 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. Veolia is considering installation of a 2.5MW solar facility to provide power to the site (zero export).
	<b>Odour</b>		
	<b>Discharge Limits</b>		
4.6	The Proponent shall not cause or permit the emission of offensive odours from the site, as defined under Section 129 of the POEO Act.	Not verified	The Auditors did not note the presence of offensive odour either within Tarago village; at the IMF or at the entry to the Woodlawn site. The Auditors acknowledge that conditions may have been favourable on the day of the site visit. All

<b>Table 3: Conditions of Project Approval 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
			complaints received at the site relate to odour. The Auditors note there was a reduction in complaints in 2017 compared to prior years.
	<b>Independent Odour Audit</b>		
4.7	<p>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:</p> <p>(a) consult with OEH and the Department;</p> <p>(b) audit the effectiveness of the odour controls on site in regard to protecting receivers against offensive odour;</p> <p>(c) review the Proponent's production data (that are relevant to the odour audit) and complaint records;</p> <p>(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;</p> <p>(e) measure all key odour sources on site including:</p> <p>i. consideration of wet weather conditions providing all raw sampling data used in this analysis;</p> <p>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</p> <p>iii. a comparison of the results of these measurements against the predictions in the EA;</p> <p>(f) determine whether the project is complying with the requirements in this approval to protect receivers against offensive odour;</p> <p>(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</p> <p>(h) recommend and prioritise (mandatory and non-mandatory) recommendations for their implementation.</p>	Observation	<p>There have been two independent odour audits (IOA) since the 2016 IEA. The 2017 IOA was conducted in early 2017, approximately 16 months after the previous (2015) IOA. The 2018 IOA was conducted in early 2018, 12 months after the 2017 IOA.</p> <p>The IOA reports generally comply with the approval conditions; however, the Auditors observe that there are opportunities to improve how IOAs address the requirements to audit the effectiveness of the odour controls on-site in regard to protecting receivers against offensive odour and to assess whether the project is complying with the requirements in the approval to protect receivers against offensive odour. This is based on the following observations:</p> <ul style="list-style-type: none"> <li>• The focus of the IOAs is on measurement of emissions at source, as required by the condition, but does not link this to impacts at offsite receivers.</li> <li>• No dispersion modelling is presented to determine the impact of odour emissions on offsite receivers.</li> <li>• The IOAs do not provide a detailed complaints analysis, to verify/validate odour complaints during the audit period. The 2018 IOA recommends (in Section 8.3.2) that Veolia</li> </ul>

Table 3: Conditions of Project Approval 10_0012			
Condition		Compliant	Comments
			<p>refines their investigation of odour issues in the community; however the Auditors note that the IOA should inform this.</p> <ul style="list-style-type: none"> <li>In the 2018 IOA, the reduced complaints are attributed to an increase in landfill gas capture rates compared to the previous year and improved leachate management, although this is described from a qualitative viewpoint.</li> <li>The assessment of the effectiveness of odour controls in the IOA is limited to a comparison of odour emissions from the previous odour audit and odour emissions used in the EA modelling. Although this is a requirement of the condition, it does not audit the effectiveness in protecting receivers against offensive odour.</li> </ul>
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	The Auditors sighted a letter to the DPE accompanying submission of the 2017 IOA. The condition has not been triggered for the 2018 IOA.
4.10	Unless otherwise directed by the Secretary, the Proponent shall implement all the mandatory odour controls and recommendations of any Independent Odour Audit/s. Recommendations of the preceding Independent Odour Audit/s 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. A leachate treatment plant is currently under construction.



Table 3: Conditions of Project Approval 10_0012			
Condition		Compliant	Comments
	<b>Dust Limits</b>		
4.11	<p>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.</p> <p><i>Refer to table in Approval</i></p>	Not verified	<p>The Auditors did not observe dust being generated at the bioreactor site during the site visit. Dust deposition monitoring was reviewed for the 2016-17 reporting period at four locations on Veolia properties: DG22 and DG24 (Woodlawn), DG28 (Pylara) and DG18 (IMF). The annual average dust deposition complied with the criteria at all locations. Veolia no longer routinely monitors for PM<sub>10</sub> or TSP; however, monitoring was undertaken for over four months from November 2016 to February 2017 and results were within criteria. The Auditors have no reason to believe that dust criteria are exceeded at any private residential receiver.</p>

<b>Table 3: Conditions of Project Approval 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	<b>Air Quality Monitoring, Management and Validation</b>		
4.12	<p>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:</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) 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;</li> <li>(d) include a program for monitoring the air quality impacts of the project, in particular: <ul style="list-style-type: none"> <li>• LGE specifications and monitoring of LGE emissions against the requirements of the <i>POEO (Clean Air) Regulation 2010</i> including measures that would be taken to ensure compliance with this regulation;</li> </ul> </li> <li>(e) be revised to consider mandatory odour controls and recommendations of any Independent Odour Audit required by this approval; and</li> <li>(f) detail the remedial actions to be taken in the event that a non-compliance is identified.</li> </ul> <p>This plan must be documented in the Landfill EMP (see condition 3 in schedule 7).</p>	Compliant	The DPE has approved the April 2016 revision of the Air Quality and Greenhouse Gas Management Plan.
	<b>SOIL AND WATER</b>		
	<b>Pollution of Waters</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.
	<b>Soil</b>		
4.14	<p>The Proponent shall:</p> <ul style="list-style-type: none"> <li>(a) minimise any soil loss through erosion on site;</li> <li>(b) where possible, set aside any topsoil won on site for the proposed revegetation and rehabilitation of the site; and</li> </ul>	Compliant	These measures are undertaken with implementation of the Soil and Water Management Plan.

<b>Table 3: Conditions of Project Approval 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	(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.		
	<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 OEH's 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 separate 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> .	Compliant	The Auditors observed erosion and sediment control measures in place for construction of the Leachate Treatment Plant.
	<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 Secretary. This plan must: (a) be prepared in consultation with EPA, Water NSW and DPI-Water by a suitably qualified and experienced expert whose appointment has been endorsed by the Secretary; (b) be approved by the Secretary prior to the commencement of expanded operations; (c) must specifically consider soil and water management (including leachate management) at the Landfill and ED3N, ED3S, ED3S-S, ED2, coffer dams and ED1; (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).	Compliant	DPE has approved the June 2017 revision of the Soil and Water Management Plan.

<b>Table 3: Conditions of Project Approval 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
4.17 A	The Proponent shall update the Soil and Water Management Plan for the landfill by including the proposed changes to water and leachate management in MOD 1 and MOD2. The Plan shall be prepared in accordance with the requirements of Condition 17, in consultation with Water NSW and the EPA to the satisfaction of the Secretary. Prior to operation of the LTP or as otherwise agreed by the Secretary, the Proponent must submit a Soil and Water Management Plan to the satisfaction of the Secretary.	Compliant	DPE has approved the June 2017 revision of the Soil and Water Management Plan. The condition in relation to operation of the LTP has not been triggered as operation of the LTP has not commenced.
	<b>Leachate Management</b>		
4.18	<p>The Proponent shall prepare and implement a Leachate Management Plan for the Landfill to the satisfaction of the Secretary. This plan must:</p> <ul style="list-style-type: none"> <li>(a) be prepared in consultation with EPA, Water NSW and DPI-Water by a suitably qualified and experienced expert whose appointment has been endorsed by the Secretary;</li> <li>(b) be approved by Secretary prior to the commencement of expanded operations;</li> <li>(c) describe in the detail the leachate barrier system installed on site;</li> <li>(d) detail measures to collect and store all leachate generated by the landfill;</li> <li>(e) detail measures to prevent leachate from escaping to surface water, groundwater or the surrounding subsoils;</li> <li>(f) ensure all surface water from areas not subject to waste disposal or leachate disposal is directed away from the leachate management system;</li> <li>(g) treat all water that has entered areas filled with waste, or been contaminated by leachate, as leachate;</li> <li>(h) detail the management measures for the LTP, pipeline and coffer dam(s); and</li> <li>(i) detail how the LTP would be managed during an emergency or system failure.</li> </ul> <p>This plan must be documented in the Landfill EMP (see condition 3 in schedule 7).</p>	Compliant	DPE has approved the March 2017 revision of the Leachate Management Plan.
4.18 A	The Proponent shall update the Leachate Management Plan for the landfill by including the proposed changes to water and leachate management in MOD 1 and MOD2. The Plan shall be prepared in accordance with the requirements of Condition 18, in consultation with Water NSW and the EPA to the satisfaction of the Secretary. Prior to operation of the LTP or as otherwise agreed by the Secretary, the Proponent must submit a revised Leachate Management Plan to the satisfaction of the Secretary.	Not triggered	Operation of the LTP has not commenced.

<b>Table 3: Conditions of Project Approval 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	<b>Coffer Dam(s)</b>		
4.18 AA	Should any additional coffer dams in ED1 be required, the Applicant must submit revised management plans in accordance with conditions 17 and 18 to the satisfaction of the Secretary prior to any treated leachate being discharged to the coffer dams. The plans must be prepared in consultation with the EPA and Water NSW and be documented in the Landfill EMP.	Not triggered	
4.18 B	<p>The Proponent must develop and implement a Longterm Leachate Management Strategy that:</p> <ul style="list-style-type: none"> <li>Minimises the generation of leachate at the premises;</li> <li>Captures, treats and disposes of all leachate generated at the premises;</li> <li>Maintains leachate levels in the waste mass to a level that does not inhibit the efficiency of the landfill gas extraction system;</li> <li>Progressively removes all treated leachate from ED3: and</li> <li>Minimises the emission of offensive odours from leachate treated and stored onsite so there is no offsite impact.</li> </ul> <p>The Longterm Leachate Management Strategy must be submitted to the Secretary and the EPA (for inclusion as a Pollution Reduction Program attached to environment protection licence 11436) for approval within two months of the approval date of MOD 1.</p>	Compliant	The EPA approved the long-term strategy in September 2016 and a Pollution Reduction Program has been attached to environment protection licence 11436. The strategy has been incorporated into the 2016 LEMP which has been approved by the DPE.
4.18 C	Treated leachate must not be discharged to any part of ED3S, other than ED3S-S, until such time as the Longterm Leachate Management Strategy has been approved by the Secretary and the EPA.	Compliant	
4.18 D	Seepage or leakage points in ED2 must be identified and repaired to the satisfaction of the Secretary and EPA prior to the transfer of any stormwater from ED3S to ED2.	Not triggered	Veolia commissioned AECOM to carry out the integrity assessment of ED1 and ED2. The AECOM report was provided to the EPA and Department of Planning. At present, ED2 is used only by Heron Resources. Veolia has advised that the Ecological Risk Assessment recommended by AECOM report will be conducted and jointly managed by Heron and Veolia given the overlapping responsibilities for overall site water management.

<b>Table 3: Conditions of Project Approval 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
4.18 E	The Longterm Leachate Management Strategy must be operational no later than 30 September 2018 or as otherwise agreed by the Secretary.	Not triggered	The Leachate Treatment Plant is currently under construction.
	<b>Leachate Treatment Plant</b>		
4.18 F	The Proponent must construct the Leachate Treatment Plant (LTP) and associated infrastructure in accordance with the Construction Environment Management Plan prepared by Veolia dated 12 December 2017.	Not verified	The auditors have no reason to believe the condition is not being met.
4.18 G	All run-off during construction must be contained on the site, no discharges off-site are permitted.	Compliant	
4.18 H	The LTP must be: (a) capable of processing at least 4 litres per second of leachate; and (b) bunded to contain 110 % of the facilities largest sized tank.	Not triggered	The LTP is under construction. The Auditors understand the LTP has been designed to comply with the condition.
4.18 I	The sludge skip bin must be bunded and covered to prevent contaminants entering surface water.	Not triggered	
	<b>Coffer Dam(s)</b>		
4.18 J	Treated leachate must not be discharged to any part of ED1, other than within lined coffer dam(s).	Not triggered	
4.18 K	The coffer dam(s) in ED1 must be designed and constructed: (a) by a suitably qualified and experienced person(s); (b) based on a geotechnical investigation and any recommendations prepared by a suitable qualified person(s); and (c) ensuring that all coffer dams are lined with a High Density Polyethylene liner to the satisfaction of the EPA and in consultation with Water NSW.	Not triggered	
4.18 L	The Proponent must provide works-as-executed drawings signed by a registered surveyor demonstrating that the coffer dam(s) have been constructed in accordance with the design required by Condition 18K. The Proponent must submit the works-as-executed drawings to the EPA, Water NSW and Secretary prior to the discharge of treated leachate into the coffer dam(s).	Not triggered	

<b>Table 3: Conditions of Project Approval 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
4.18 M	Prior to the discharge of treated leachate into any coffer dam(s) in ED1, the Proponent must confirm in writing and provide a quality assurance report to the EPA, Water NSW and the Secretary that the High Density Polyethylene dam lining has been adequately installed. From the commencement of discharge of treated leachate into the coffer dam(s), the Proponent shall provide quarterly updates to the EPA, Water NSW and the Secretary of the leachate volume in the coffer dam(s) and the remaining leachate storage volume.	Not triggered	
4.18 N	Prior to the discharge of treated leachate to any coffer dam(s), the Proponent must install a leak detection system which monitors flows along all pipelines which carry leachate. Any leaks must be investigated, contained and rectified.	Not triggered	
4.18 O	Only treated leachate from the LTP is permitted to be stored within coffer dam(s) in ED1 unless otherwise agreed to by the Secretary.	Not triggered	
4.18 P	The coffer dam(s) are not permitted to exceed 80 per cent capacity until either:  (a) a new coffer dam has been designed and constructed in accordance with condition 18K to 18N and is ready to accept treated leachate from the LTP and a revised management plan has been submitted to the satisfaction of the Secretary in accordance with Condition 17 and 18; or  (b) sections of ED3N have been emptied of partially treated leachate, had its liner assessed and, if necessary, repaired, and is capable of receiving treated leachate from the LTP.	Not triggered	
4.18 Q	No interaction between the treated leachate in the coffer dam(s) and the mine stormwater in ED1 is permitted.	Not triggered	
4.18 R	Within six months of commissioning the LTP and annually thereafter, unless otherwise agreed to by the Secretary, the Proponent shall commission and pay the full cost of an independent assessment of the leachate and water management system. This audit must be conducted by a suitably qualified, experienced and independent expert whose appointment has been endorsed by the Secretary. During the audit, this expert must:  (a) consult with the EPA, Water NSW and the Secretary; (b) assess actual performance against the assumptions and predictions made in the project water balance prepared by WSP dated September	Not triggered	

<b>Table 3: Conditions of Project Approval 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	2017. This must include: <ul style="list-style-type: none"> <li>(i) actual versus predicted inputs and outputs into and out of each dam;</li> <li>(ii) actual versus predicted mechanical evaporation from each dam;</li> <li>(iii) actual versus predicted rainfall and evaporation; and</li> <li>(iv) the actual versus predicted volume of water or treated leachate stored in each dam.</li> </ul> (c) assess actual versus predicted performance of the LTP. This must include: <ul style="list-style-type: none"> <li>(i) actual versus target effluent quality; and</li> <li>(ii) actual versus target throughput.</li> </ul> (d) determine whether the leachate and water management system is achieving its intended objectives; and		
	<b>ED1</b>		
4.18 S	The volume of mine water stored in ED1 must be no more than 10 ML by 31 December 2023.	Not triggered	
	<b>ED3N</b>		
4.18 T	ED3N must be emptied of effluent from the existing leachate system by 31 December 2022.	Not triggered	
4.18 U	Prior to discharging treated leachate into sections of ED3N from the LTP, the Proponent must verify the integrity of the dam and prepare an integrity assessment of the ED3N liner to demonstrate the dam is not leaking and is suitable for the storage of treated leachate.	Not triggered	
4.18 V	Should the integrity assessment identified in Condition 18U find that the liner in ED3N is not adequate for treated leachate storage, the Proponent must submit management options to the Secretary, Water NSW and the EPA which will be adopted to rectify any integrity issues.	Not triggered	
4.18 W	The Proponent must not store treated leachate from the LTP in ED3N until the Secretary and the EPA are satisfied that either ED3N is not leaking or the management options identified in Condition 18V are acceptable.	Not triggered	



<b>Table 3: Conditions of Project Approval 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	<b>NOISE</b>		
	<b>Limits</b>		
4.19	<p>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.</p> <p><i>Refer to table in Approval</i></p> <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>	Not verified	The original 2004 Noise Management Protocol included a monitoring protocol. Under the 2016 Noise Monitoring and Management Plan, monitoring is undertaken in response to a complaint; or to issue noise level checks on any new (untested) items. No noise complaints have been received at the Facility. The Auditors have no reason to believe the condition is not being met.
	<b>Operating Hours</b>		
4.20	<p>The Proponent shall comply with the operating hours in Table 7 for the site, unless otherwise agreed in writing by the EPA.</p> <p><i>Refer to table in Approval (MOD2)</i></p>	Compliant	Veolia advised that operations are generally restricted to 6:00am to 5:00pm.
	<b>Monitoring and Management</b>		
4.21	<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>	Compliant	DPE has approved the June 2016 revision of the Noise Monitoring and Management Plan.

<b>Table 3: Conditions of Project Approval 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	This plan must be documented in the Landfill EMP (see condition 3 in schedule 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	Siting of the existing meteorological station does not meet the requirements of the relevant Australian Standard, in terms of separation distance to the nearest trees; however, the Auditors consider that the existing trees would probably have a small or minimal effect on the recorded wind conditions. The 2016 IEA recommended consideration of an alternative or additional location and suggested a location on the Pylara property would assist in understanding the non-steady state nature of local dispersion and inform the investigation of community complaints. Veolia has obtained advice from the supplier, Hydrometric, that the current location is acceptable and is probably as good as any location on the site. It is not clear if the supplier considered the Pylara property when giving this advice.
	<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 OEHL 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;	Compliant	DPE has approved the August 2016 revision of the Landscape and Vegetation Management Plan.

<b>Table 3: Conditions of Project Approval 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	<p>(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;</p> <p>(e) describe the on-going maintenance regime for rehabilitation and vegetation management in the rehabilitation area/s.</p> <p>This plan must be documented in the Landfill EMP (see condition 3 in schedule 7).</p>		
	<b>Pest, Vermin &amp; Noxious Weed Management</b>		
4.24	<p>The Proponent shall:</p> <p>(a) implement suitable measures to manage pests, vermin and declared noxious weeds on site; and</p> <p>(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.</p> <p><i>Note: For the purposes of this condition, noxious weeds are those species subject to an order declared under the Noxious Weed Act 1993.</i></p> <p>These measures must be documented in the Landfill EMP (see condition 3 in schedule 7).</p>	Compliant	The Landscape and Vegetation Management Plan includes pest and weed management measures and a description of the monitoring program.
	<b>FIRE AND EMERGENCY MANAGEMENT</b>		
4.25	<p>The Proponent shall prepare and implement a Fire and Emergency Management Plan for the Landfill. This plan must:</p> <p>(a) be prepared by a suitably qualified and experienced expert;</p> <p>(b) be approved by the Secretary prior to the commencement of expanded operations;</p> <p>(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);</p> <p>(d) identify strategies to contain and minimise the effects of any threats to the environment and public health such as (but not limited to);</p> <ul style="list-style-type: none"> <li>- measures to minimise the risk of fire on site, including in the landfill area;</li> <li>- actions to extinguish any fires on site promptly;</li> <li>- measures to ensure adequate fire-fighting capacity on site, including a fire fighting tanker; and</li> </ul>	Compliant	DPE has approved the January 2017 revision of the Emergency Response Plan.

<b>Table 3: Conditions of Project Approval 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	<p>(e) detail a communication strategy for notifying the relevant government agencies and potentially affected community in the event of an emergency;</p> <p>(f) address any chemical storage required to operate the LTP and be consistent with the DPE's HIPAP No.1, 'Emergency Planning'.</p> <p>This plan must be documented in the Landfill EMP (see condition 3 in schedule 7). Prior to operation of the LTP, the Fire and Emergency Management Plan must be revised and approved by the Secretary.</p>		
4.25 A	<p>A comprehensive Safety Management System, covering all on-site operations and associated transport activities involving hazardous materials. Records from the Safety Management System must be kept on-site and must be available for inspection by the Secretary upon request. The Safety Management System shall be consistent with the Department of Planning and Environment's Hazardous Industry Planning Advisory Paper No. 9, 'Safety Management'.</p>	Not verified	Veolia operates a safety management system. The Auditors did not verify that the safety management system is consistent with Hazardous Industry Planning Advisory Paper No. 9, 'Safety Management'; however, the Auditors have no reason to believe the condition is not being met.
4.25 B	<p>The Applicant must store all chemicals in accordance with:</p> <p>(a) the requirements of all relevant Australian Standards; and</p> <p>(b) the NSW EPA's '<i>Storing and Handling of Liquids: Environmental Protection - Participants Handbook</i>' if the chemicals are liquids.</p> <p>In the event of an inconsistency between the requirements listed from (a) to (b) above, the most stringent requirement must prevail to the extent of the inconsistency.</p>	Compliant	
	<b>VISUAL AMENITY</b>		
	<b>Lighting</b>		
4.26	<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>	Not verified	Evidence that lighting complied with the Australian Standard was not available. However it is assumed that it was provided to allow operations to commence. Section 3.4.2.8 of the 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> ".

Table 3: Conditions of Project Approval 10_0012			
Condition		Compliant	Comments
			Given these measures and the distance to the nearest residences, it is considered unlikely that lighting at the facility would create a nuisance. No lighting complaints have been received. The Auditors have no reason to believe that the condition has not been complied with.
	<b>SECURITY</b>		
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.	Compliant	Stock fencing was observed around the perimeter of the facility. A security gate was observed at the entrance to the facility. The front security gate is closed and locked at night when the site is unattended.
	<b>LANDFILL CLOSURE AND REHABILITATION</b>		
4.28	The Proponent shall prepare and implement a Closure Plan for the Landfill to the satisfaction of the Secretary. This plan must: (a) be prepared in consultation with the OEH, EPA, Water-NSW and other relevant agencies by suitably qualified and experienced experts whose appointment has been endorsed by the Secretary; (b) be submitted to the Secretary 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).	Compliant	DPE has approved the August 2016 revision of the Landfill Closure and Rehabilitation Management Plan.

<b>Table 3: Conditions of Project Approval 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
4.29	<p>The Proponent shall prepare and implement a Rehabilitation Management Plan for the Landfill to the satisfaction of the Secretary. This plan must:</p> <ul style="list-style-type: none"> <li>(a) be prepared in consultation with the OEH, EPA, Water-NSW and other relevant agencies by a suitably qualified and experienced expert;</li> <li>(b) be submitted to the Secretary for approval within six (6) months of the date of this approval;</li> <li>(c) be undertaken in a manner which is complementary with the rehabilitation of the Woodlawn mine site; and</li> <li>(d) must ensure rehabilitation of the site does not impede or limit the rehabilitation works on any part of the Woodlawn Mine site.</li> </ul> <p>This plan must be documented in the Landfill EMP (see condition 3 in schedule 7).</p>	Compliant	DPE has approved the August 2016 revision of the Landfill Closure and Rehabilitation Management Plan.
<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	The Proponent shall only receive waste on site that is authorised for receipt by an EPL.	Compliant	The Crisps Creek IMF only receives waste from Veolia's Clyde and Banksmeadow facilities. Control measures are in place at Clyde and Banksmeadow to ensure only authorised waste is transported to Crisps Creek.
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 is captured and diverted to a first flush system. Water quality monitoring is undertaken on a quarterly basis.
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.
	<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.	Compliant	A container maintenance quality assurance program is in place. No evidence of leaking

<b>Table 3: Conditions of Project Approval 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
			containers was 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. No litter was observed during the site visit. Veolia personnel undertake daily inspections of the facility.
	<b>Pest, Vermin &amp; Noxious Weed Management</b>		
5.6	<p>The Proponent shall:</p> <p>(a) implement suitable measures to manage pests, vermin and declared noxious weeds on site; and</p> <p>(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.</p> <p>These measures must be documented in the Crisps Creek IMF EMP (see condition 4 in schedule 7).</p> <p><i>Note: For the purposes of this condition, noxious weeds are those species subject to an order declared under the Noxious Weed Act 1993.</i></p>	Compliant	All waste handled at the IMF is fully containerised. The IMF is manned during active operations and larger pests will be identified quickly. Monthly inspections for small pests and noxious weeds (as part of the overall Monthly Environmental Inspection) are undertaken. The EMP notes that specific baiting or weeding will be undertaken as required.
	<b>AIR</b>		
	<b>Greenhouse Gas</b>		
5.7	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	Compliant	Greenhouse gas emissions are addressed in the EMP.
	<b>Odour</b>		
	<b>Discharge Limits</b>		
5.8	The Proponent shall not cause or permit the emission of offensive odours from the site, as defined under Section 129 of the POEO Act.	Compliant	The Auditors did not note the presence of offensive odour either within Tarago village or at

Table 3: Conditions of Project Approval 10_0012			
Condition		Compliant	Comments
			the IMF site. The 2017 and 2018 IOAs classified the IMF as a very low risk source in terms of odour and noted there are "virtually no active pathways for odour emission release from this operation that can be practically measured." No odour complaints were received in relation to the IMF during the 2016-17 reporting period.
	<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 2017 and 2018 IOAs included a discussion 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	
	<b>Wastewater Management</b>		
5.11	The Proponent shall ensure that there is no vehicle or container wash down at the Crisps Creek IMF.	Compliant	No evidence of wash down or wash down facilities were observed during the audit site visit. Containers would be washed at the bioreactor facility if required, e.g. to perform maintenance.
5.12	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 <i>Water Industry Competition Act 2006</i> , 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 <i>Environmental Guidelines Use of Effluent by Irrigation</i> (DECC) and the Australian guidelines for water recycling: <i>managing health and environmental risks (phase1) – 2006</i> .	Note	This condition has been audited previously and is not relevant to the current Audit period.
	<b>Bunding</b>		
5.13	The Proponent shall store all chemicals, fuels and oils used on site in appropriately bunded areas, with impervious flooring and sufficient capacity to	Compliant	



<b>Table 3: Conditions of Project Approval 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	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: <i>Technical Bulletin Bunding and Spill Management</i> .		
	<b>Erosion and Sediment Control</b>		
5.14	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 <i>Managing Urban Stormwater: Soils and Construction</i> guideline.	Note	This condition has been audited previously and is not relevant to the current Audit period.
	<b>NOISE</b>		
	<b>Limits</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	For current operations, noise monitoring is not routinely undertaken. Monitoring may be undertaken in response to a complaint. No noise complaints have been received at the IMF.
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	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 approved by DPE and includes a number of measures that would control noise generation. Train noise monitoring is not routinely undertaken at the IMF. Monitoring may be undertaken in response to a complaint. No noise complaints have been received by Veolia in relation to train noise at the IMF.
	<b>Operating Hours</b>		
5.17	The Proponent shall comply with the operating hours in Table 9 for the site, unless otherwise agreed in writing by the EPA.	Compliant	Veolia advised that operations are generally restricted to 6:00am to 5:00pm.

Table 3: Conditions of Project Approval 10_0012			
Condition		Compliant	Comments
	<i>Refer to table in Approval (MOD2)</i>		
	<b>VISUAL AMENITY</b>		
	<b>Lighting</b>		
5.18	The Proponent shall ensure that the lighting associated with the project: (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.	Not verified	Evidence that lighting complied with the Australian Standard was not available. However it is assumed that compliance was achieved to allow operations to commence. Furthermore, with 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 complaints have been received in relation to lighting. The Auditors have no reason to believe that the condition has not been complied with.
	<b>SECURITY</b>		
5.19	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.	Compliant	Stock fencing was observed around the perimeter of the facility. A security gate was observed at the entrance to the IMF.  Veolia advised that the front security gate is closed and locked at night when the site is unattended.
	<b>RAIL TRAFFIC</b>		
5.20	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.	Non-compliant	Two trains per day are sent from Sydney; however, to facilitate movements into IMF without impacting on rail traffic on the main line, the second train is split into two shuttles at Goulburn. The return of this train to Sydney is in one movement from the IMF. Therefore, there are technically five movements per day at the IMF,

<b>Table 3: Conditions of Project Approval 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
			although there are no additional waste containers and no noise complaints have been received at the facility.
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.	Note	This condition has been audited previously and is not relevant to the current Audit period.
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 approved by the DPE.
<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 2016 IMF EMP includes the transport route to be used by heavy vehicles. The required route is also the quickest road access between the IMF and the facility. Vehicles are tracked via GPS via the Intelligent Access Program.
6.2	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.	Compliant	
	<b>Delivery of Regional Waste by Road</b>		
6.3	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.	Not verified	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 and includes information on

<b>Table 3: Conditions of Project Approval 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	<i>Note: this condition is linked to condition 6 in schedule 3.</i>		the required transport routes. The required routes are generally the quickest routes to the Facility from the surrounding major centres. The Auditors have no reason to believe this condition is not complied with.
	<b>Transport Code of Conduct</b>		
6.4	<p>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:</p> <p>(a) be prepared in consultation with the RMS, Goulburn Mulwaree Council, Palerang Council and the Community Liaison Committee, and be submitted to the Director-General for approval;</p> <p>(b) describe the measures to be implemented to:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> minimise the impacts of the project on the local and regional road network including traffic noise;</li> <li><input type="checkbox"/> 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;</li> <li><input type="checkbox"/> minimise conflicts with other road users e.g. school bus operators; and</li> </ul> <p>(c) include measures to ensure truck drivers are aware of the approved routes for the transport of waste by road.</p>	Not triggered	The facility has not yet received 50,000 tpa of regional waste by road. Veolia has written to the DPE requesting approval to increase the limit to 95,000 tpa. The Transport Code of Conduct will require updating and approval by the DPE prior to the 50,000 tpa threshold being exceeded.
	<b>ROAD UPGRADES</b>		
	<b><i>Palerang LGA</i></b>		
6.5	<p>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:</p> <p>(a) be prepared by a suitably independent and qualified expert whose appointment has been endorsed by the Director-General;</p> <p>(b) be prepared in consultation with Palerang Council and the RMS;</p> <p>(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</p>	Note	This condition has been audited previously and is not relevant to the current Audit period.

Table 3: Conditions of Project Approval 10_0012			
Condition		Compliant	Comments
	<p>(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>		
6.6	<p>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	The approach to implementation of the mandatory pavement and traffic management measures (including costs) has been agreed with the former Palerang Council (now Queanbeyan-Palerang Regional Council). These measures have not yet been implemented, as the threshold of 30,000 tpa of regional waste at the Landfill by road from the south of the intersection of Collector Road and Main Road 268 has not yet been reached.
6.7	<p>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> <p><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></p>	Not triggered	

Table 3: Conditions of Project Approval 10_0012			
Condition		Compliant	Comments
	<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 safety and the safety of the Proponent's truck drivers negotiating the right-hand turn into Collector Road;</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 <i>Austroads Guide to Road Design Part 3: Geometric Design</i> 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 verified	The Auditors understand that this assessment was undertaken by the Australian Road Research Board (ARRB) in 2013. The Auditors have not reviewed the ARBB assessment; however, the Auditors have no reason to believe this condition has not complied with.
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>	Noted	

<b>Table 3: Conditions of Project Approval 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 provides waste tonnages to the relevant Councils and the Councils calculate the contributions.
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 (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.</p> <p><i>Note: at any time either party may refer the matter to the Director-General for dispute resolution.</i></p>	Noted	
<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	Minutes of quarterly CLC meeting are available on the Veolia website. There is no longer a Supervisory Licensee (The POEO Act was amended in 2017 to repeal supervisory licences in respect of putrescible waste facilities).
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-General's endorsement.	<b>Administrative non-compliance</b>	The community liaison committee (CLC) continues to operate as required under Project Approval 10_0012; however, Veolia has not verified that all current members of the CLC have been endorsed by the DPE.

<b>Table 3: Conditions of Project Approval 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	<b>ENVIRONMENTAL MANAGEMENT</b>		
7.3	<p>The Proponent shall prepare and implement an Environmental Management Plan (EMP) for the Landfill to the satisfaction of the Director-General. This plan must:</p> <ul style="list-style-type: none"> <li>a) be submitted to the Director-General for approval prior to the commencement of expanded operations;</li> <li>b) be prepared in consultation with the OEH and other relevant agencies by a suitably qualified and experienced expert/s;</li> <li>c) provide the strategic framework for environmental management of the Landfill including all plans specified for inclusion in schedule 4;</li> <li>d) identify the statutory approvals that apply to the Landfill;</li> <li>e) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the Landfill;</li> <li>f) include procedures to keep the local community informed about the operation and environmental management of the Landfill;</li> <li>g) describe the procedure for stakeholder consultation and complaints handling; and</li> <li>h) include a clear plan depicting all the monitoring currently being carried out within and around the Landfill.</li> </ul>	Compliant	DPE has approved the April 2016 revision of the LEMP.
7.4	<p>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:</p> <ul style="list-style-type: none"> <li>a) be submitted to the Director-General for approval prior to the commencement of expanded operations;</li> <li>b) be prepared in consultation with the OEH and other relevant agencies by a suitably qualified and experienced expert/s;</li> <li>c) provide the strategic framework for environmental management of the Crisps Creek IMF including: <ul style="list-style-type: none"> <li>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;</li> <li>ii. noise management and monitoring protocols for evaluating compliance with the noise impact assessment criteria in this approval;</li> <li>iii. landscaping treatment at the Crisps Creek IMF to minimise visibility of the site from residences and public vantage points;</li> </ul> </li> </ul>	Compliant	The DPE has approved the September 2016 revision of the IMF EMP.



<b>Table 3: Conditions of Project Approval 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	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.		
	<b>Annual Environmental Management Review</b>		
7.5	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.	Compliant	
	<b>INDEPENDENT ENVIRONMENTAL AUDIT</b>		
7.6	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:	Compliant	This Independent Environmental Audit has been prepared to address Condition 7.6. The prior IEA was completed less than two years ago, in 2016;

<b>Table 3: Conditions of Project Approval 10_0012</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	<p>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;</p> <p>b) incorporate and consider the findings/mandatory recommendations of any Independent Odour Audit required by this approval.</p> <p>c) assess the environmental performance of the Project, and its effects on the surrounding environment;</p> <p>d) assess whether the Project is complying with the relevant standards, performance measures, and statutory requirements;</p> <p>e) review the adequacy of any strategy/plan/program required under this approval; and, if necessary,</p> <p>f) recommend measures or actions to improve the environmental performance of the Project, and/or any strategy/plan/program required under this approval.</p>		however, this was late. The timing of this Audit is to correct the three yearly cycle.
	<b>COMPLAINTS HANDLING PROCEDURE</b>		
7.7	<p>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:</p> <ul style="list-style-type: none"> <li>- a formal complaint/incident reporting procedure;</li> <li>- an investigation procedure; and</li> <li>- a complaint resolution procedure.</li> </ul> <p>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. <i>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.</i></p>	Observation	<p>The Woodlawn Eco Project Complaints Handling Procedure was implemented in 2016 (prior to which, complaints had been handled under a non-site specific Veolia procedure). The Auditors did not verify that the complaints handling procedure was prepared in consultation with the Department, Goulburn- Mulwaree Council, the EPA and the CLC; however, the DPE has approved the 2016 Complaints Handling Procedure and, according to the minutes, it was discussed at the February 2017 CLC meeting. The 2016 procedure says that the online complaints register is updated within 7 days at: <a href="http://www.veolia.com.au/nsw-monitoring-reports">http://www.veolia.com.au/nsw-monitoring-reports</a>. The Auditors note that neither the register nor a direct link to it can be found at this address; however, there is a link at this address to a Reports page at which the register can be found:</p>

Table 3: Conditions of Project Approval 10_0012			
Condition		Compliant	Comments
			<a href="http://www.veolia.com.au/media/media/reports">http://www.veolia.com.au/media/media/reports</a> . The register was up-to-date.
7.7A	The Proponent shall provide a report to the Secretary of the complaints received and the response/action taken and timeframe in accordance with Condition 7, on an annual basis which is to be submitted within the AEMR. The report shall include all the matters required within subsections of Condition 7.	Compliant	The 2017 AEMR included a summary of complaints and action taken as Appendix 5.
	<b>INCIDENT REPORTING</b>		
7.8	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.	Note	
	<b>Revision of Plans &amp; Programs</b>		
7.9	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. <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>	Note	
	<b>ACCESS TO INFORMATION</b>		
7.10	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;	Compliant	

Table 3: Conditions of Project Approval 10_0012			
Condition		Compliant	Comments
	e) report of the complaints and the response/action taken to resolve the complaint as required by Condition 7; f) a copy of the minutes of the Community Liaison Committee Meetings; and g) any other matter required by the Director-General.		

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	<b><i>Adherence to Terms of DA and EIS</i></b>		
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; d) the Amended DA and accompanying information prepared by Woodward-Clyde, dated 12 November 1999; e) Modification Application DA31-02-99 Mod1 and accompanying Environmental Assessment titled " <i>Modification to DA31-02-99 to Receive Regional Council Waste at the Woodlawn Bioreactor</i> ", prepared by Veolia Environmental Services, dated February 2010 and the associated 'Response to Submissions' prepared by Veolia Environmental Services dated 12 April 2010; f) Modification Application DA31-02-99 Mod2; and g) Modification Application DA31-02-99 Mod3.	Note	Compliance with conditions of this consent are assessed in this table. The Auditors note that several conditions of this consent are superseded by Project Approval 10_0012 and several others are duplicates of conditions Project Approval 10_0012.
	<b><i>Deferred Commencement</i></b>		
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.	Note	This condition has been audited previously and is not relevant to the current Audit period.
	<b><i>Duration of The Consent</i></b>		
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. <i>Note: Extension of further landfilling activities beyond 20 years would be subject to further approvals applicable at the time.</i>	Note	Operations commenced in September 2004 so this approval is valid until September 2024. The Auditors note that nothing in approval 10-0012 supersedes this condition and that further approval will be required to operate beyond 2024.

Table 4: Conditions of Development Consent 31-02-99																		
Condition		Compliant	Comments															
	<b><i>Input Rate Variations</i></b>																	
4	<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><tr><th>Years from date of operational commencement</th><th>Maximum Input Rate (Received by Rail from the Sydney region)</th><th>Maximum Input Rate (Received by Road from surrounding LGAs)</th></tr><tr><td>0-5</td><td>400,000 tpa</td><td>0</td></tr><tr><td>6-10</td><td>360,000 tpa</td><td>50,000 tpa</td></tr><tr><td>11-15</td><td>325,000 tpa</td><td>50,000 tpa</td></tr><tr><td>16-20</td><td>290,000 tpa</td><td>50,000 tpa</td></tr></table>	Years from date of operational commencement	Maximum Input Rate (Received by Rail from the Sydney region)	Maximum Input Rate (Received by Road from surrounding LGAs)	0-5	400,000 tpa	0	6-10	360,000 tpa	50,000 tpa	11-15	325,000 tpa	50,000 tpa	16-20	290,000 tpa	50,000 tpa	Note	Superseded by Approval 10_0012
Years from date of operational commencement	Maximum Input Rate (Received by Rail from the Sydney region)	Maximum Input Rate (Received by Road from surrounding LGAs)																
0-5	400,000 tpa	0																
6-10	360,000 tpa	50,000 tpa																
11-15	325,000 tpa	50,000 tpa																
16-20	290,000 tpa	50,000 tpa																
5	In any event, no more than 500,000 tonnes shall be landfilled at the site in any one year.	Note	Superseded by Approval 10_0012															
	<b><i>Compliance with Requirements of the Director-General and Prescribed Conditions</i></b>																	
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.	Note																
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.	Note	This condition has been audited previously and is not relevant to the current Audit period.															

<b>Table 4: Conditions of Development Consent 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	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.	Compliant	Operational measures are outlined in the LEMP and sub-plans. The updated 2016 LEMP has been approved by the DPE. In the Auditors opinion, Veolia has taken, and is taking, reasonable and practical measures to prevent and minimise harm to the environment as a result of operations of the facility. Post-closure and decommissioning requirements have not been triggered.
	<b><i>Structural Adequacy</i></b>		
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).	Note	This condition has been audited previously and is not relevant to the current Audit period.
	<b><i>Verification of Construction</i></b>		
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 c) retaining walls and columns; d) framing and roof structure; e) fire protection coverings to building elements required to comply with the BCA; and f) mechanical ventilation. The certificate/s shall demonstrate at what stage of construction inspections were undertaken.	Note	This condition has been audited previously and is not relevant to the current Audit period. Current building works for the LTP are covered under Table 3 for Approval 10-0012.

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	<b><i>Dispute Resolution</i></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	<b><i>Environmental Services</i></b> 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; c) be responsible for considering and advising on matters specified in the d) conditions of this consent and compliance with such matters; e) oversee the receipt of, and response to, complaints about the environmental performance of the project; f) 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 g) be present on-site during any critical construction or operational activities as defined in the relevant Landfill Environmental Management Plan (LEMP).	Observation	The appointed EMR is not currently based at the Woodlawn site.



Table 4: Conditions of Development Consent 31-02-99			
Condition		Compliant	Comments
	<b>Landfill Environmental Management Plan</b>		
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 <i>Environmental Guidelines: Solid Waste Landfills</i> . 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	This condition has been audited previously and is not relevant to the current Audit period.
14	<b>Licence Applications</b> 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 to 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)	Note	This condition has been audited previously and is not relevant to the current Audit period.
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. e) post closure management of Evaporation Dam No 3 (ED3); f) post closure leachate management, including the management of the g) bioreactor processes; h) post closure landfill gas management; i) post closure maintenance; and j) 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)	Compliant	DPE has approved the August 2016 revision of the Landfill Closure and Rehabilitation Management Plan.

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	<b><i>Community Liaison Committee</i></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	Minutes of quarterly CLC meetings are available on the Veolia website. There is no longer a Supervisory Licensee (the POEO Act was amended in 2017 to repeal supervisory licences in respect of putrescible waste facilities).
	<b><i>Consultation with Tarago and District Progress Association Incorporated (TADPAI)</i></b>		
16A	The Applicant shall meet quarterly with TADPAI representatives and provide updated information on odour incidents, leachate management and gas extraction and resolution of incidents related to the local community.	Compliant	TADPAI is represented on the CLC which meets quarterly.
	<b><i>Annual Environmental Management Report</i></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><i>Conditions Compliance Reports</i></b> The Applicant shall submit to the Secretary, the EPA, DPI-Water, Water NSW 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 Secretary; 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 Secretary; 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. <i>Note: the requirements of a) and b) above may be satisfied by the same report if appropriate.</i>	Observation	Parts a) and b) of this condition have been audited previously and are not relevant to the current Audit period.  The 2016 Conditions Compliance Report is attached to the 2016 LEMP. It is Veolia's intention to update the Conditions Compliance Report as the LEMP is updated. Reporting of compliance with conditions is performed annually through the AEMR and EPL Annual Returns.

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	<b><i>Independent Environmental Audits</i></b>		
19	<p>Every three years following the date of this consent, or at periods otherwise agreed to by the Secretary, and until such time as agreed to by the Secretary, the Applicant shall arrange for an independent audit of the environmental performance of the development. The audits shall:</p> <ul style="list-style-type: none"> <li>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;</li> <li>b) be conducted by a suitably qualified independent person approved by the Secretary;</li> <li>c) assess compliance with the requirements of this consent;</li> <li>d) assess the implementation of the LEMPs and review the effectiveness of the environmental management of the development; and</li> <li>e) be carried out at the Applicants' expense.</li> </ul> <p>The audits shall be submitted to the Secretary, the EPA, DPI-Water, Water NSW, Council and the Community Liaison Committee.</p> <p>The Applicants shall comply with all reasonable requirements of the Secretary in respect of any measures arising from or recommended by the audits and within such time as agreed to be the Secretary.</p>	Compliant	This Independent Environmental Audit has been prepared to address Condition 19 and an equivalent condition in Approval 10_0012. This approval is dated 30 November 2000. The prior IEA was completed less than two years ago, in 2016; however, this was later than required by this condition. The timing of this Audit brings the audit back within the three yearly cycle.
	<b>SITE REHABILITATION</b>		
	<b><i>Whole of Site Rehabilitation</i></b>		
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.	Note	
21	Activities associated with landfilling must not impede or limit the rehabilitation works on any part of the Woodlawn Mine site.	Note	
	<b><i>Rehabilitation Management Plan</i></b>		
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:	Compliant	DPE has approved the August 2016 revision of the Landfill Closure and Rehabilitation Management Plan. This covers the area now under Veolia's control. A separate Vegetation and Rehabilitation

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	<p>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;</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>		Management Plan applies to the mine area now under the control of Heron Resources.
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.	Note	This condition has been audited previously and is not relevant to the current Audit period. The Auditors note that mining activities have recommenced at Woodlawn and the mining area and bioreactor area are managed separately by Heron Resources and Veolia respectively.
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	Note	This condition has been audited previously and is not relevant to the current Audit period. The Auditors note that mining activities have recommenced at Woodlawn and the mining area and bioreactor area are managed separately by Heron Resources and Veolia respectively. Heron's MOP is available on the Heron Resources website.

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
25	<p><b><i>EPA Financial Assurance</i></b></p> <p>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:</p> <p>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</p> <p>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.</p> <p>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.</p> <p>Written approval must be obtained from the EPA for any changes to the financial assurance detailed in this condition.</p>	Compliant	The Auditors sighted evidence of receipt of the amended financial assurance by the EPA in October 2017.
	<b>WASTE SOURCES AND TYPES</b>		
26	<p>The Applicant shall ensure that:</p> <p>(a) all waste received by rail at the Woodlawn Waste Management Facility is sourced from the Sydney Region; and</p> <p>(b) all waste received by road at the Woodlawn Waste Management Facility is sourced from local government areas in the vicinity of the site.</p>	Compliant	

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
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. <i>(EPA GTA)</i>	Note	Waste classifications in this condition are no longer in use. The Auditors note that waste types that can be received at the premises are specified in section L3 of EPL 11436.
<b>WASTE MANAGEMENT PROCEDURES</b>			
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. <i>(EPA GTA)</i>	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 note that this condition duplicates a condition of Approval 10-0012.
<b>Waste Transportation</b>			
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. <i>(EPA GTA)</i>	Compliant	The Auditors note that this condition duplicates a condition of Approval 10-0012.
30	All pressure relief valves on the containers must be designed to meet the environmental requirements of condition 29. <i>(EPA GTA)</i>	Note	This condition has been audited previously and is not relevant to the current Audit period.
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 d) including cleaning and performance testing; and e) Container cleaning. <i>(EPA GTA)</i>	Compliant	A container maintenance quality assurance program is in place. No evidence of leaking containers was observed during the Audit site visit.

<b>Table 4: Conditions of Development Consent 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>	Observation	The Emergency Response Plan includes sections on spill response. While waste is identified as a potential source of spills, the plan does not specifically address the clean-up of spilt waste.
32B	Prior to receipt of waste from adjoining local government areas via road outlined in DA31-02-99 Mod1, the Applicant shall prepare and implement a Transport Code of Conduct for the project to the satisfaction of the Director General.	Compliant	A Transport Code of Conduct was prepared by Veolia in April 2011.
<b><i>Control of Incoming Wastes</i></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>	Compliant	Waste is only received from Veolia's Sydney waste transfer terminals 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. Procedures are in place at Veolia's Sydney waste transfer terminals to screen waste prior to transport to Woodlawn.
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	This condition has been audited previously and is not relevant to the current Audit period. The auditors note that the 2004 LEMP has been replaced by the 2016 LEMP which does not include a filling schedule; however, a separate filling schedule from 2018 to 2032 was provided.
<b><i>Cover Material</i></b>			
36	Cover material must be virgin excavated natural material, unless otherwise approved in writing by the EPA. <i>(EPA GTA)</i>	Compliant	The Auditors note that this condition duplicates a condition of 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>	Compliant	Daily cover, other than virgin excavated material, needs to be approved by the EPA.

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
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>	Not verified	The requirements are documented in management plans and are understood by facility personnel; however, the Auditors did not verify cover thickness. The Auditors have no reason to believe the condition is not being met.
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>	Not verified	The Auditors have no reason to believe the condition is not being met.
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>	Not verified	The requirements are documented in management plans. The Auditors did not verify cover availability; however, the cover is sourced on-site. The Auditors have no reason to believe the condition is not being met.
<b>Landfill Gas</b>			
41	The Applicant shall ensure to the maximum practical extent the quantity of landfill gas that is collected and treated.	Compliant	Veolia is taking steps to improve gas capture, including engaging a consultant to assess and recommend improvements to the gas capture network.
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%. <i>(EPA GTA)</i>	Compliant	Under EPL 11436, performance of the flare in destroying VOCs is deemed to be achieved based on temperature and residence time. Performance of gas engines was measure during the annual emissions testing by Ektimo. Ektimo reported VOC destruction efficiency of 99.3%.
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. <i>(EPA GTA)</i>	Observation	Under EPL 11436, performance of flare in destroying VOCs is deemed to be achieved based on temperature and residence time. Temperature and gas flowrate, which is proportional to residence time, are monitored continuously. The Auditors reviewed a sample of monitoring data which demonstrated compliance.



<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
			The Auditors note that residence time has been reported in the AEMRs and the Annual Returns as an average of <0.3 seconds whereas, to be compliant it should be >0.3 seconds (assuming temperature of 1,000°C). Furthermore the lowest and highest values should also be provided.
44	Any landfill gas condensate must be collected and returned to the leachate recycling system. <i>(EPA GTA)</i>	Compliant	Condensate is injected into the waste in the void or directed to the leachate extraction system.
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.	Compliant	Gas pipes are constructed from high density plastic and laid in sand and then aggregate to prevent damage.
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. <i>(EPA GTA)</i>	Note	This condition has been audited previously and is not relevant to the current Audit period.
<b>WATER QUALITY AND MANAGEMENT</b>			
<b><i>Waste Management Facility Site</i></b>			
47	The premises and the activities carried out therein must not pollute surface water or groundwater. <i>(EPA GTA)</i>	Compliant	Monitoring is undertaken in accordance with the LEMP. Results are summarised in the AEMR.
<u>Groundwater and Leachate Management</u>			
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. <i>(EPA GTA)</i>	Note	This condition has been audited previously. According to the 2016 SWMP, modelling of groundwater flows in 2016 showed a cone of depression evident around the bioreactor and this is expected to continue at least until the waste level approaches the natural water table.
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.	Not triggered	

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
50	<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 other waste-waters and contaminated storm-waters generated as a result of the operation of the facility;</li> <li>b) efficiently operate, notwithstanding the settlement of the waste;</li> <li>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;</li> <li>d) 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>e) ensure that leachate can be recirculated within the biologically active zones of the landfilled waste; and</li> <li>f) comply with Conditions 48 and 8(b).</li> </ul> <p>Details of this system must be documented in the LEMP. <i>(EPA GTA)</i></p>	Compliant	
51	<p>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></p>	Observation	<p>The leachate barrier systems are described in the 2016 Leachate Management Plan approved by the DPE. Where joint fractures and drill holes require sealing, the 2004 Barrier System and Quality Assurance Plan (BSQAP) is referred to.</p> <p>The Auditors note that the overarching 2016 LEMP refers to a series of other documents in relation to the barrier system and that these references should be simplified.</p>
52	<p>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:</p> <ul style="list-style-type: none"> <li>a) the base and the top elevation of the mine void; and</li> <li>b) the localised joints, fracture zones and adits/portals.</li> </ul>	Note	<p>In relation to the bioreactor base, this condition has been audit previously and is not relevant to the current Audit period. In relation to joint fractures and drill holes that require sealing, the 2004 BSQAP is referred to as noted above.</p>
53	<p>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 <math>10^{-9}</math> metres per second.</p>	Note	<p>In relation to the bioreactor base, this condition has been audit previously and is not relevant to the current Audit period. In relation to joint fractures and drill holes that require sealing, the 2004 BSQAP is referred to as noted above.</p>

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
54	A Construction Quality Assurance Plan (CQAP) for the barrier system shall be prepared and included in the LEMP.	Compliant	The leachate barrier systems are described in the 2016 Leachate Management Plan approved by the DPE. Where joint fractures and drill holes require sealing, the 2004 Barrier System and Quality Assurance Plan (BSQAP) is referred to.
55	<p>The Applicant shall prepare a Leachate Contingency Management Plan (LCMP) that addresses, but not necessarily be limited to the following matters:</p> <p>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;</p> <p>b) the storage of leachate external to the landfilled waste in the mine void;</p> <p>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;</p> <p>d) an estimate of the full costs for implementing each aspect of this plan. (EPA GTA);</p> <p>e) contingency measures in the event that the leachate storage dams reach capacity sooner than anticipated, this should include the provision for construction and operation of additional lined coffer dams in ED1 to the satisfaction of the EPA; and</p> <p>f) contingency measures should the modelling as required by Condition 70G demonstrate that the dams will overflow.</p>	Compliant	DPE has approved the March 2017 revision of the Leachate Management Plan. Condition 70G has not yet been triggered.
55A	Prior to operation of the LTP, or as otherwise agreed by the Secretary, the Applicant must submit a revised LCMP to the satisfaction of the Secretary. The LTP is not permitted to operate until the revised LCMP is approved by the Secretary. The plan must be prepared in consultation with the EPA and Water NSW and include contingency measures should the leachate dams fill sooner than anticipated.	Not triggered	
55B	Should additional coffer dam(s) be required to be constructed as part of the LCMP the dam(s) must be designed constructed and maintained in accordance with Condition 70L to 70P.	Not triggered	

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
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	
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 Soil and Water Management Plan forms part of the approved 2016 LEMP.
<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	Veolia advise that there has been no discharge from the site during the Audit period.
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.	Note	This condition has been audited previously and is not relevant to the current Audit period.
60	The Applicant shall install drainage so that the West Ridge Catchment shall not drain into the mine void.	Note	This condition has been audited previously and is not relevant to the current Audit period.
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 approved 2016 EMP describes how evaporation of water by spraying is to be undertaken. No evidence of spray drifting was observed during the site visit.
63	ED3 shall not receive water stored in the Waste Rock Dam.	Compliant	
64	Stormwater in the mine void must only be discharged into ED3S sump, for transfer via pipeline to ED2, or otherwise used for operational purposes within the landfill, as approved in writing by the EPA. <i>(EPA GTA)</i>	Compliant	
65	Stormwater collected in the mine void may only be transferred into ED3S sump and ED2 provided that: a) The Applicant can always comply with condition 58; and c) the stormwater to be transferred contains no leachate, unless otherwise approved in writing by the EPA. <i>(EPA GTA)</i>	Compliant	

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
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. <i>(EPA GTA)</i>	Compliant	A Surface Water Management Scheme forms part of the 2017 revision of the Soil and Water Management Plan.
66A	Prior to operation of the LTP or as otherwise agreed by the Secretary, the Applicant must submit a revised Stormwater Management Plan to the satisfaction of the Secretary. The plan shall be prepared in consultation with the EPA and Water NSW and include the changes to water management in MOD2 and MOD3, in accordance with the requirement of Condition 66.	Not triggered	
66B	Prior to operation of the LTP or as otherwise agreed by the Secretary, the Applicant must submit a revised Management Plan for ED3N, ED3S, ED3S-S and the Coffe Dam to the satisfaction of the Secretary. The plan shall be prepared in consultation with the EPA and Water NSW and include the changes to water and leachate management in MOD2 and MOD3, in accordance with the requirement of Condition 70. The plan must be documented in the LEMP.	Not triggered	
66C	Should any additional coffe dam in ED1 be required, the Applicant must submit revised management plans in accordance with Condition 70 and 70B to the satisfaction of the Secretary prior to any treated leachate being discharged to the coffe dams. The plans must be prepared in consultation with the EPA and Water NSW and be documented in the LEMP.	Not triggered	
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)	Compliant	The DPE issued a penalty notice to Veolia in October 2016 in relation to tracking of materials observed by the DPE in July 2016. The penalty notice was issued during the current Audit period; however, it is noted that the incident occurred during the previous audit period and is not a non-compliance in the current Audit period. Improvements to the wheel wash were discussed during the Audit site visit in March 2018. No tracking of materials was observed by the Auditors.
68	Containers used for transporting waste must only be washed at the container wash facility as frequently as is necessary to minimise environmental impacts	Note	Superseded by Approval 10_0012.

Table 4: Conditions of Development Consent 31-02-99			
Condition		Compliant	Comments
	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 <i>Bundling and Spill Management</i> . (EPA GTA)	Note	This condition duplicates or is superseded by a condition of Approval 10_0012.
	<u>ED3 – Management</u>		
70	<p>The Applicant must prepare a management plan for ED3N, ED3S and ED3S-S to ensure that:</p> <ul style="list-style-type: none"> <li>a) each dam lined and is maintained to prevent the leakage from the dams in order to protect groundwater and surface water;</li> <li>b) a monitoring and inspection program is implemented including installation of monitoring bores, a review of monitoring data and six-monthly inspections to evaluate the integrity of the barrier and to assess if leakage from the dam is occurring;</li> <li>c) adequate capacity is retained in ED3N and ED3S to meet the environmental performance requirements in condition 58</li> <li>d) measures are identified to maintain adequate capacity within a suitable time period after receiving water from a rainfall event;</li> <li>e) there is an emergency plan for the management of leachate in excess of the capacity of ED3N, ED3S and coffer dam(s);</li> <li>f) the sources of leachate that are collected or received in ED3N, ED3S and coffer dam(s) are identified; and</li> <li>g) the quantity of leachate from each source that reports to ED3N and ED3S is monitored and compared in graphical format with rainfall data.</li> <li>(h) ED3N is emptied of effluent from the existing leachate system by 31 December 2022;</li> <li>(i) all pipelines which transfer leachate and treated leachate are monitored to ensure leaks do not occur;</li> <li>j) the operational details of the LTP include: <ul style="list-style-type: none"> <li>(i) the leachate quality targets;</li> </ul> </li> </ul>	Compliant	Management of ED3 is part of the June 2017 revision of the Soil and Water Management Plan.

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	<ul style="list-style-type: none"> <li>(ii) a description of the performance indicators that would be used to judge the performance of the LTP;</li> <li>(iii) a description of the management measures that would be implemented to manage the operational impacts of the LTP including the chemical storage area and sludge skip bin;</li> <li>(iv) contingency measures to manage any unpredicted impacts such as the bioreactor membrane failing; and</li> <li>(v) the roles, responsibility, authority and accountability of all key personnel involved in the environmental management of the LTP.</li> </ul> <p>k) An updated plan including MOD2 must be documented in the LEMP.</p>		
70A	The Applicant must confirm in writing to the EPA and the Secretary the dam lining is in place (in accordance with Condition 70), prior to the discharge of treated leachate into ED3S-S. From the commencement of MOD 2, the Applicant shall provide quarterly updates to the EPA and the Secretary of the leachate volume in ED3S-S (southern lagoon) and the remaining storage volume.	Not verified	The Auditors sighted a samples of quarterly reports to the EPA providing the required information. The Auditors did not verify that the EPA and the Secretary were notified in writing that the dam lining was in place prior to the discharge of treated leachate into ED3S-S.
70B	<p>The Applicant must prepare a management plan for ED2 to ensure that:</p> <ul style="list-style-type: none"> <li>(a) only mine void stormwater that does not contain leachate and direct rainfall and runoff is received and stored within ED2;</li> <li>(b) the dam is lined and maintained to prevent the leakage of stored acid mine drainage waters in order to protect groundwater surface water;</li> <li>(c) a monitoring and inspection program is implemented including installation of monitoring bores, a review of monitoring data and six-monthly inspections to evaluate the integrity of the barrier and to assess if leakage from the dam is occurring;</li> <li>(d) adequate capacity is maintained in ED2 to meet the environmental performance requirements in Condition 58;</li> <li>(e) measures are identified to maintain adequate capacity within a suitable time period after receiving water from a rainfall event;</li> <li>(f) there is an emergency plan for the management of water in excess of the capacity of ED2;</li> <li>(g) that sources of water that are collected or received in ED2 are identified; and</li> <li>(h) the quantity of water from each source that reports to ED2 is monitored and compared in graphical format with rainfall data.</li> </ul>	Compliant	Management of ED2 is part of the June 2017 revision of the Soil and Water Management Plan.

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	The plan must be prepared in consultation with the EPA and submitted to the Secretary for approval within two months of the date of approval for MOD 2 or as otherwise agreed by the Secretary. The revised plan shall be documented in the LEMP.		
70C	Seepage or leakage points in ED2 must be identified and repaired to the satisfaction of the Secretary and EPA prior to the transfer of any stormwater from ED3S to ED2.  <i>Note: Conditions pertaining to ED2 will be triggered only in the event of transfer of water from ED3S to ED2.</i>	Not Triggered	
70D	The Proponent must develop and implement a Longterm Leachate Management Strategy that: <ul style="list-style-type: none"> <li>Minimises the generation leachate at the premises;</li> <li>Captures, treats and disposes of all leachate generated at the premises;</li> <li>Maintains leachate levels in the waste mass to a level that does not inhibit the efficiency of the landfill gas extraction system;</li> <li>Progressively removes all treated leachate from ED3; and</li> <li>Minimise the emission of offensive odours from leachate treated and stored onsite so that there is no off site impact.</li> </ul> The Longterm Leachate Management Strategy must be submitted to the Secretary and the EPA (for inclusion as a Pollution Reduction Program attached to environment protection licence 11436) for approval within two months of the approval date of MOD 2.	Compliant	The Auditors note that this condition duplicates a condition in Approval 10-0012.
70E	Treated leachate must not be discharged to any part of ED3S, other than ED3S-S, until such time as the Long Term Leachate Management Strategy has been approved by the Secretary and the EPA.	Compliant	The Auditors note that this condition duplicates a condition in Approval 10-0012.
70F	The Longterm Leachate Management Strategy must be operational no later than 30 September 2018, or as otherwise agreed by the Secretary.	Not triggered	The Auditors note that this condition duplicates a condition in Approval 10-0012.
	<u>Future Modelling</u>		
70G	Prior to the operation of the LTP, the Applicant must provide modelling which demonstrates that the evaporation dams will not overflow for the period between 2029 to 2058. Should overflow be predicted, the Applicant must provide contingency measures in accordance with Condition 55A.	Not triggered	



<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	<u>Leachate Treatment Plant</u>		
70H	The Applicant must construct the Leachate Treatment Plant (LTP) and associated infrastructure in accordance with the Construction Environment Management Plan prepared by Veolia dated 12 December 2017.	Not verified	The Auditors note that this condition duplicates a condition in Approval 10-0012.
70I	All run-off during construction must be contained on the site in accordance with Condition 58.	Compliant	Veolia advise that there has been no discharge from the site during the Audit period.
70J	The LTP must be: (a) capable of processing at least 4 litres per second of leachate; and (b) bunded to contain 110 % of the facilities largest sized tank.	Not triggered	The Auditors note that this condition duplicates a condition in Approval 10-0012.
70K	The sludge skip bin must be bunded and covered to prevent contaminants entering surface water.	Not triggered	The Auditors note that this condition duplicates a condition in Approval 10-0012.
	<u>Coffer Dam(s)</u>		
70L	Treated leachate must not be discharged to any part of ED1, other than within lined coffer dam(s).	Not triggered	The Auditors note that this condition duplicates a condition in Approval 10-0012.
70M	The coffer dam(s) in ED1 must be designed and constructed: (a) by a suitably qualified and experienced person(s); (b) based on a geotechnical investigation and any recommendations prepared by a suitable qualified person(s); and (c) ensuring that all coffer dams are lined with a High Density Polyethylene liner to the satisfaction of the EPA and in consultation with Water NSW.	Not triggered	The Auditors note that this condition duplicates a condition in Approval 10-0012.
70N	The Applicant must provide works-as-executed drawings signed by a registered surveyor demonstrating that the coffer dam(s) have been constructed in accordance with the design required by Condition 70M. The Applicant must submit the works-as-executed drawings to the EPA, Water NSW and Secretary prior to the discharge of treated leachate into the coffer dam(s).	Not triggered	The Auditors note that this condition duplicates a condition in Approval 10-0012.
70O	Prior to the discharge of treated leachate into any coffer dam(s) in ED1, the Applicant must confirm in writing and provide a quality assurance report to	Not triggered	The Auditors note that this condition duplicates a condition in Approval 10-0012.

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	the EPA, Water NSW and the Secretary that the High Density Polyethylene dam lining has been adequately installed. From the commencement of discharge of treated leachate into the coffer dam(s), the Applicant shall provide quarterly updates to the EPA, Water NSW and the Secretary of the leachate volume in the coffer dam(s) and the remaining leachate storage volume.		
70P	Prior to the discharge of treated leachate to any coffer dam(s), the Applicant must install a leak detection system which monitors flows along all pipelines which carry leachate. Any leaks must be investigated, contained and rectified.	Not triggered	The Auditors note that this condition duplicates a condition in Approval 10-0012.
70Q	Only treated leachate from the LTP is permitted to be stored within coffer dam(s) in ED1, unless otherwise agreed to by the Secretary.	Not triggered	The Auditors note that this condition duplicates a condition in Approval 10-0012.
70R	The coffer dam(s) are not permitted to exceed 80 per cent capacity until either:  (a) a new coffer dam has been designed and constructed in accordance with condition 70M to 70P and is ready to accept treated leachate from the LTP and a revised management plan has been submitted to the satisfaction of the Secretary in accordance with Condition 70; or  (b) sections of ED3N have been emptied of partially treated leachate, had its liner assessed and, if necessary, repaired, and is capable of receiving treated leachate from the LTP.	Not triggered	The Auditors note that this condition duplicates a condition in Approval 10-0012.
70S	No interaction between the treated leachate in the coffer dam(s) and the mine stormwater in ED1 is permitted.	Not triggered	The Auditors note that this condition duplicates a condition in Approval 10-0012.
70T	Within six months of commissioning the LTP and annually thereafter, unless otherwise agreed to by the Secretary, the Proponent shall commission and pay the full cost of an independent assessment of the leachate and water management system. This audit must be conducted by a suitably qualified, experienced and independent expert whose appointment has been endorsed by the Secretary. During the audit, this expert must:  (a) consult with the EPA, Water NSW and the Secretary; (b) assess actual performance against the assumptions and predictions made in the project water balance prepared by WSP dated September 2017. This must include:	Not triggered	The Auditors note that this condition duplicates a condition in Approval 10-0012.

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	(v) actual versus predicted inputs and outputs into and out of each dam; (vi) actual versus predicted mechanical evaporation from each dam; (vii) actual versus predicted rainfall and evaporation; and (viii) the actual versus predicted volume of water or treated leachate stored in each dam. (c) assess actual versus predicted performance of the LTP. This must include: (iii) actual versus target effluent quality; and (iv) actual versus target throughput. (d) determine whether the leachate and water management system is achieving its intended objectives; and (e) outline all reasonable and feasible measures that may be required to improve water and leachate management at the site.		
70U	The volume of mine water stored in ED1 must be no more than 10 ML by 31 December 2023.	Not triggered	The Auditors note that this condition duplicates a condition in Approval 10-0012.
70V	ED3N must be emptied of effluent from the existing leachate system by 31 December 2022.	Not triggered	The Auditors note that this condition duplicates a condition in Approval 10-0012.
70W	Prior to discharging treated leachate into sections of ED3N from the LTP, the Applicant must verify the integrity of the dam and prepare an integrity assessment of the ED3N liner to demonstrate the dam is not leaking and is suitable for the storage of treated leachate.	Not triggered	The Auditors note that this condition duplicates a condition in Approval 10-0012.
70X	Should the integrity assessment identified in Condition 70W find that the liner in ED3N is not adequate for treated leachate storage, the Applicant must submit management options to the Secretary, the EPA and Water NSW which will be adopted to rectify any integrity issues.	Not triggered	The Auditors note that this condition duplicates a condition in Approval 10-0012.
70Y	The Applicant must not store treated leachate from the LTP in ED3N until the Secretary and the EPA are satisfied that either ED3N is not leaking or the management options identified in Condition 70X are acceptable.	Not triggered	The Auditors note that this condition duplicates a condition in Approval 10-0012.

Table 4: Conditions of Development Consent 31-02-99			
Condition		Compliant	Comments
	<b><u>Waste-water Management</u></b>		
71	<p>The sewage management system must be designed, installed and operated to meet the following criteria:</p> <p>a) <b>Prevention of Public Health Risk.</b> 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.</p> <p>b) <b>Protection of Lands.</b> 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.</p> <p>c) <b>Protection of Surface Waters.</b> Surface waters must not become</p> <p>d) contaminated by any flows discharged from the waste-water management system including waste-water, rainfall runoff, contaminated subsurface runoff or contaminated groundwater.</p> <p>e) <b>Protection of Groundwaters.</b> Underground water resources must not</p> <p>f) become contaminated by either the waste-water, or any flows discharged 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>	Compliant	The sewage system is located near the gatehouse and is regulated by Council. The sewage management scheme is described in the 2016 SWMP and the 2016 Air Quality and Greenhouse Gas Management (AQGGMP).
72	Waste-water must only be applied to utilisation areas in conformance with Condition 71. <i>(EPA GTA)</i>	Compliant	
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	The Auditors did not observe evidence of spray drifting from the site. No complaints or records of

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
			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	The system is pumped out if required.
	<b><i>Intermodal Facility Site</i></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	
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	
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>	Compliant	No contaminated stormwater has reportedly been discharged from the site during the Audit period. Stormwater is diverted to onsite first flush system for storage and testing.
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>	Compliant	Container handling areas and roadways at the IMF are sealed.
	<b><u>Waste Water Management</u></b>		
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>	Compliant	The Auditors note that this condition duplicates a condition in Approval 10-0012.

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
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)	Note	This condition has been audited previously and is not relevant to the current Audit period.
	<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 work, the operation on that section of the stream shall cease immediately upon the oral or written direction of the officer.	Not triggered	Primarily related to construction of the facility. Not triggered during current Audit period.
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.	Not triggered	Primarily related to construction of the facility. Not triggered during current Audit period.
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.	Not triggered	Primarily related to construction of the facility. Not triggered during current Audit period.
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.	Compliant	
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.	Not triggered	Primarily related to construction of the facility. Not triggered during current Audit period.
	<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.	Compliant	
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	Note	This condition has been audited previously and is not relevant to the current Audit period.

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</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> .		
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	Note	This condition has been audited previously and is not relevant to the current Audit period.
90	No exotic trees are to be planted within the stream or within 40 metres from the top of the bank of the stream.	Note	This condition has been audited previously and is not relevant to the current Audit period.
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	This condition has been audited previously and is not relevant to the current Audit period.
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	This condition has been audited previously and is not relevant to the current Audit period.
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	This condition has been audited previously and is not relevant to the current Audit period.
	<b>NOISE</b>		
	<b><i>Hours of Construction and Operation</i></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. (EPA GTA)	Not verified	Construction of the LTP is in progress at the bioreactor site. The Auditors have no reason to believe the condition is not being met.

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
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>	Not verified	Construction of the LTP is in progress at the bioreactor site. The Auditors have no reason to believe the condition is not being met.
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	
	<u>Operation</u>		
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). <i>(EPA GTA)</i>	Note	Superseded by Approval 10_0012.
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. <i>(EPA GTA)</i>	Note	Superseded by Approval 10_0012.
	<b>Noise Limits</b>		
	<u>Waste Management Facility Site</u>		
99	Noise from the premises must not exceed an LA10 (15 minute) noise emission criterion of 35 dB(A) LA10 (15 minute) at the most affected residential receiver. <i>(EPA GTA)</i>	Note	Superseded by Approval 10_0012.
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 b) inversions or increased level of impacts from temperature inversions; c) 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>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	<u>Intermodal Facility Site</u>		
101	Except as provided in Condition 102, noise from the premises must not exceed an LA10 (15 minute) noise emission criterion of 35 dB(A) at the most affected residential receiver. <i>(EPA GTA)</i>	Note	Superseded by Approval 10_0012.
102	Noise emissions from freight trains entering and leaving the premises must not exceed the noise limit of 45 dB(A) LA10 (15 minutes) prior to 7am and 50 dB(A) LA10 (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. <i>(EPA GTA)</i>	Note	Superseded by Approval 10_0012.
103	Noise from the premises is to be measured at the most affected residential receiver to determine compliance with Conditions 101 and 102. <i>(EPA GTA)</i>	Note	Superseded by Approval 10_0012.
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	Note	Superseded by Approval 10_0012.

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	j) options for overnight parking of haulage trucks.		
106	<p>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:</p> <ul style="list-style-type: none"> <li>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;</li> <li>b) scheduling of train movements outside critical time periods;</li> <li>c) using the quietest trains possible;</li> <li>d) employee education;</li> <li>e) using quiet couplings for trains</li> <li>f) using quiet forklifts;</li> <li>g) regular maintenance of rail track, roads, hard stand areas, equipment;</li> <li>h) ongoing community liaison to monitoring complaints (eg. complaints line); and</li> <li>i) negotiated agreements for noise complaints if noise issues become unresolvable.</li> </ul>	Note	Superseded by Approval 10_0012.
107	<p>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:</p> <ul style="list-style-type: none"> <li>a) compliance standards;</li> <li>b) community consultation;</li> <li>c) complaints handling monitoring/system;</li> <li>d) site contact person to follow up complaints;</li> <li>e) mitigation measures;</li> <li>f) the design and operation of the proposed mitigation methods demonstrating</li> <li>g) best practice;</li> <li>h) construction times;</li> <li>i) contingency measures where noise complaints are received; and</li> <li>j) monitoring methods and programs.</li> </ul>	Note	This condition has been audited previously and is not relevant to the current Audit period.

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	<b>NOISE IMPACTS</b>		
	<b><i>Consultation with Pylara Pty Ltd</i></b>		
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 c) quantify noise levels and sources; and if adverse impacts are identified, modify where practicable road transport operations in order to mitigate such impacts.	Note	This condition has been audited previously and is not relevant to the current Audit period. Veolia purchased Pylara property in 2001.
	<b><i>Land Acquisition</i></b>		
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 i. Pylara at the date of this consent, having regard to: ii. the existing use and permissible use of the land in accordance with the applicable planning instruments at the date of the written request; and iii. the presence of improvements at Pylara and/or any Council approved iv. building or structure which although substantially commenced at the date of request is completed subsequent to that date; and v. 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.	Note	This condition has been audited previously and is not relevant to the current Audit period. Veolia purchased Pylara property in 2001.
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:	Note	This condition has been audited previously and is not relevant to the current Audit period. Veolia purchased Pylara property in 2001.

Table 4: Conditions of Development Consent 31-02-99			
Condition		Compliant	Comments
	<p>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, <i>after consideration of any submissions from the owner's and the Applicant, a fair and reasonable</i> acquisition, price for Pylara as described in sub-clause (a) and/or terms upon which it is to be acquired;</p> <p>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:</p> <p>(i) the appointed independent valuer,</p> <p>(ii) the Director-General or nominee, and</p> <p>(iii) the president of the Law Society of NSW or nominee.</p> <p>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.</p>		
111	The Applicant shall bear the costs of any valuation or survey assessment requested by the independent valuer, panel or the Director-General.	Note	This condition has been audited previously and is not relevant to the current Audit period. 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.	Note	This condition has been audited previously and is not relevant to the current Audit period. 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. (EPA GTA)	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:	Note	Superseded by Approval 10_0012.

Table 4: Conditions of Development Consent 31-02-99			
Condition		Compliant	Comments
	<p>a) AS 2922-1987 Ambient air – Guide for the siting of sampling units; and</p> <p>b) AS 2923-1987 Ambient air – Guide for measurement of horizontal wind for air quality applications.</p> <p>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.</p> <p>The meteorological station shall also measure rainfall and evaporation. (EPA GTA)</p>		
	<u>Intermodal Facility Site</u>		
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)	Compliant	The Auditors note that this condition duplicates a condition in Approval 10-0012.
	<b><i>Dust</i></b>		
	<u>Waste Management Facility Site</u>		
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)	Note	Superseded by Approval 10_0012.
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)	Compliant	The Auditors did not observe dust being generated at the bioreactor site during the site visit. Dust deposition monitoring was reviewed for the 2016-17 reporting period at four locations on Veolia properties: DG22 and DG24 (Woodlawn), DG28 (Pylara) and DG18 (IMF). The annual average dust deposition complied with consent condition criteria in Approval 10-0012 for off-site receptors at all sampling locations. Veolia no longer routinely monitors TSP; however, monitoring was undertaken for over four months from November 2016 to February 2017 and results were within consent condition criteria for off-site receptors at all sampling locations.

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
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)	Compliant	Dust management measures are incorporated into the 2016 AQGGMP.
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)	Compliant	All waste received at the site by rail from Sydney is containerised. No uncovered road deliveries were observed during the site visit.
120	All internal permanent roadways between the container transfer area and Collector Road must be sealed. (EPA GTA)	Compliant	The access road from the site entry to the mine void is sealed.
121	All sealed surfaces intended to carry vehicular traffic must be managed to minimise the quantity of wind blown dust emissions. (EPA GTA)	Compliant	A water cart operates on all unsealed roads at the site
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.	Compliant	Water cart in operation
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)	Compliant	DPE has approved the August 2016 revision of the Landfill Closure and Rehabilitation Management Plan.
<u>Intermodal Facility Site</u>			
<i>Construction and Operational Phases</i>			
124	Activities occurring at the premises must be carried out in a manner that will minimise emissions of dust from the premises. (EPA GTA)	Compliant	The Auditors did not witness dust being generated at the IMF site during the audit site visit. Depositional dust sampling equipment is located on site and has shown reasonably consistent results. Most operations are conducted on paved surfaces.
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)	Note	Superseded by Approval 10_0012.
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)	Compliant	The Auditors did not observe trucks entering or leaving the premises carrying excavated dusty materials including clays, sands and soils. The

Table 4: Conditions of Development Consent 31-02-99			
Condition		Compliant	Comments
			construction phase is complete and the facility is handling containerised waste.
127	All sealed and unsealed surfaces shall be managed to minimise the quantity of wind blown dust emissions. (EPA GTA)	Compliant	The Auditors did not observe dust being emitted from the IMF site.
	<b>ENVIRONMENTAL MONITORING</b> (EPA GTAs)		
	<b><i>Waste Management Facility Site</i></b>		
	<u>Odour Monitoring</u>		
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.	Note	Superseded by Approval 10_0012.
	<u>Ambient Air Quality Monitoring</u>		
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.	Note	Superseded by Approval 10_0012.
	<u>Landfill Gas Monitoring</u>		
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.	Compliant	Landfill gas monitoring is undertaken in accordance with EPL 11436. Requirements are outlined in the 2016 AQGGMP. Results are summarised in the EPL Annual Return and AEMR.

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	<u>Groundwater Monitoring</u>		
131	<p>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.</p> <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>	Note	Superseded by Approval 10_0012.
	<u>Surface Water Monitoring</u>		
132	<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) coffer dam(s)</li> <li>(iv) ED1;</li> <li>(v) ED3N;</li> <li>(vi) ED3S;</li> <li>(vii) ED3S-S;</li> <li>(viii) ED2;</li> <li>(ix) Downstream receiving waters of ED2;</li> <li>(x) All treated leachate effluent discharge lines;</li> </ul> </li> </ul>	Note	Superseded by Approval 10_0012.



<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	<p>(xi) Discharge line from ED3S to ED2; and</p> <p>(xii) rainwater collected in the mine void;</p> <p>(b) monitoring methodologies and standards to be employed;</p> <p>(c) monitoring frequency based on rainfall events and creek flow assessment;</p> <p>(d) an assessment of the contribution of surface water pollution from the Woodlawn Waste Management Facility as distinct from the Woodlawn Mine site;</p> <p>(e) the quantity of water relocated from the mine void into ED3;</p> <p>(f) the quantity of water relocated from ED3 into the mine void;</p> <p>(g) the chemical composition of liquids added to the landfilled waste;</p> <p>(h) the chemical composition of treated leachate in the effluent discharge line and the coffer dam;</p> <p>(i) the chemical composition of leachate within ED3S-S;</p> <p>(j) the quantity of water that reports to ED3 , including its sources;</p> <p>(k) the quantity of water removed and/or discharged from ED3, including its destination;</p> <p>(l) the total quantity of water contained in ED3;</p> <p>m) the quantity of water transferred from ED3S into ED2;</p> <p>n) the quantity of water that reports to ED2 from Woodlawn Waste Management Facility, including its sources;</p> <p>o) the total quantity of water contained in ED2;</p> <p>(p) the total quantity of treated leachate contained in the coffer dam(s);</p> <p>(q) the total quantity of water contained in ED1;</p> <p>(r) the parameters and substances that are proposed to be monitored, including sampling and analysis frequencies;</p> <p>(s) reporting and assessment of results; and</p> <p>(t) opportunities to integrate the monitoring program with other monitoring programs in the vicinity.</p> <p>The Monitoring of ED2 will initially be at weekly intervals once the transfer of stormwater from ED3S to ED2 has commenced and will be reviewed 12 months after commencement of MOD 2.</p> <p>Conditions pertaining to ED2 will be triggered only in the event of transfer of water from ED3S to ED2.</p>		
	<u>Leachate Monitoring</u>		
133	<p>The Applicant shall prepare and implement a leachate quality and quantity monitoring program. The program must be documented in the LEMP.</p> <p>The program must include details on:</p>	Compliant	Leachate monitoring is undertaken in accordance with EPL 11436. Requirements are outlined in the

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	(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.		2016 Leachate Management Plan. Results are summarised in the EPL Annual Return and AEMR.
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 LEMP.	Compliant	The BPMP was updated in June 2014.
	<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	Note	Superseded by Approval 10_0012.

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	(c) frequency of noise monitoring.		
	<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.	Not verified	The 2016 LEMP references the 2014 BPMP which references the original BFP Consultants report. The Auditors did not verify that geotechnical monitoring was in accordance with the 1998 BFP Consultants report.
	<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.	Compliant	EPA website confirms receipt of Annual Returns.
	<b><i>Intermodal Facility Site</i></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); (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	Superseded by Approval 10_0012.

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	<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	This condition has been audited previously and is not relevant to the current Audit period.
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 condition has been audited previously and is not relevant to the current Audit period.
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	This condition has been audited previously and is not relevant to the current Audit period.
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	This condition has been audited previously and is not relevant to the current Audit period.
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;	Note	This condition has been audited previously and is not relevant to the current Audit period.

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	(c) construction of a right turn bay on Bungendore Road for right-turning traffic into the Intermodal Facility. <i>(MSC GTA)</i> ; 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. <i>(MSC GTA)</i>	Note	This condition has been audited previously and is not relevant to the current Audit period.
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	This condition has been audited previously and is not relevant to the current Audit period.
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	This condition has been audited previously and is not relevant to the current Audit period.
<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.
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.	Not verified	An Agricultural Contingency Plan was included in the Emergency Plan that formed part of the 2004 LEMP. The Contingency Plan has not carried over

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
			into the 2016 LEMP or 2017 Emergency Response Plan. The Auditors have not verified that the Department of Primary Industries was consulted during updating of the LEMP and Emergency Response Plan.
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><i>Terrestrial Flora and Fauna</i></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	Evidence of consultation with NPWS/OEH has not been reviewed by the Auditors.
	<b><i>Aquatic Flora and Fauna</i></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	This condition has been audited previously and is not relevant to the current Audit period.
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	This condition has been audited previously and is not relevant to the current Audit period.
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	This condition has been audited previously and is not relevant to the current Audit period.

Table 4: Conditions of Development Consent 31-02-99			
Condition		Compliant	Comments
	<b>HERITAGE AND ARCHAEOLOGY</b> <i>Aboriginal Heritage</i>		
	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.	Note	
	<i>Non-Aboriginal Heritage</i>		
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.	Note	This condition has been audited previously and is not relevant to the current Audit period.
	<b>CONTINGENCY PLANNING</b>		
	<i>Emergency Management Plan</i>		
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.	Note	Superseded by Approval 10_0012.

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
159	<p>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;</li> <li>(f) ensuring that all relevant employees are familiar with the emergency management plan; and</li> <li>(g) any chemical storage required to operate the LTP and be consistent with the DPE's HIPAP No.1, 'Emergency Planning'.</li> </ul> <p>The Applicant should regularly review the adequacy of the plan obtaining expert advice as required.</p> <p><i>Note: When developing this emergency plan opportunities may exist to integrate with the Woodlawn Min site emergency management plans.</i></p>	Note	Superseded by Approval 10_0012.
159 A	<p>Prior to operation of the LTP, or within such further period as the Secretary may agree, the Applicant shall prepare and submit a revised Emergency Management Plan to the Secretary for approval. The plan shall include the site changes in MOD 2 and MOD3, in accordance with the requirements of Condition 159.</p>	Not triggered	
159 B	<p>A comprehensive Safety Management System, covering all on-site operations and associated transport activities involving hazardous materials. Records from the Safety Management System must be kept on-site and must be available for inspection by the Secretary upon request. The Safety Management System shall be consistent with the Department of Planning and Environment's Hazardous Industry Planning Advisory Paper No. 9, 'Safety Management'.</p>	Note	The Auditors note that this condition duplicates a condition in Approval 10-0012.



<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
159 C	<p>The Applicant must store all chemicals in accordance with:</p> <p>(a) the requirements of all relevant Australian Standards; and</p> <p>(b) the NSW EPA's '<i>Storing and Handling of Liquids: Environmental Protection - Participants Handbook</i>' if the chemicals are liquids.</p> <p>In the event of an inconsistency between the requirements listed from (a) to (b) above, the most stringent requirement must prevail to the extent of the inconsistency.</p>	Compliant	The Auditors note that this condition duplicates a condition in Approval 10-0012.
<b>COMPLAINTS PROCEDURES</b>			
160	<p>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	The Auditors tested the complaints line after 8:00pm and the call was answered.
161	The complaints register shall be available for inspection upon request by the Director-General, EPA, DLWC, and the CLC.	Note	Superseded by condition 162 and Approval 10_0012 which require all complaints required to be available on Veolia website.
162	<p>Within 2 months of the date of the approval of MOD 2, a complaints handling procedure must be submitted to the Secretary 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:</p> <ul style="list-style-type: none"> <li>• a formal complaint/incident reporting procedure;;</li> <li>• an investigation procedure; and</li> <li>• a complaint resolution procedure.</li> </ul> <p>A report of the complaint and the response/action taken and timeframe required to resolve the complaint must be made publicly available on the Applicants website within 7 days of a complaint being made. <i>Note: The level of detail contained in the report of the complaint shall be determined in</i></p>	Observation	The Auditors note that this condition duplicates a condition in Approval 10-0012. An observation has been made in Table 3 in relation to the complaints handling procedure.

<b>Table 4: Conditions of Development Consent 31-02-99</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
	<i>consultation with the Department, Goulburn- Mulwaree Council, the EPA and the Community Liaison Committee.</i>		
163	The Applicant shall provide a report the Secretary of the complaints received, the response/action taken and timeframe in accordance with Condition 162, on an annual basis which is to be submitted within the AEMR. The report shall include all the matters required within subsections of Condition 162.	Compliant	The Auditors note that this condition duplicates a condition in Approval 10-0012.
164	From the commencement of MOD 2, the Applicant shall make the following information publicly available on its website as is required by the consent: 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 AEMR including monitoring results (over the last 5 years); d) a copy of any Independent Environmental and Odour Audit, and the Applicant's response to the recommendations in any audit; e) report of the complaints and the response/action taken to resolve the complaint as required by Condition 162; f) a copy of the minutes of the Community Liaison Committee Meetings; and g) any other matter required by the Director-General.	Compliant	The Auditors note that this condition duplicates a condition in Approval 10-0012.

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor</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	<p>This licence authorises the carrying out of the scheduled activity listed below at the premises listed in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.</p> <p>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.</p>	Compliant	Scale of activity is not limited by this condition. Also see condition L3.3.
<b>A2</b>	<b>Premises or plant to which this licence applies</b>		
A2.1	<p>The licence applies to the following premises:  <i>Refer to table in EPL</i></p>	Note	The EPL has been modified since last IEA, including an amendment to the premises description in March 2017 to exclude parts of the premises now covered by the EPL held by Tarago Operations Pty Ltd to undertake mining and mineral processing.
<b>A3</b>	<b>Other Activities</b>		
A3.1	<p>This licence applies to all other activities carried on at the premises, including:            Ancillary Activity : Electricity Generating Works</p>	Note	
<b>A4</b>	<b>Information supplied to the EPA</b>		
A4.1	<p>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.</p> <p>In this condition the reference to "the licence application" includes a reference to:</p> <ul style="list-style-type: none"> <li>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</li> <li>b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.</li> </ul>	Note	

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
A4.2	The Woodlawn Bioreactor Landfill Environmental Management Plan 2016 prepared by Veolia Environmental Services (Australia) 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.	Note	
<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>	Not verified	The Auditors did not verify the location of all monitoring points against the location descriptions given in the table; however, the Auditors have no reason to believe the locations are not being used.
P1.2	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.	Note	No utilisation areas are listed under this condition.
P1.3	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 EPL for table (EPL modified since last IEA)</i>	Not verified	The Auditors did not verify the location of all monitoring points against the original drawings given as location descriptions in the table; however, the Auditors have no reason to believe the locations are not being used.
<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	Veolia advise that there has been no discharge from the site during the Audit period.

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
<b>L2</b>	<b>Concentration limits</b>		
L2.1	For each monitoring/discharge point or utilisation area specified in the table/s 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.	Note	No water pollutants relevant to this condition.
L2.2	Air Concentration Limits <i>Refer to EPL for table</i>	Compliant	Results of 2017 annual monitoring of gas engine emissions by a NATA accredited laboratory show compliance with concentration limits.
L2.3	This condition does not authorise the pollution of air by any pollutant other than those specified in the above tables.	Note	
L2.4	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.	Note	
<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	This condition does not limit the types of waste that can be received.
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.	Note	

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
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>	Observation	Weighbridge records reviewed for period January to December 2017 confirm input rates were not exceeded. Landfill commenced receiving residual waste from the AWT (MBT) in March 2017. The Auditors note that this condition limits the amount of putrescible regional waste received by road to 50,000 tpa. Veolia has written to the DPE in accordance with the conditions of Approval 10_0012 requesting approval to increase the limit of regional waste by road to 95,000 tpa, although not all regional waste received is putrescible. It will be necessary to modify the EPL before receiving over 50,000 tpa of putrescible regional waste by road. Veolia advised that the process to modify the licence has commenced.
<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.	Not verified	The original 2004 Noise Management Protocol included a monitoring protocol. Under the 2016 Noise Monitoring and Management Plan, monitoring is undertaken in response to a complaint; or to issue noise level checks on any new (untested) items. No noise complaints have been received at the Facility. The Auditors have no reason to believe the condition is not being met.

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
L4.2	<p>For the purpose of Condition L4.1:</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.</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> <p>i) for night time (10 pm to 7 am) assessment - 1 metre from the façade of the residence; and</p> <p>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.</p> <p>d) The noise emission limits apply for prevailing meteorological and winds up to 3 metres per second, except under conditions of temperature inversions.</p>	Note	
L4.3	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>		
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 operations are generally restricted to 6:00am to 5:00pm.
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	Note	
L5.3	Construction work carried out at the premises between 7:00pm and 6:00am Monday to Saturdays, and Sundays and Public Holidays, must be inaudible at residential premises.	Not triggered	Construction of the LTP is in progress. Condition 94 of Approval 31-02-99 prohibits construction work at times given in this condition.

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
<b>L6</b>	<b>Potentially Offensive Odour</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	The Auditors did not note the presence of offensive odour either within Tarago village; at the IMF or at the entry to the Woodlawn site. The Auditors acknowledge that conditions may have been favourable on the day of the site visit. All complaints received at the site relate to odour. The Auditors note there was a reduction in complaints in 2017 compared to prior years.
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.	Note	
<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	
<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	Veolia's maintenance schedule and records and the training and competency records for operators were viewed onsite.
<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 observe dust being emitted from the bioreactor site.



<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor</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	The Auditors did not observe dust being generated at the bioreactor site during the site visit. Dust deposition monitoring was reviewed for the 2016-17 reporting period at four locations on Veolia properties: DG22 and DG24 (Woodlawn), DG28 (Pylara) and DG18 (IMF). The annual average dust deposition complied with consent condition criteria for off-site receptors at all sampling locations. Veolia no longer routinely monitors TSP; however, monitoring was undertaken for over four months from November 2016 to February 2017 and results were within consent condition criteria for off-site receptors at all sampling locations.
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 by rail from Sydney is containerised. No uncovered road deliveries were observed during the site visit.
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 from the site entry to the mine void is sealed.
O3.5	All surfaces intended to carry vehicular traffic must be managed to minimise the quantity of wind blown dust emissions.	Compliant	A water cart 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 cart 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	Emergency Response Plan included in the 2016 LEMP
O4.2	The licensee must extinguish fires at the premises as soon as possible.	Compliant	Emergency Response Plan included in the 2016 LEMP

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor</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	Emergency Response Plan is included in the 2016 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.	Note	This condition has been audited previously. The LEMP has been updated since the last IEA and notes that the rehabilitated Western Ridge area drains back to clean catchment rather than ED3 or the bioreactor.
O5.2	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	
O5.3	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	
O5.4	The evaporation of water by spraying must not result in the drifting of the sprayed liquid from the premises.	Compliant	The approved 2016 LEMP describes how evaporation of water by spraying is to be undertaken with reference to wind conditions. The Auditors did not observe evidence of spray drifting from the site.
O5.5	Untreated leachate must not be transferred to Evaporation Dam 3 unless approved in writing by the EPA.	Compliant	

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
O5.6	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 containers are washed down at the Facility only when needed, e.g. for maintenance. No wash down was observed during the audit site visit.
O5.7	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.	Note	EPL 11437, the supervisory licence, is no longer in force. The POEO Act was amended in 2017 to repeal supervisory licences in respect of putrescible waste facilities.
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 licensee receives only those types of wastes and in such quantities that do not exceed those permitted by this environment protection licence.	Note	EPL 11437, the supervisory licence, is no longer in force.
O5.9	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.	Note	EPL 11437, the supervisory licence, is no longer in force.
O5.10	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.	Note	EPL 11437, the supervisory licence, is no longer in force.
<b>O6</b>	<b>Waste Management</b>		
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	

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
O6.2	The landfill void must be managed to ensure the groundwater gradient directs groundwater flows towards the landfill void.	Note	This condition has been audited previously. According to the 2016 Soil and Water Management Plan, modelling of groundwater flows in 2016 showed a cone of depression evident around the bioreactor and this is expected to continue at least until the waste level approaches the natural water table.
O6.3	A leachate collection/storage/recirculation/treatment system must be designed, installed and operated to: a) accept, in addition to leachate, other waste-waters and contaminated storm-waters allowed by this licence to be introduced into the waste; b) efficiently operate, despite settlement of the waste; c) ensure that liquid is not deliberately stored in the landfilled waste, unless it is necessary for the efficient decomposition of the landfilled waste; d) ensure that leachate can be recirculated within the biologically active zones of the landfilled waste; e) comply with condition O5.2; and f) ensure to the maximum extent practicable the biological decomposition of all organic waste and productive capture of methane.	Compliant	
O6.4	All dams used for the storage of treated leachate must be maintained with a minimum freeboard of 0.5m.	Compliant	This condition was added to the EPL in October 2016. Since then, based on monthly measurement reported in the AEMR and Annual Return, the minimum freeboard has been maintained.

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
O6.5	<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>	Observation	<p>The leachate barrier systems are described in the 2016 Leachate Management Plan approved by the DPE. Where joint fractures and drill holes require sealing, the 2004 Barrier System and Quality Assurance Plan (BSQAP) is referred to.</p> <p>The Auditors note that the 2016 LEMP refers to a series of other documents in relation to the barrier system and that these references should be simplified.</p>
O6.6	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.	Note	The auditors note an error in the condition in referring to condition O5.4. It is assumed the correct reference is condition O6.5. However, this condition is taken to refer to the original construction of the bioreactor. This has been audited previously and is not relevant to the current Audit period.
O6.7	<p>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.</p>	Observation	<p>No water is imported to the Landfill without prior approval of the EPA. This requirement is documented in the 2016 Soil and Water Management Plan (SWMP) which has been approved by the DPE.</p> <p>The Auditors understand that leachate is received from the newer Banksmeadow Intermodal Facility as well as the Clyde Intermodal Facility. The licence should be modified accordingly. Veolia advised that the process to modify the licence has commenced.</p>

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
O6.8	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	Veolia advised that fresh clay is sourced from within the facility for use as daily cover. The Auditors did not verify the source of daily cover; however, the Auditors have no reason to believe the condition is not being met.
O6.9	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.
O6.10	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. 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.	Not verified	The requirements are documented in management plans and are understood by facility personnel; however, the Auditors did not verify cover thickness. The Auditors have no reason to believe the condition is not being met.
O6.11	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. 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.	Not verified	The Auditors have no reason to believe the condition is not being met.
O6.12	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	The requirements are documented in management plans. The Auditors did not verify cover availability; however, the cover is sourced on-site. The Auditors have no reason to believe the condition is not being met.

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
O6.13	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	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.
O6.14	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	
O6.15	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	Veolia is taking steps to improve gas capture, including engaging a consultant to assess and recommend improvements to the gas capture network.
O6.16	<p>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.</p> <p>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.</p> <p><i>Refer to table in EPL</i></p>	Observation	Minimum performance of flares is deemed to be achieved based on temperature and residence time. Temperature and gas flowrate, which is proportional to residence time, are monitored continuously. The Auditors reviewed a sample of monitoring data which demonstrated compliance. The Auditors note that residence time has been reported in the AEMRs and the Annual Returns as an average of <0.3 seconds whereas, to be compliant it should be >0.3 seconds (assuming temperature of 1,000°C). Furthermore the lowest and highest values should also be provided.

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
O6.17	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. <i>Refer to table in EPL</i>	Not verified	Performance of the gas engines was measured during the annual emissions testing by Ektimo. Ektimo reported VOC destruction efficiency of 99.3% which complies with the condition. Ground level concentrations of sulfuric acid, sulfur dioxide, nitrogen dioxide and hydrogen sulphide beyond the site boundary are not monitored and cannot be verified by the Auditors.
O6.18	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.	Note	The auditors note an error in the condition in referring to conditions O5.16 and 5.17. It is assumed the correct references are conditions O6.16 and O6.17. The condition also refers to an outdated regulation. On this basis, the Auditors assume this condition relates to the installation of the original equipment and has been assessed in prior audit periods. The auditors note that one new gas engine was installed in 2017. The Auditors sighted the specification, factory test report and commissioning report for this new engine.
O6.19	Any landfill gas condensate must be collected and returned to the leachate recycling system.	Compliant	Condensate is injected into the waste in the void or directed to the leachate extraction system.
O6.20	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.	Compliant	Gas pipes are constructed from high density plastic and laid in sand and then aggregate to prevent damage.
O6.21	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.	Note	This condition has been audited previously and is not relevant to the current Audit period.
O6.22	The licensee must apply biofiltration media, or another material as approved in writing by the EPA, at the waste/rock interface around the perimeter of the landfill void to reduce odour from fugitive gas emissions.	Compliant	Biofiltration media is applied at the waste surface/rock interface.



<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
O6.23	The licensee must not exhume any landfilled waste unless approved in writing by the EPA.	Note	
O6.24	Vehicles leaving the premises must not track materials to external surfaces.	Compliant	No tracking of materials was observed by the Auditors.
O6.25	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	
O6.26	The licensee must take all practical measures to prevent litter leaving the premises	Compliant	The Facility is maintained in good condition, with no litter observed beyond the landfill during the site visit.
<b>O7</b>	<b>Other operating conditions</b>		
<b>5</b>	<b>Monitoring and Recording Conditions</b>		
<b>M1</b>	<b>Monitoring 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.	Not verified	Veolia was able to produce records request for the two year audit period. The Auditors did not request records back to four years; however, the auditors have no reason to believe the condition is not being met.

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor</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.	Not verified	The auditors have no reason to believe the condition is not being met.
<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.	Note	See M2.2 and M2.3
M2.2	Air monitoring requirements <i>Refer to tables in EPL</i>	Compliant	Annual Returns for past two reporting periods since the last IEA were reviewed. The Auditors note that the breakdown of VOC analysis for Monitoring Point 5 was not attached to the copy provided of the 2016/17 Annual Return.

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
M2.3	Water and/ or Land Monitoring Requirements <i>Refer to tables in EPL (modified since last IEA)</i>	Non-compliant	Annual Returns for past two reporting periods since the last IEA were reviewed. Sample frequency was not achieved for some surface water monitoring points in the 2016/17 reporting period due to insufficient flow. One groundwater monitoring point (44) was decommissioned during the period and did not achieve the sampling frequency. No reason for decommissioning the monitoring point was given in the Annual Return. The Auditors understand that the EPA has written to Veolia regarding this non-compliance. Veolia advised that the replacement strategy is part of the current application to modify the licence.
<b>M3</b>	<b>Testing methods - concentration limits</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.	Not verified	The Auditors did not verify monitoring methodology; however, the Auditors have no reason to believe the condition has not been met.
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>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
<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. <i>Refer to table in EPL</i>	Compliant	The 2016 IEA recommended consideration of an alternative or additional location for the weather station. Veolia has obtained advice from the supplier, Hydrometric, that the current location is acceptable and is as good as any location on the site.
<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	A register of complaints dating back to 2010 is available on the Veolia website.
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	The complaints register records the information required.
M5.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	Compliant	A register of complaints dating back to 2010 is available on the Veolia website.
<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	The Auditors tested the complaints line after 8:00pm and the call was answered.

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
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	Veolia advertises the complaints line number (and the EPA pollution line number) in the Tarago Times monthly publication. The complaints line number is also in the bioreactor LEMP which is available on the Veolia website.
M6.3	The preceding two conditions do not apply until the date of the issue of this licence (or preceding if replacement).	Note	
<b>M7</b>	<b>Requirement to monitor volume or mass</b>		
M7.1	For each discharge point or utilisation area specified below, the licensee must monitor: a) the volume of liquids discharged to water or applied to the area; b) the mass of solids applied to the area; c) the mass of pollutants emitted to the air; at the frequency and using the method and units of measure, specified below. <i>Refer to table in EPL</i>	Compliant	The approved method is by inspection of a calibrated post or survey of water level. Water levels are recorded monthly.
<b>6</b>	<b>Reporting Conditions</b>		
<b>R1</b>	<b>Annual return documents</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 Returns for the two reporting periods since the last IEA were reviewed. The EPA website confirms that these Annual Returns were received by the EPA.
R1.2	An Annual Return must be prepared in respect of each reporting period.	Compliant	

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
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	
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.	Not verified	The EPA website records the 2015/16 Annual Return date received as being within the 60 day period. The EPA website records the 2016/17 Annual Return date received as 9 November 2017, which was just outside the 60 day period. The Auditors sighted an email from Veolia to the EPA dated 3 November, within the 60 day period, noting that the Annual Return had been submitted on-line via the EPA's eConnect system and providing the appendices. The Auditors have no reason to believe the condition has not been met.
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 Auditors reviewed the Annual Return for 2015/16 and 2016/17. The Annual Return for 2012/13, 2013/14 and 2014/15 were reviewed in the 2016 IEA.

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
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.	Not verified	The copy of the 2015/16 Annual Return provided to the Auditors was signed. The copy of the 2016/17 Annual Return provided to the Auditors was unsigned; however, the EPA has acknowledged receipt of the Annual Return and the Auditors have no reason to believe the condition has not been met.
R1.8	A person who has been given written approval to certify a certificate of compliance under a licence issued under the Pollution Control Act 1970 is taken to be approved for the purpose of this condition until the date of first review of this licence.	Note	
R1.9	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: a) tabulated results of all monitoring data required to be collected by this licence; 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; c) an analysis and interpretation of all monitoring data; d) an analysis of and response to any complaints received; 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 f) recommendations on improving the environmental performance of the facility.	Compliant	Annual Returns and AEMRs for the 2015/16 and 2016/17 reporting periods were reviewed. Trend graphs are provided in Annual Environmental Monitoring Report.
R1.10	The items specified in condition R1.7 must be signed by the holder of Environment Protection Licence No. 11437 – the supervisory licence.	Note	EPL 11437, the supervisory licence, is no longer in force.
<b>R2</b>	<b>Notification of environmental harm</b>		
R2.1	Notifications must be made by telephoning the Environment Line service on 131 555.	Note	

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor</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. 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.	Note	
<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.	Note	
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.	Note	
R3.3	The request may require a report which includes any or all of the information (listed in the condition).	Note	
R3.4	The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.	Note	
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	



<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
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 reaches the freeboard level in condition O6.4, 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 the 0.5m freeboard level and/or a program for the design and construction of works to increase the capacity of Evaporation Dam 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	

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor</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; and</li> <li>i) The current level of leachate in each pond.</li> </ul>	Not verified	<p>The 2016/17 Annual Return reported 36 odour complaints in the reporting period. The Auditors reviewed a sample of reports to the EPA relating to 11 of these complaints. The reports provided the required information. The Auditors note that a report relating to several complaints around late December 2016 and early January 2017 was provided more than 24 hours after some of the complaints were received. The EPA has not taken action in relation to the late submission of late reports and it is noted that most complaints are made directly to the EPA and there may be a delay in the complaint being passed on to Veolia. The auditors have no reason to believe the condition was not met.</p>
<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).	Compliant	The licence is available in PDF format at the site.
G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	Note	
G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	Compliant	The licence is available in PDF format at the site.

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
<b>8</b>	<b>Pollution Studies and Reduction Programs</b>		
<b>U1</b>	<b>Longterm Leachate Treatment Solution</b>		
U1.1	By 30 September 2018, the licensee must install, commission and implement the longterm leachate management solution detailed in the report titled "Longterm Leachate Treatment Solution Submission Report" submitted to the EPA on 5 August 2016 (as revised).	Not triggered	
U1.2	The membrane bioreactor (MBR) leachate treatment plant component of the longterm leachate management solution must be capable of continuously treating at least 4L/s of leachate. Note: The longterm leachate treatment solution will require a modification to the premises' Development Approval.	Not triggered	The LTP is under construction. The Auditors understand the LTP has been designed to comply with the condition.
U1.3	Unless otherwise agreed to in writing by the EPA, the licensee must submit a monthly report detailing progress on the Longterm Leachate Treatment Solution project required by condition U1.1. The report must include, but not necessarily be limited to, the following: 1. a brief narrative on the progress of the project; 2. photographs of construction work completed; and 3. a description of any anticipated or actual risks to the project timeline and the measures being implemented to mitigate those risks. The report must be submitted electronically on the fifth business day of the month for the previous month's activities.	Compliant	The Auditors reviewed monthly reports for December 2017 and January and February 2018. The Auditors sighted copies of emails submitting these reports to the EPA.
<b>U2</b>	<b>Evaporation Dam 1 (ED1) and Evaporation Dam 2 (ED2) improvement</b>		
U2.1	By 30 September 2016, the licensee must engage a suitably qualified independent consultant (as approved by the EPA) to investigate the integrity of the ED1 and ED2 liners, all points of potential leakage from ED1 and ED2 and the nature and extent of any leakage or migration from ED1 and ED2.	Not verified	Veolia commissioned AECOM to carry out the integrity assessment of ED1 and ED2. The date on which AECOM was engaged has not been verified by the Auditors.

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
U2.2	By 30 November 2016, the licensee must submit a report to the EPA detailing the results of the consultant's investigation required by condition U2.1. The report must include: a) an assessment of the geophysical conditions underlying and surrounding ED1 and ED2; b) an assessment of the integrity of the liner mechanism for ED1 and ED2; c) an assessment of the identified points of liner failure/faults; d) an assessment of the pathways for the migration of pollutants from ED1 and ED2 into the surrounding environment (including into Allianoyonyiga Creek and Crisps Creek); e) an assessment of the current nature and extent of groundwater and surface water pollution from ED1 and ED2; and f) recommended control and remediation measures to improve the integrity of ED1 and ED2, prevent the occurrence of seepage from ED1 and ED2, and repair or make good any groundwater or surface water pollution caused by ED1 and ED2.	Administrative Non-compliance	Veolia sought an extension to the submission date for this report from the EPA. The extension was not granted. The report was submitted in June 2017 and the EPA issued Veolia with a Penalty Infringement Notice for contravening a condition of the licence.
	<b><i>Leachate Minimisation Plan</i></b>		
U3.1	By 30 December 2016, the licensee must submit a plan to the EPA detailing how it will reduce the amount of water entering the landfill void and making contact with the waste. The plan must: a) identify groundwater recharge points outside of the void; b) identify groundwater seepage points within the void; c) identify any other inputs; and d) include a program of works aimed at minimising water ingress into the landfill void and increasing the capture and diversion of runoff from the walls of the void.	Not verified	The Auditors sighted the Leachate Minimisation Assessment prepared by Earth2Water dated 16 December 2016 to satisfy the requirements of this condition. The date of submission to the EPA has not been verified; however, the Auditors have no reason to believe the condition was not met.
	<b><i>Biofiltration Trial</i></b>		
U4.1	The licensee must develop a pilot-scale biofilter system to evaluate the effect of biofilter depth on landfill gas emissions.	Compliant	
U4.2	By 15 October 2016, the licensee must submit a methodology for the biofiltration trial to the EPA for approval.	Not verified	The Auditors did not verify the submission date of the biofiltration trial methodology to the EPA for approval; however, the trial has been conducted and reported to the EPA. The auditors have no reason to believe the condition was not met.

<b>Table 5: Conditions of EPL 11436 Woodlawn Bioreactor</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
U4.3	By 30 March 2017, the licensee must submit a report to the EPA detailing the outcomes of the trial. The report must be prepared by a suitably qualified independent consultant and include recommendations for: a) the most effective depth of filter medium for reducing odour emissions; b) the most effective application method; c) the optimum time frame for replacing biofilter material, where required; and d) an action strategy for streamlining the application and management of this material.	Compliant	The Auditors sighted a copy of the trial report dated March 2017. Veolia reported in the 2016/17 AEMR that the report was submitted to the EPA in March 2017.
<b>9</b>	<b>Special Conditions</b>		
<b>E1</b>	<b>Financial assurance</b>		
E1.1	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. <i>Refer to EPL for additional requirements for Financial Assurance</i>	Compliant	The Auditors sighted an email from the EPA confirming receipt of an amendment to the bank guarantee for EPL 11436 on 3 October 2017. The amendment and the original guarantee are both held at the EPA's Wollongong Office.

<b>Table 6: Conditions of EPL 11455 - Intermodal Facility</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	<p>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</p> <p>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.</p>	Compliant	<p>Note: No maximum scale is noted in this EPL condition.</p> <p>However, the scale of waste received at the Crisps Creek IMF is limited by the scale noted in the Woodlawn Bioreactor planning approvals and EPL.</p>
A1.2	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	<p>The licence applies to the following premises:</p> <p><i>Refer to table in EPL</i></p>	Note	
<b>A3</b>	<b>Information supplied to the EPA</b>		
A3.1	<p>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.</p> <p>In this condition the reference to "the licence application" includes a reference to:</p> <p>(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</p> <p>(b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.</p>	Note	
A3.2	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.	Note	

Table 6: Conditions of EPL 11455 - Intermodal Facility			
Condition		Compliant	Comments
<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	<p>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.</p> <p><i>Refer to table in EPL</i></p>	Observation	<p>Monitoring locations are documented in the Landfill Environmental Management Plan (LEMP) and the Environmental Management Plan for Crisps Creek Intermodal Facility (IMF EMP). Monitoring results are presented in the Annual Returns and AEMRs.</p> <p>Condition P1.1 requires air monitoring to be conducted at "Nearest sensitive receptor to the premises" as such, the dust deposition gauge (location No 4/ DG18) was located on property to the north-east; however, the property owner asked for it to be removed. No 4/DG18 is now located at the boundary to the east of the on-site shed away from structures and trees. The auditors consider the selected on-site location appropriate as it is expected to provide a more conservative measurement. However, it is shown at the western end of the IMF on the IMF EMP plan and it is recommended that the location on the IMF EMP plan is updated.</p>
P1.2	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.	Note	Not applicable – no table in this condition.
P1.3	<p>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.</p> <p><i>Refer to table in EPL</i></p>	Compliant	Monitoring locations are documented in the LEMP and IMF EMP. Monitoring results are reported in the Annual Returns and AEMRs.

<b>Table 6: Conditions of EPL 11455 - Intermodal Facility</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
<b>3</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	Surface and storm water collected in an onsite first flush system. Testing following rainfall events prior to discharge to Mulwaree River. Monitoring locations are documented in the IMF EMP. Monitoring results are reported in the Annual Returns and AEMRs.
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 has reportedly been discharged from the site during the Audit Period. Stormwater is diverted to onsite first flush system for storage and testing.
<b>L2</b>	<b>Waste</b>		
L2.1	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 table in EPL</i>	Compliant	The site generally receives containerised general solid waste (putrescible). Waste is monitored at the Clyde and Banksmeadow Transfer Terminals at point of loading containers.
L2.2	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. Contingencies (e.g. in case of road blocks) are addressed within the IMF EMP.
<b>L3</b>	<b>Noise Limits</b>		
L3.1	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.	Note	The licence does not contain condition L6.2. The Auditors note this should be a reference to condition L3.2.



<b>Table 6: Conditions of EPL 11455 - Intermodal Facility</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
L3.2	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.	Note	The licence does not contain condition L6.1. The Auditors note this should be a reference to condition L3.1.
L3.3	<p>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> <p>i) for night time (10 pm to 7 am) assessment – 1 metre from the façade of the residence; and</p> <p>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.</p> <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>	Not verified	<p>The licence does not contain conditions L6.1 and L6.2. The Auditors note these should be references to conditions L3.1 and L3.2 respectively.</p> <p>The IMF EMP states that the noise modelling for the EA predicted that standard activities at the IMF would not exceed these criteria at the nearest sensitive receivers. The IMF EMP requires noise monitoring to be conducted if noise complaints are received. No complaints have been received and, as such, monitoring has not been conducted.</p> <p>The auditors have no reason to believe the condition has not been met.</p>

Table 6: Conditions of EPL 11455 - Intermodal Facility			
Condition		Compliant	Comments
<b>L4</b>	<b>Hours of Operation</b>		
L4.1	All operational activities at the premises including road haulage may only be conducted between 6:00 am to 10:00 pm on Mondays to Saturdays. There must be no activities on Sundays or public holidays.	Compliant	Veolia advised that operations are generally conducted between 6:30am to 4.20pm for haulage of waste from the IMF to the bioreactor as dependent upon train movements. During the IEA (2016), it was noted that the EPL operating hours did not match the project approval 10_0012 operating hours (which are 6am to 10pm). The recommendation to amend was included in the Action Plan and Veolia applied and received an updated EPL to match the operating hours of the approval.

Table 6: Conditions of EPL 11455 - Intermodal Facility			
Condition		Compliant	Comments
<b>L5</b>	<b>Potentially offensive odour</b>		
L5.1	<p>The licensee must not cause or permit the emission of offensive odour beyond the boundary of the premises.</p> <p>Note: Section 129 of the Protection of the Environment Operations Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.</p>	Compliant	<p>Two Independent Odour Audits (IOA) have been conducted of the Woodlawn facility since the IEA in 2016. Both the 2017 and the 2018 IOA conducted a brief downwind assessment for the IMF to determine presence of waste-based odour. The inspection did not find any evidence of any waste-based odour being emitted and on this basis, classifies the IMF as a very low risk source in terms of odour. Both the 2017 and 2018 IOA reports state that "no samples were collected from the IMF as all waste transportation is a fully contained process until the displacement of the contents into the Void via the mobile tipping platform." The 2017 IOA reports a 35% increase in odour complaints and the 2018 IOA reports a 78% decrease in odour complaints; however, no specific analysis is presented in relation to the IMF.</p> <p>The Auditors note that procedures and maintenance of the containers for transporting of waste has apparently been a focus since the IEA in 2016.</p> <p>The AEMR 2018 reports that no odour complaints relating to the IMF have been received.</p> <p>The Auditors did not detect offensive odours during the Audit visit to the IMF.</p>

<b>Table 6: Conditions of EPL 11455 - Intermodal Facility</b>			
<b>Condition</b>		<b>Compliant</b>	<b>Comments</b>
<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 IMF EMP and Veolia's ISO 9001 quality and ISO 14001 environmental 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>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	Veolia's maintenance schedule and the training and competency records for operators had been viewed. Veolia also participates in the National Heavy Vehicle Accreditation Scheme. Maintenance and operational performance is audited under the scheme.
<b>O3</b>	<b>Dust</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. Depositional dust sampling equipment is located on site and has shown reasonably consistent results. Most operations are conducted on paved surfaces.
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.	Compliant	No truck wheel track out was evident at the IMF site access onto Bungadore Road and fugitive dust emissions were not observed as trucks exited the site.

Table 6: Conditions of EPL 11455 - Intermodal Facility			
Condition		Compliant	Comments
<b>O4</b>	<b>Emergency Response</b>		
O4.1	The licensee must extinguish fires at the premises as soon as possible.	Compliant	Fire emergency procedures and training are noted in the IMF EMP. Equipment was observed by the Auditors.

<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	Schedule 5, Condition 20 – Train movements at IMF.	Clarify with the DPE whether approval is required for continued splitting of the second train each day at Goulburn into two movements to the IMF until the Tarago rail upgrade works are complete	October 2018	Veolia will seek clarification from DPE if splitting of the second train at Goulburn will trigger any approval requirements.	
2	Schedule 7, Condition 2 – Endorsement of CLC members.	Verify that all current members of the CLC have been endorsed by the DPE.	Completed	Seek endorsement from DPE.	22/05/2018
<b>EPL 11436</b>					
3	Condition M2.3 – Water and/ or Land Monitoring Requirements	Progress modification of EPL 11436 to completion to address decommissioning of monitoring point 44.	30 June 2018	Application to vary EPL 11436 has been submitted to EPA.	
<b>Observations</b>					
4	Independent Odour Audit	Consider improvement to the IOA scope to allow for a more quantitative assessment of offensive odour impacts in the community, through dispersion modelling, detailed complaints analysis, etc.	January 2019	Scope of the IOA will be updated to include the recommendations from the IEA 2018.	
5	Environmental Management Representative	Consider whether a new Environmental Management Representative based at the Woodlawn site should be appointed.	December 2018	Internal discussion with NSW SHEQ.	
6	Spill Response	Improve measures for the clean-up of a putrescible waste spill in the Emergency Response Plan.	December 2018	Update ERP to include measures for the clean-up of a putrescible waste spill.	

<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>
7	Flare System Operation	Ensure flare average residence time is correctly reported in the AEMER and Annual Return and also be provide the lowest and highest values for the reporting period.	5 November 2018	To be correctly reported in the next AEMR and Annual return.	
8	Barrier System	References in the overarching 2016 LEMP to the barrier system and the 2004 BSQAP should be simplified.	31 December 2018	Combine relevant document and update LEMP.	
9	Dust Monitoring at the IMF	Update the IMF EMP, as required, to show the correct location of No 4/DG18.	30 June 2018	Update IMF EMP to show correct location of No 4/DG18.	
10	Maximum annual landfill input rates outlined in EPL 11436.	It will be necessary to modify EPL 11436 before receiving over 50,000 tpa of putrescible regional waste by road.	30 June 2018	To be added to current application to modify EPL 11436.	
11	Receipt of leachate from Sydney intermodal facilities.	EPL 11436 should be modified to permit leachate to be received from the Banksmeadow Intermodal Facility as well as the Clyde Intermodal Facility.	30 June 2018	Included as part of the current licence variation.	

## 6. LIMITATIONS

### 6.1 Limitations of this Report

Ramboll prepared this report in accordance with the scope of work as outlined in the proposal (P4171) to Veolia dated 19 January 2018 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 disclaims responsibility for any changes that may have occurred after this time.

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

Ramboll did not independently verify all of the written or oral information provided to Ramboll during the course of this investigation. While Ramboll 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 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's express written permission.



## **APPENDIX 1**

### **1.DPE APPROVAL OF AUDIT TEAM**



Contact: Chris Schultz  
Phone: 02 4224 9478  
Fax: 02 4224 9470  
Email: [chris.schultz@planning.nsw.gov.au](mailto:chris.schultz@planning.nsw.gov.au)

Amandeep Brar  
Environmental Planner NSW  
Veolia Environmental Services (Australia) Pty Ltd  
Cnr Unwin and Shirley Streets  
ROSEHILL NSW 2142

Dear Amandeep

**Woodlawn Waste Expansion Project (Project Approval 10\_0012)  
Independent Environmental Audit**

I refer to your letter dated 11 January 2018 seeking the Secretary's endorsement for an audit team to undertake the Independent Environmental Audit (audit) under Project Approval 10\_0012 as modified (the approval) for the Woodlawn Bioreactor and Crisps Creek Intermodal Facility.

Having considered the qualifications and experience of the Ramboll Australia Pty Ltd audit team, namely;

- Victoria Sedwick – Exemplar Global Registered Lead Environmental Auditor
- Ronan Kellaghan
- David Ford
- Shaun Taylor

the Secretary endorses the appointment of this team to undertake the audit in accordance with Condition 6 of Schedule 7 of the approval. This approval is conditional on the audit team being independent of the development. The Secretary requires that the audit also assess compliance against the conditions of Environmental Protection Licence (EPL) 11436.

The audit is to be conducted in accordance with AS/NZS ISO 19011 Australian/New Zealand Standard: Guidelines for quality and/or environmental management systems auditing and the *Post-approval requirements for State significant developments – Independent Audit Guideline* dated October 2015.

The audit report is to:

- include a compliance table indicating the compliance status of each condition of approval and any relevant EPL;
- not use the term "partial compliance"
- recommend actions in response to non-compliances;
- review the adequacy of plans and programs required under this approval; and

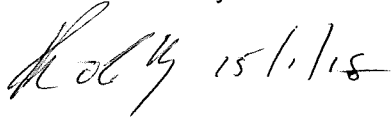
- identify opportunities for improved environmental management and performance.

Within 12 weeks of commissioning the audit, or otherwise as agreed by the Secretary, Veolia Environmental Services (Australia) Pty Ltd (Veolia) is to submit a copy of the audit report to the Secretary together with its response to any recommendations contained in the audit report and a timetable to implement the recommendations.

Prior to submitting the audit report to the Secretary, it is recommended that Veolia review the report to ensure it complies with the relevant approval condition.

Should you wish to discuss this matter please contact Chris Schultz on the details above.

Yours sincerely

Handwritten signature of Katrina O'Reilly, dated 15/1/18.

Katrina O'Reilly  
**Team Leader Compliance**  
*as nominee for the Secretary*

## **APPENDIX 2**

### **2.PROJECT APPROVAL 10\_0012**

# Modification of Minister's Approval

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

As delegate for the Minister for Planning, under the Instrument of Delegation executed on 11 October 2017, I approve the modification of the Project Approval referred to in Schedule 1, subject to the conditions outlined in Schedule 2.



Chris Ritchie  
Director  
Industry Assessments

Sydney 22 DECEMBER 2017

### SCHEDULE 1

Project Approval (MP 10\_0012), granted by the Planning Assessment Commission on 16 March 2012 for the Woodlawn Waste Expansion Project at 619 Collector Road, Tarago, in the Goulburn Mulwaree and Palerang local government areas.

### SCHEDULE 2

This approval is modified as follows:

1. Insert the following definitions in alphabetical order:

Coffer Dam	means coffer dam(s) in ED1 as referred to in MOD 3
ED1	Evaporation Dam No. 1 as referred to in MOD 3 (the unlined portion of ED1)
EPL	Environment Protection Licence
LTP	Leachate Treatment Plant
ML	Megalitre
MOD 2	Modification Application titled <i>Modification of DA 31-02-99 and MP10_0012 for the construction of a leachate treatment plant and associated infrastructure and changes to regional waste limits and operating hours prepared by SG Haddad Advisory and CW Strategic Planning Services</i> , dated May 2017 and Response to Submissions dated October 2017

2. Delete all references to "Water-NSW" and replace with "Water NSW".
3. Delete the definition of "Water NSW" and insert the following definition in alphabetical order:

Water NSW	NSW manager and protector of the Sydney Drinking Water Catchment
-----------	--

#### In Schedule 3: Administrative Conditions

4. Delete Condition 2 and replace with the following:
  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);
- (d) Modification Application MP 10\_0012 MOD 1;
- (e) Modification Application MP10\_0012 MOD 2; and
- (f) conditions of this approval.

5. Delete conditions 17 and 17A and replace with the following:

**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 Secretary. This plan must:
- (a) be prepared in consultation with EPA, Water NSW and DPI Water by a suitably qualified and experienced expert whose appointment has been endorsed by the Secretary;
  - (b) be approved by the Secretary prior to the commencement of expanded operations;
  - (c) must specifically consider soil and water management (including leachate management) at the Landfill and ED3N, ED3S, ED3S-S, ED2, coffer dam(s) and ED1;
  - (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).

- 17A. The Proponent shall update the Soil and Water Management Plan for the landfill by including the proposed changes to water and leachate management in MOD 1 and MOD 2. The Plan shall be prepared in accordance with the requirements of Condition 17, in consultation with Water NSW and the EPA and to the satisfaction of the Secretary. Prior to the operations of the LTP or as otherwise agreed by the Secretary, the Proponent must submit a Soil and Water Management Plan to the satisfaction of the Secretary.

6. Delete conditions 18 and 18A and replace with the following:

**Leachate Management**

18. The Proponent shall prepare and implement a Leachate Management Plan for the Landfill to the satisfaction of the Secretary. This plan must:
- (a) be prepared in consultation with EPA, Water NSW and DPI Water by a suitably qualified and experienced expert whose appointment has been endorsed by the Secretary;
  - (b) be approved by Secretary 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;
  - (g) treat all water that has entered areas filled with waste, or been contaminated by leachate, as leachate;
  - (h) detail the management measures for the LTP, pipeline and coffer dam(s); and
  - (i) detail how the LTP would be managed during an emergency or system failure.

This plan must be documented in the Landfill EMP (see Condition 3 in Schedule 7).

- 18A. The Proponent shall update the Leachate Management Plan for the landfill by including the proposed changes to the leachate management in MOD 1 and MOD 2. The Plan shall be prepared in accordance with the requirements of Condition 18, in consultation with Water NSW and the EPA and to the satisfaction of the Secretary. Prior to the operation of the LTP or as otherwise agreed by the Secretary, the Proponent must submit a revised Leachate Management Plan to the satisfaction of the Secretary.

7. Insert the following new Condition 18AA after Condition 18A as follows:

**Coffer Dam(s)**

- 18AA. Should any additional coffer dams in ED1 be required, the Applicant must submit revised management plans in accordance with conditions 17 and 18 to the satisfaction of the Secretary prior to any treated

leachate being discharged to the coffer dams. The plans must be prepared in consultation with the EPA and Water NSW and be documented in the Landfill LEMP.

8. Delete Condition 18E and replace with the following:

18E. The Long-term Leachate Management Strategy must be operational no later than 30 September 2018 or as otherwise agreed by the Secretary.

9. Insert the following new conditions after Condition 18E:

**Leachate Treatment Plant**

18F. The Proponent must construct the Leachate Treatment Plant (LTP) and associated infrastructure in accordance with the Construction Environment Management Plan prepared by Veolia dated 12 December 2017.

18G. All run-off during construction must be contained on the site, no discharges off-site are permitted.

18H. The LTP must be:

- (a) capable of processing at least 4 litres per second of leachate; and
- (b) bunded to contain 110 % of the facilities largest sized tank.

18I. The sludge skip bin must be bunded and covered to prevent contaminants entering surface water.

**Coffer Dam(s)**

18J. Treated leachate must not be discharged to any part of ED1, other than within lined coffer dam(s).

18K. The coffer dam(s) in ED1 must be designed and constructed:

- (a) by a suitably qualified and experienced person(s);
- (b) based on a geotechnical investigation and any recommendations prepared by a suitable qualified person(s); and
- (c) ensuring that all coffer dams are lined with a High Density Polyethylene liner to the satisfaction of the EPA and in consultation with Water NSW.

18L. The Proponent must provide works-as-executed drawings signed by a registered surveyor demonstrating that the coffer dam(s) have been constructed in accordance with the design required by Condition 18K. The Proponent must submit the works-as-executed drawings to the EPA, Water NSW and Secretary prior to the discharge of treated leachate into the coffer dam(s).

18M. Prior to the discharge of treated leachate into any coffer dam(s) in ED1, the Proponent must confirm in writing and provide a quality assurance report to the EPA, Water NSW and the Secretary that the High Density Polyethylene dam lining has been adequately installed. From the commencement of discharge of treated leachate into the coffer dam(s), the Proponent shall provide quarterly updates to the EPA, Water NSW and the Secretary of the leachate volume in the coffer dam(s) and the remaining leachate storage volume.

18N. Prior to the discharge of treated leachate to any coffer dam(s), the Proponent must install a leak detection system which monitors flows along all pipelines which carry leachate. Any leaks must be investigated, contained and rectified.

18O. Only treated leachate from the LTP is permitted to be stored within coffer dam(s) in ED1 unless otherwise agreed to by the Secretary.

18P. The coffer dam(s) are not permitted to exceed 80 per cent capacity until either:

- (a) a new coffer dam has been designed and constructed in accordance with condition 18K to 18N and is ready to accept treated leachate from the LTP and a revised management plan has been submitted to the satisfaction of the Secretary in accordance with Condition 17 and 18; or
- (b) sections of ED3N have been emptied of partially treated leachate, had its liner assessed and, if necessary, repaired, and is capable of receiving treated leachate from the LTP.

18Q. No interaction between the treated leachate in the coffer dam(s) and the mine stormwater in ED1 is permitted.

18R. Within six months of commissioning the LTP and annually thereafter, unless otherwise agreed to by the Secretary, the Proponent shall commission and pay the full cost of an independent assessment of the leachate and water management system. This audit must be conducted by a suitably qualified, experienced and independent expert whose appointment has been endorsed by the Secretary. During the audit, this expert must:

- (a) consult with the EPA, Water NSW and the Secretary;

- (b) assess actual performance against the assumptions and predictions made in the project water balance prepared by WSP dated September 2017. This must include:
  - (i) actual versus predicted inputs and outputs into and out of each dam;
  - (ii) actual versus predicted mechanical evaporation from each dam;
  - (iii) actual versus predicted rainfall and evaporation; and
  - (iv) the actual versus predicted volume of water or treated leachate stored in each dam.
- (c) assess actual versus predicted performance of the LTP. This must include:
  - (i) actual versus target effluent quality; and
  - (ii) actual versus target throughput.
- (d) determine whether the leachate and water management system is achieving its intended objectives; and
- (e) outline all reasonable and feasible measures that may be required to improve water and leachate management at the site.

#### **ED1**

- 18S. The volume of mine water stored in ED1 must be no more than 10 ML by 31 December 2023.

#### **ED3N**

- 18T. ED3N must be emptied of effluent from the existing leachate system by 31 December 2022.
- 18U. Prior to discharging treated leachate into sections of ED3N from the LTP, the Proponent must verify the integrity of the dam and prepare an integrity assessment of the ED3N liner to demonstrate the dam is not leaking and is suitable for the storage of treated leachate.
- 18V. Should the integrity assessment identified in Condition 18U find that the liner in ED3N is not adequate for treated leachate storage, the Proponent must submit management options to the Secretary, Water NSW and the EPA which will be adopted to rectify any integrity issues.
- 18W. The Proponent must not store treated leachate from the LTP in ED3N until the Secretary and the EPA are satisfied that either ED3N is not leaking or the management options identified in Condition 18V are acceptable.

10. Delete Condition 20 and replace with the following:

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

*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, Christmas Day and Good Friday	Nil

11. Delete Condition 25 and replace with the following:

#### **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 Secretary 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):
    - (i) measures to minimise the risk of fire on site, including in the landfill area;
    - (ii) actions to extinguish any fires on site promptly;
    - (iii) 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; and



- (f) address any chemical storage required to operate the LTP and be consistent with the Department of Planning and Environment's Hazardous Industry Planning Advisory Paper No. 1, 'Emergency Planning'.

This plan must be documented in the Landfill EMP (see condition 3 in schedule 7). Prior to the operation of the LTP, the Fire and Emergency Management Plan must be revised and approved by the Secretary.

12. Insert new conditions 25A and 25B immediately after Condition 25 as follows:

#### **Safety Management System**

- 25A. A comprehensive Safety Management System, covering all on-site operations and associated transport activities involving hazardous materials. Records from the Safety Management System must be kept on-site and must be available for inspection by the Secretary upon request. The Safety Management System shall be consistent with the Department of Planning and Environment's Hazardous Industry Planning Advisory Paper No. 9, 'Safety Management'.

#### **Chemical Storage**

- 25B. The Applicant must store all chemicals, fuels and oils used on-site in accordance with:

- (a) the requirements of all relevant Australian Standards; and
- (b) the NSW EPA's '*Storing and Handling of Liquids: Environmental Protection – Participants Handbook*' if the chemicals are liquids.

In the event of an inconsistency between the requirements listed from (a) to (b) above, the most stringent requirement must prevail to the extent of the inconsistency.

#### **In Schedule 5: Specific Environmental Conditions – Crisps Creek IMF site**

13. Delete Condition 17 and replace with the following:

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

*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, Christmas Day and Good Friday	Nil

# Notice of Modification

## Section 75W of the *Environmental Planning & Assessment Act 1979*

As delegate of the Minister for Planning, I modify the Project Approval referred to in Schedule 1, subject to the conditions in Schedule 2



Ben Lusher  
**Acting Executive Director**  
**Key Sites and Industry Assessments**

Sydney

9 SEPTEMBER

2016

### SCHEDULE 1

**Development Approval:** MP 10\_0012 granted by the Planning Assessment Commission on 16 March 2012

**For the following:** Woodlawn Waste Expansion Project

**Proponent:** Veolia Environmental Services (Australia) Pty Ltd

**Approval Authority:** Minister for Planning

**The Land:** Woodlawn Bioreactor site: Lot 19 DP 827588, Lots 25, 30, 33, 34, 69, 88 & 91 DP 754919, Lot 4 and 5 DP 830765, Lot 1 DP 241092

Crisps Creek Intermodal Facility site: Lot 1 DP 1045652

**Modification:** MP 10\_0012 MOD 1: Modification for changing the site water and leachate management to allow the use of:

- ED2 for the mine void storm water storage; and
- ED3S for treated leachate storage.

### SCHEDULE 2

The above approval is modified as follows:

- (a) Schedule 2 Definitions is amended in alphabetical order by the insertion of the **bold and underlined** words / numbers and deletion of ~~struck out~~ words/numbers as follows:

Department	Department of Planning and <b><u>Environment</u></b> Infrastructure
Director-General	Director-General of the Department (or delegate)
<b><u>DPI-Water</u></b>	<b><u>Department of Primary Industries –Water</u></b>
<b><u>ED2</u></b>	<b><u>Evaporation Dam No.2, as referred to in MOD 1</u></b>
<b><u>ED3N</u></b>	<b><u>Evaporation Dam No.3 - North as referred to in MOD 1</u></b>
<b><u>ED3S</u></b>	<b><u>Evaporation Dam No.3 - South as referred to in MOD 1</u></b>
<b><u>ED3S-S</u></b>	<b><u>Evaporation Dam No.3 - South (southern lagoon) as referred to in Appendix 6</u></b>
<b><u>EPA</u></b>	<b><u>Environment Protection Authority</u></b>

Minister	Minister for Planning and Infrastructure
<b>MOD 1</b>	<b><u>Modification Environmental assessment titled “Woodlawn Bioreactor, Modification to surface water and leachate management” dated 11 December 2015 and the Response to Submissions, dated June 2016.</u></b>
NOW	Department of Primary Industries – NSW Office of Water
<b>Secretary</b>	<b><u>Secretary of the Department (or delegate)</u></b>
<b>Water-NSW</b>	<b><u>NSW Water Supplier</u></b>

**Delete all references to Director-General and replace with Secretary.**

**Delete all references to NOW and replace with DPI-Water.**

- (b) Schedule 3 – Condition 2 is amended by the insertion of the **bold and underlined** words / numbers and deletion of ~~struck-out~~ words/numbers as follows:

#### **Terms of Approval**

2. The Proponent shall carry out the Project generally in accordance with the:
- EA;
  - statement of commitments (see Appendix 1);
  - site layout plans and drawings in the EA (see Appendix 2); and
  - Modification Application MP 10 0012 MOD 1; and**
  - conditions of this approval.
- (c) Schedule 4 - Condition 10 is amended by the insertion of the **bold and underlined** words / numbers and deletion of ~~struck-out~~ words/numbers as follows:

#### **Independent Odour Audit**

10. Unless otherwise directed by the **Secretary** ~~Director-General~~, the Proponent shall implement all the mandatory odour controls and recommendations of any Independent Odour Audit/s. Recommendations of the **preceding** first Independent Odour Audit/s 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).

- (d) Schedule 4 –Condition 17 is amended by the insertion of the **bold and underlined** words / numbers and deletion of ~~struck-out~~ words/numbers as follows:

#### **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 **Secretary** ~~Director-General~~. This plan must:
- be prepared in consultation with **EPA, OEH, and DPI-Water** ~~NOW~~ by a suitably qualified and experienced expert whose appointment has been endorsed by the **Secretary** ~~Director-General~~;
  - be approved by the Secretary Director-General prior to the commencement of expanded operations;
  - must specifically consider soil and water management (including leachate management) at the Landfill, and **ED3N ED3S, ED3S-S and ED2;**
  - include a water balance for the project;
  - include a surface water monitoring program;
  - 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).

- (e) Schedule 4 – is amended by the insertion of the following new Condition 17A, after Condition 17 as shown in **bold and underlined** as follows:

**17A. The Proponent shall update the Soil and Water Management Plan for the landfill by including the proposed changes to water and leachate management in MOD 1. The Plan shall be prepared in accordance with the requirements of Condition 17, in consultation with Water-NSW and the EPA to the satisfaction of the Secretary. The updated Plan must be submitted for approval to the Secretary within two months of the date of this approval or as otherwise agreed to by the Secretary.**

- (f) Schedule 4 – Condition 18 is amended by the insertion of the **bold and underlined** words / numbers and deletion of ~~struck-out~~ words/numbers as follows:

#### **Leachate Management**

18. The Proponent shall prepare and implement a Leachate Management Plan for the Landfill to the satisfaction of the ~~Secretary~~ Director-General. This plan must:
- (a) be prepared in consultation with ~~EPA-OEH, and DPI-Water~~ **NOW** by a suitably qualified and experienced expert whose appointment has been endorsed by the ~~Secretary~~ Director-General;
  - (b) be approved by ~~Secretary~~ 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).

- (h) Schedule 4 – is amended by the insertion of the following new Condition 18A, after Condition 18 as shown in **bold and underlined** as follows:

**18A The Proponent shall update the Leachate Management Plan for the landfill by including the proposed changes to the leachate management in MOD 1. The Plan shall be prepared in accordance with the requirements of Condition 18, in consultation with Water-NSW and the EPA to the satisfaction of the Secretary. The updated Plan must be submitted for approval to the Secretary within two months of the date of this approval or as otherwise agreed to by the Secretary.**

- (i) Schedule 4 – is amended by the insertion of the following new Condition 18B, after Condition 18A as shown in **bold and underlined** as follows:

#### **Long-term Leachate Management**

- 18B. The Proponent must develop and implement a Longterm Leachate Management Strategy that:**
- **Minimises the generation of leachate at the premises;**

- Captures, treats and disposes of all leachate generated at the premises;
- Maintains leachate levels in the waste mass to a level that does not inhibit the efficiency of the landfill gas extraction system;
- Progressively removes all treated leachate from ED3; and
- Minimise the emission of offensive odours from leachate treated and stored onsite so there is no offsite impact.

The Longterm Leachate Management Strategy must be submitted to the Secretary and the EPA (for inclusion as a Pollution Reduction Program attached to environment protection licence 11436) for approval within two months of the approval date of MOD 1.

18C. Treated leachate must not be discharged to any part of ED3S, other than ED3S-S, until such time as the Long Term Leachate Management Strategy has been approved by the Secretary and the EPA.

18D. Seepage or leakage points in ED2 must be identified and repaired to the satisfaction of the Secretary and EPA prior to the transfer of any stormwater from ED3S to ED2.

18E. The Longterm Leachate Management Strategy must be operational no later than 20 December 2017 or as otherwise agreed by the Secretary.

- (j) Schedule 4 – Condition 28 is amended by the insertion of the **bold and underlined** words / numbers and deletion of struck-out words/numbers as follows:

#### **LANDFILL CLOSURE AND REHABILITATION**

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

- (a) be prepared in consultation with the OEH, **EPA, Water-NSW** and other relevant agencies by suitably qualified and experienced experts whose appointment has been endorsed by the **Secretary** ~~Director-General~~;
- (b) be submitted to the **Secretary** ~~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).

- (k) Schedule 4 – Condition 29 is amended by the insertion of the **bold and underlined** words / numbers and deletion of struck-out words/numbers as follows:

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

- (a) be prepared in consultation with the OEH, **EPA, Water-NSW and other relevant agencies** by a suitably qualified and experienced expert;
- (b) be submitted to the **Secretary** ~~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).

- (l) Schedule 7 – is amended by the insertion of the following new Condition 7A, after Condition 7 as shown in **bold and underlined** as follows:

**7A The Proponent shall provide a report to the Secretary of the complaints received, the response/action taken and timeframe in accordance with Condition 7, on an annual basis which is to be submitted within the AEMR. The report shall include all the matters required within subsections of Condition 7.**

- (m) Schedule 7 – Condition 10 is amended by the insertion of the **bold and underlined** words / numbers and deletion of ~~struck out~~ words/numbers as follows:

## **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 ~~and~~ or Odour Audit, and the Proponent's response to the recommendations in any audit;
  - e) **report of the complaints and the response/action taken to resolve the complaint as required by Condition 7;**
  - f) **a copy of the minutes of the Community Liaison Committee Meetings;** and
  - g) any other matter required by the Director-General.
- (n) Schedule 7 - Appendix 5 is included by the insertion of the following new figure titled Revised water and leachate management plan as shown in **bold and underlined** as follows:



Veolia Environmental Services (Australia) Pty Ltd Woodlawn Bioreactor -  
Modification to surface water and leachate management







# 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

---

### 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

---

## **TABLE OF CONTENTS**

<b>SCHEDULE 2 - DEFINITIONS</b>	<b>3</b>
<b>SCHEDULE 3 - ADMINISTRATIVE CONDITIONS</b>	<b>4</b>
Obligation to Minimise Harm to the Environment	4
Terms of Approval	4
Limits of Approval	4
Structural Adequacy	5
Transitional Arrangements	5
Demolition	5
Operation of Plant and Equipment	5
Staged Submission of Plans or Programs	5
Compliance	5
<b>SCHEDULE 4 - SPECIFIC ENVIRONMENTAL CONDITIONS – LANDFILL SITE</b>	<b>6</b>
Waste Management	6
Air	6
Soil and Water	8
Noise	8
Flora and Fauna	9
Fire and Emergency Management	10
Visual Amenity	10
Security	10
Landfill Closure and Rehabilitation	10
<b>SCHEDULE 5 - SPECIFIC ENVIRONMENTAL CONDITIONS – CRISPS CREEK IMF SITE</b>	<b>11</b>
Waste Management	11
Air	11
Soil and Water	11
Noise	12
Visual Amenity	13
Security	13
Rail Traffic	13
<b>SCHEDULE 6 – TRAFFIC AND ROAD UPGRADES</b>	<b>14</b>
Traffic and Transport	14
Road Upgrades	14
Road Maintenance Contributions	15
<b>SCHEDULE 7 - ENVIRONMENTAL MANAGEMENT, REPORTING &amp; AUDITING</b>	<b>16</b>
Community Liaison Committee	16
Environmental Management	16
Independent Environmental Audit	17
Incident Reporting	17
Access to Information	17
<b>APPENDIX 1: STATEMENT OF COMMITMENTS</b>	<b>18</b>
<b>APPENDIX 2: SITE LAYOUT</b>	<b>20</b>
<b>APPENDIX 3: FINAL LANDFORM</b>	<b>22</b>
<b>APPENDIX 4: TRUCK HAULAGE ROUTES FOR REGIONAL WASTE</b>	<b>23</b>

## 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.

---

## **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>f</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 bunded 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 Liaison 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:
- a) be prepared to the satisfaction of the Director-General;
  - b) be prepared by a suitably independent and qualified expert whose appointment has been endorsed by the Director-General in consultation with RMS;
  - 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 safety and the safety of the Proponent's truck drivers negotiating the right-hand turn into Collector Road;
  - 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)
  - e) assess the need for a climbing lane against *Austroads 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:
- (a) Palerang Council for waste hauled to the Landfill along Palerang Council maintained roads; and
  - (b) 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.

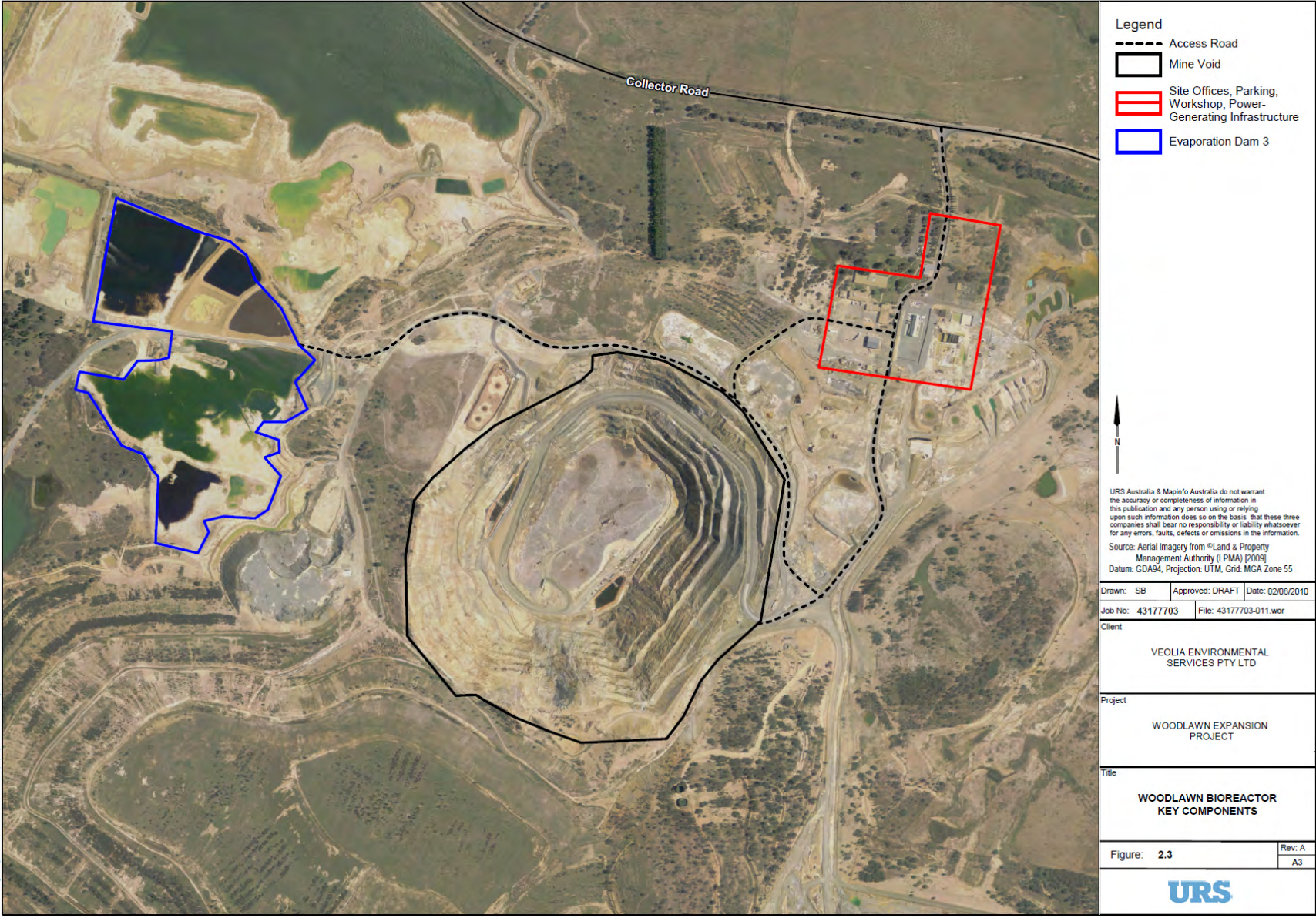
**APPENDIX 1**  
**PROPONENT'S STATEMENT OF COMMITMENTS**

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

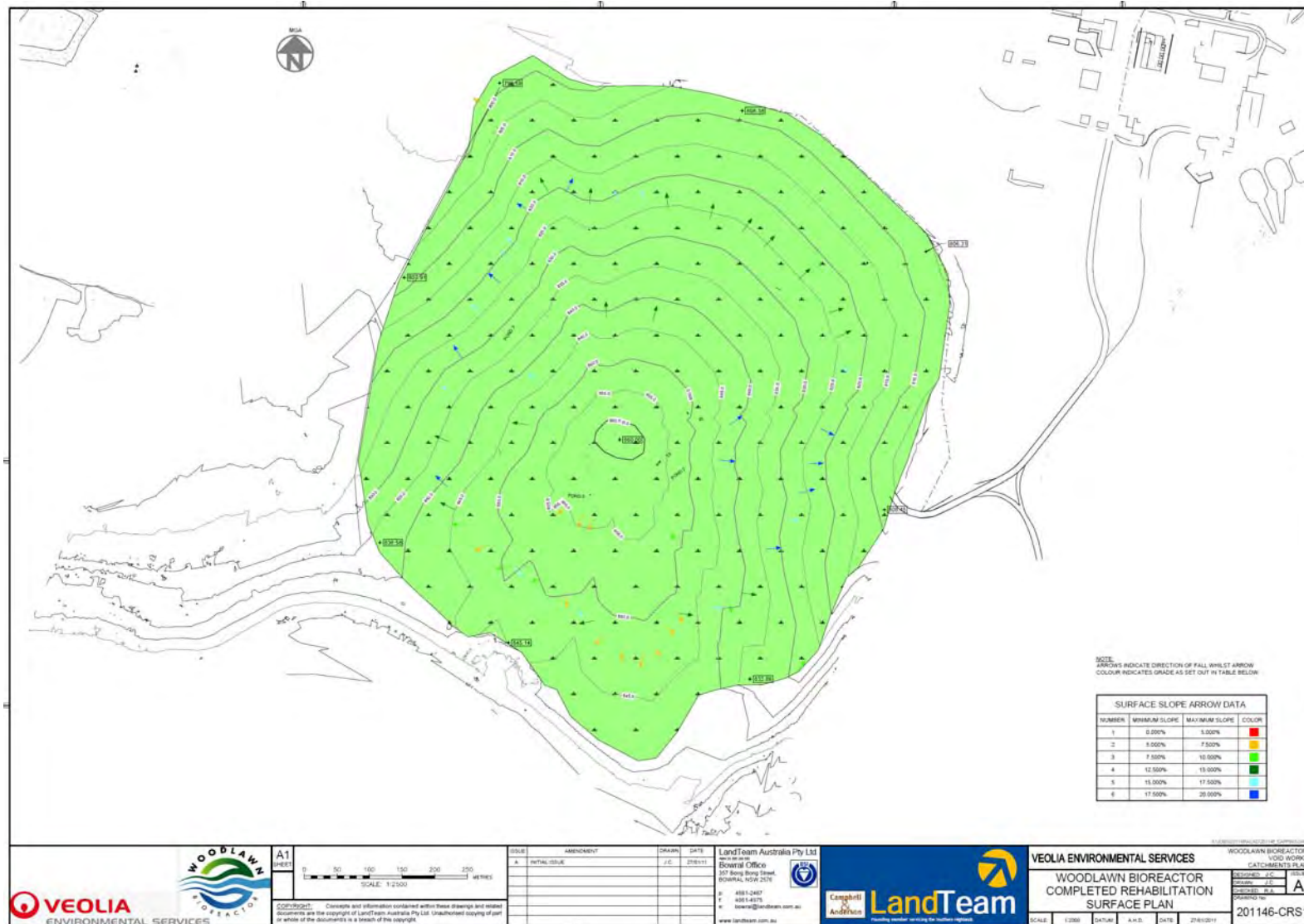




# CRISPS CREEK IMF

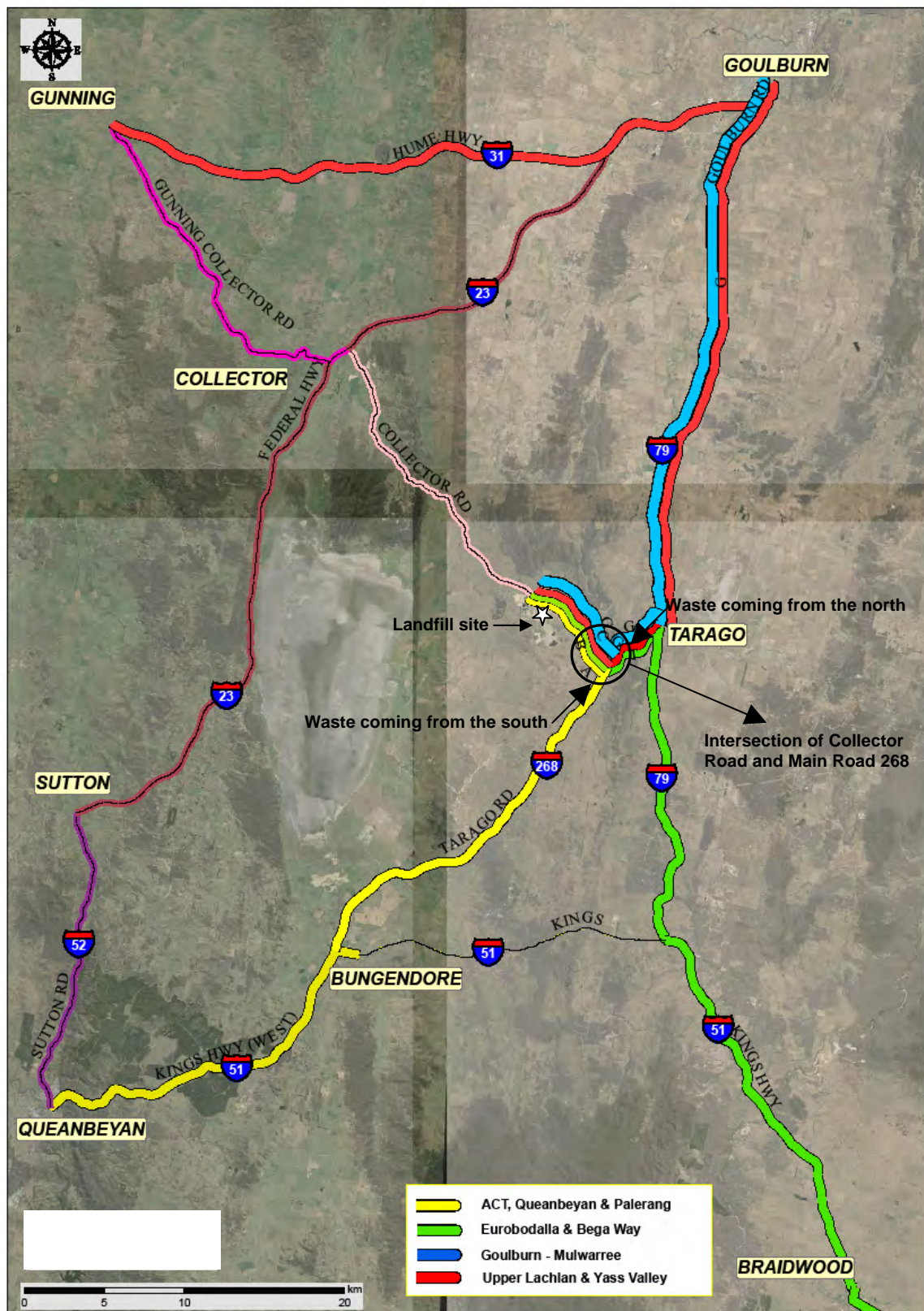


## APPENDIX 3 - FINAL LANDFORM





# **APPENDIX 4** **TRUCK HAULAGE ROUTES FOR REGIONAL WASTE**





**APPENDIX 3**  
**3.DEVELOPMENT CONSENT 31-02-99**

# Notice of Modification

## Section 75W of the *Environmental Planning & Assessment Act 1979*

As delegate of the Minister for Planning under instrument of delegation executed on 25 January 2010, I modify the development consent referred to in Schedule 1, subject to the conditions in schedule 2.



Chris Wilson  
Executive Director  
Major Projects Assessment

Sydney

11.8.10

2010

### SCHEDULE 1

**Development Consent:** (DA-31-02-99) granted by the Minister for Urban Affairs and Planning on 30 November 2000

**For the following:** construction and operation of the Woodlawn Waste Management Facility at 619 Collector Road Tarago, in the Goulburn Mulwaree and Palerang Local Government Areas

**Modification:** Modification No: 1 - to receive up to 50,000 tonnes per annum of waste at the facility by road, from local government areas in the vicinity of the facility

### SCHEDULE 2

The development consent is modified by:

- 1) Inserting a new condition 1 (e) as follows:

(e) Modification Application DA31-02-99 Mod1 and accompanying Environmental Assessment titled "*Modification to DA31-02-99 to Receive Regional Council Waste at the Woodlawn Bioreactor*", prepared by Veolia Environmental Services, dated February 2010 and the associated '*Response to Submissions*' prepared by Veolia Environmental Services dated 12 April 2010.

- 2) Replacing existing Table 1 ( within condition 4) with the following table:

**Table 1: Maximum Input Rates**

Years from date of operational commencement	Maximum Input Rate (Received by Rail from the Sydney region)	Maximum Input Rate (Received by Road from surrounding LGAs)
0-5	400,000 tpa	0
6-10	360,000 tpa	50,000 tpa
11-15	325,000 tpa	50,000 tpa
16-20	290,000 tpa	50,000 tpa

- 3) Replace existing condition 26 with the following:

The applicant shall ensure that:

- a) all waste received by rail at the Woodlawn Waste Management Facility is sourced from the Sydney region; and
- b) All waste received by road at the Woodlawn Waste Management Facility is sourced from local government areas in the vicinity of the site (in accordance with DA31-02-99 Mod1).

- 4) Inserting a new condition 32B as follows:

**TRANSPORT CODE OF CONDUCT**

Prior to the receipt of waste from adjoining local government areas via road outlined in DA31-02-99 Mod1, the Applicant 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 RTA, Goulburn Mulwaree and Palerang Councils, and be submitted to the Director-General for approval prior to the receipt of waste at the facility from adjoining local government areas via road; and
- (b) describe the measures to be implemented to:
  - minimise the impacts of the Development on the local and regional road network including traffic noise; and
  - minimise conflicts with other road users e.g. school bus operators.

# Notice of Modification

## Section 75W of the *Environmental Planning & Assessment Act 1979*

As delegate of the Minister for Planning, I modify the development consent referred to in Schedule 1, subject to the conditions in Schedule 2.



Ben Lusher  
**Acting Executive Director**  
**Key Sites and Industry Assessments**

Sydney

9 SEPTEMBER 2016

### SCHEDULE 1

- Development Consent:** DA 31-02-99 granted by the then Minister for Urban Affairs and Planning on 30 November 2000
- For the following:** Woodlawn Waste Management Facility at 619 Collector Road Tarago, in the Goulburn Mulwaree and Palerang Local Government Areas
- Applicant:** Veolia Environmental Services (Australia) Pty Ltd
- Consent Authority:** Minister for Planning
- The Land:** Lots 4, 5-6 in DP830765, Lots 8-9 in DP534616, Lot 19 in DP827588, Lots 14, 25, 30, **33, 34, 69**, 70, 86, 88, 91, and 92 in DP754919, **Lot 1 DP 241092**, part of the land comprising Lot 10 in DP703260 and part of the land comprising Lot 3 in DP754894.
- Modification:** **DA 31-02-99 MOD 2:** Modification for changing the site water and leachate management to allow the use of:
- ED2 for the mine void storm water storage; and
  - ED3S for treated leachate storage.

### SCHEDULE 2

The above approval is modified as follows:

- (a) Schedule 2 – Abbreviations and Interpretation are amended by the insertion of the **bold and underlined** words / numbers and deletion of ~~struck-out~~ words/numbers in alphabetical order as follows:

The Department                      The Department of Urban ~~Affairs and~~ Planning **and Environment**

<del>The Director-General</del>	<del>The Director-General of the Department of Urban Affairs and Planning</del>
<del>DLWC</del>	<del>Department of Land and Water Conservation</del>
<b>DPI-Water</b>	<b>Department of Primary Industries – Water</b>
<b>ED2</b>	<b>Evaporation Dam No.2, as referred to in MOD 2</b>
<b>ED3N</b>	<b>Evaporation Dam No.3 - North as referred to in MOD 2</b>
<b>ED3S</b>	<b>Evaporation Dam No.3 - South as referred to in MOD 2</b>
<b>ED3S-S</b>	<b>Evaporation Dam No.3 - South (southern lagoon) as referred to in Figure 1 (Appendix A)</b>
<b>EPA</b>	<b>Environment Protection Authority</b>
<b>MOD 2</b>	<b>Modification Application titled “<i>Woodlawn Bioreactor – Modification to surface water and leachate management</i>” prepared by Parsons Brinckerhoff and dated 11 December 2015 and Response to Submissions dated June 2016</b>
<del>NPWS</del>	<del>National Parks and Wildlife Service</del>
<b>OEH</b>	<b>Office of Environment and Heritage</b>
<b>Secretary</b>	<b>Secretary of the Department (or delegate)</b>
<b>Water-NSW</b>	<b>NSW Water Supplier</b>

Delete all references to Director-General and replace with Secretary.

Delete all references to DLWC and replace with DPI-Water.

Delete all references to NPWS and replace with OEH.

- (b) Schedule 2 – Condition 1 is amended by the insertion of the bold and underlined words / numbers as follows:

## 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;
  - (d) the Amended DA and accompanying information prepared by Woodward-Clyde, dated 12 November 1999,
  - (e) Modification Application DA31-02-99 Mod1 and accompanying Environmental Assessment titled “*Modification to DA31-02-99 to Receive Regional Council Waste at the Woodlawn Bioreactor*”, prepared by Veolia Environmental Services, dated February 2010 and the associated ‘*Response to Submissions*’ prepared by Veolia Environmental Services dated 12 April 2010; and
  - (f) Modification Application DA 31-02-99 MOD 2; and** 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.

- (c) Schedule 2 is amended by the insertion of the following new Condition 16A, after Condition 16 as shown in **bold and underlined** as follows:

**Consultation with Tarago and District Progress Association Incorporated (TADPAI)**

**16A. The Applicant shall meet quarterly with TADPAI representatives and provide updated information on odour incidents, leachate management and gas extraction and resolution of incidents related to the local community.**

- (d) Schedule 2 – Condition 64 is amended by the insertion of the **bold and underlined** words / numbers as follows:

64. Stormwater in the mine void must only be discharged into **ED3S sump, for transfer via pipeline to ED2,** or otherwise used for operational purposes within the landfill, as approved in writing by the EPA. (EPA GTA)

- (e) Schedule 2 – Condition 65 is amended by the insertion of the bold and underlined words / numbers and deletion of struck-out words/numbers as follows:

65. Stormwater collected in the mine void may only be transferred into **ED3S sump and ED2** provided that:

- a) The Applicant can always comply with condition 58; **and**
  - 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)
- (f) Schedule 2 – is amended by the insertion of the following new Condition 66A, after Condition 66 as shown in **bold and underlined** as follows:

**66A. Within two months of the date of the approval of MOD 2 or as otherwise agreed by the Secretary, the Applicant shall submit a revised Stormwater Management Plan to the Secretary for approval. The plan shall be prepared in consultation with the EPA and include the changes to water management in MOD 2, in accordance with the requirements of Condition 66.**

- (g) Schedule 2 – is amended by the insertion of the following new Condition 66B, after Condition 66A as shown in **bold and underlined** as follows:

**66B. Within two months of the date of the approval of MOD 2, or as otherwise agreed by the Secretary, the Applicant shall submit a revised Management Plan for ED3N, ED3S and ED3S-S to the Secretary for approval. The plan shall be prepared in consultation with the EPA and include the changes to water management in MOD 2, in accordance with the requirements of Condition 70.**

- (h) Schedule 2 – Condition 70 is amended by the insertion of the **bold and underlined** words / numbers and deletion of the struck-out words/numbers as follows:

**ED3N, ED3S and ED3S-S – Management**

70. The Applicant must prepare a management plan for **ED3N, ED3S and ED3S-S** to ensure that:

- (a) ~~the~~ **each** dam is **lined and** maintained to prevent leakage of **from the dams** acid mine drainage waters in order to protect groundwater and surface water;

- (b) a monitoring and inspection program is implemented including installation of monitoring bores, a review of monitoring data and six-monthly inspections to evaluate the integrity of the barrier and to assess if leakage from the dam is occurring;
- (c) adequate capacity is retained in **ED3N and ED3S** to meet the environmental performance requirements in condition 58.
- (d) measures are identified to maintain adequate capacity within a suitable time period after receiving water from a rainfall event;
- (e) there is an emergency plan for the management of **leachate** water in excess of the capacity of **ED3N and ED3S**;
- (f) the sources of **leachate** water that are collected or received in **ED3N and ED3S** are identified; and
- (g) the quantity of **leachate** water ~~(in cubic metres per hour)~~ from each source that reports to **ED3N, and ED3S** is monitored and compared in graphical format with rainfall data.

**An updated plan including MOD 2** The plan must be documented in the LEMP.

- (i) Schedule 2 – is amended by the insertion of the following new Condition 70A, after Condition 70 as shown in **bold and underlined** as follows:

#### **Treated Leachate Storage in ED3S-S**

**70A. The Applicant must confirm in writing to the EPA and the Secretary the dam lining is in place (in accordance with Condition 70), prior to the discharge of treated leachate into ED3S-S. From the commencement of MOD 2, the Applicant shall provide quarterly updates to the EPA and the Secretary of the leachate volume in ED3S-S (southern lagoon) and the remaining storage volume.**

- (j) Schedule 2 – is amended by the insertion of the following new Condition 70B, after Condition 70A as shown in **bold and underlined** as follows:

#### **ED2 - Management**

**70B. The Applicant must prepare a management plan for ED2 to ensure that:**

- (a) only mine void stormwater that does not contain leachate and direct rainfall and runoff is received and stored within ED2;
- (b) the dam is lined and maintained to prevent the leakage of stored acid mine drainage waters in order to protect groundwater and surface water;
- (c) a monitoring and inspection program is implemented including installation of monitoring bores, a review of monitoring data and six-monthly inspections to evaluate the integrity of the barrier and to assess if leakage from the dam is occurring;
- (d) adequate capacity is retained in ED2 to meet the environmental performance requirements in condition 58.
- (e) measures are identified to maintain adequate capacity within a suitable time period after receiving water from a rainfall event;
- (f) there is an emergency plan for the management of water in excess of the capacity of ED2;
- (g) the sources of water that are collected or received in ED2 are identified; and
- (h) the quantity of water from each source that reports to ED2 is monitored and compared in graphical format with rainfall data.



The plan must be prepared in consultation with the EPA and submitted to the Secretary for approval within two months of the date of approval for MOD 2 or as otherwise agreed by the Secretary. The revised plan shall be documented in the LEMP.

70C. Seepage or leakage points in ED2 must be identified and repaired to the satisfaction of the Secretary and EPA prior to the transfer of any stormwater from ED3S to ED2.

- (k) Schedule 2 – is amended by the insertion of the following new Condition 70C, after Condition 70B as shown in **bold and underlined** as follows:

#### **Long-term Leachate Management**

70D. The Proponent must develop and implement a Longterm Leachate Management Strategy that:

- Minimises the generation of leachate at the premises;
- Captures, treats and disposes of all leachate generated at the premises;
- Maintains leachate levels in the waste mass to a level that does not inhibit the efficiency of the landfill gas extraction system;
- Progressively removes all treated leachate from ED3; and
- Minimise the emission of offensive odours from leachate treated and stored onsite so that there is no off site impact.

The Longterm Leachate Management Strategy must be submitted to the Secretary and the EPA (for inclusion as a Pollution Reduction Program attached to environment protection licence 11436) for approval within two months of the approval date of MOD 2.

70E. Treated leachate must not be discharged to any part of ED3S, other than ED3S-S, until such time as the Long Term Leachate Management Strategy has been approved by the Secretary and the EPA.

70F. The Longterm Leachate Management Strategy must be operational no later than 20 December 2017, or as otherwise agreed by the Secretary.

- (l) Schedule 2 – Condition 132 is amended by the insertion of the **bold and underlined** words / numbers and deletion of ~~struck-out~~ words/numbers as follows:

#### **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. ED3N;



- iv. ED3S;
- v. ED3S-S;
- vi. ED2;
- vii. Downstream receiving waters of ED2;
- viii. Treated leachate effluent discharge line,
- ix. Discharge line from ED3S to ED2, and
- x. 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 chemical composition of treated leachate in the effluent discharge line;
- i. the chemical composition of leachate within ED3S-S;
- j. the quantity of water that reports to ED3, including its sources;
- k. the quantity of water removed and/or discharged from ED3, including its destination;
- l. the total quantity of water contained in ED3;
- m. the quantity of water transferred from ED3S into ED2;
- n. the quantity of water that reports to ED2, including its sources;
- o. the total quantity of water contained in ED2;
- p. the parameters and substances that are proposed to be monitored, including sampling and analysis frequencies;
- q. reporting and assessment of results; and
- r. 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.*

**The Monitoring of ED2 will initially be at weekly intervals once the transfer of stormwater from ED3S to ED2 has commenced and will be reviewed 12 months after commencement of MOD 2.**

- (m) Schedule 2 – is amended by the insertion of the following new Condition 159A, after Condition 159 as shown in **bold and underlined** as follows:

**159A. Within six months of the approval lapse date of MOD 2, or within such further period as the Secretary may agree, the Applicant shall prepare and submit a revised Emergency Management Plan to the Secretary for approval. The plan shall include the site changes in MOD 2, in accordance with the requirements of Condition 159.**

- (n) Schedule 2 – is amended by the insertion of the following new Condition 162, after Condition 161 as shown in **bold and underlined** as follows:

#### **Complaints Handling Procedures**

**162. Within 2 months of the date of the approval of MOD 2, a complaints handling procedure must be submitted to the Secretary 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 and timeframe required to resolve the complaint must be made publicly available on the Applicant'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.

- (o) Schedule 2 – is amended by the insertion of the following new Condition 163, after Condition 162 as shown in **bold and underlined** as follows:

**163. The Applicant shall provide a report to the Secretary of the complaints received, the response/action taken and timeframe in accordance with Condition 162, on an annual basis which is to be submitted within the AEMR. The report shall include all the matters required within subsections of Condition 162.**

- (p) Schedule 2 – is amended by the insertion of the following new Condition 164, after Condition 163 as shown in **bold and underlined** as follows:

#### **Access to Information**

**164. From the commencement of MOD 2, the Applicant shall make the following information publicly available on its website as is required by the consent:**

- 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 and Odour Audit, and the Applicant's response to the recommendations in any audit;
- e) report of the complaints and the response/action taken to resolve the complaint as required by Condition 162;
- f) a copy of the minutes of the Community Liaison Committee Meetings; and
- g) any other matter required by the Director-General.

- (q) Schedule 2 – is amended by the insertion of Appendix A – Figure 1 as shown in **bold and underlined** as follows:

**Appendix A – Figure 1 Detail of Evaporation Dam 3 prepared by Veolia Environmental Services (Australia) Pty Ltd – Revision F dated 21 July 2016.**

End of Modifications to DA 31-02-99

# Modification of Minister's Approval

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

As delegate for the Minister for Planning, under the Instrument of Delegation executed on 11 October 2017, I approve the modification of the Development Consent referred to in Schedule 1, subject to the conditions outlined in Schedule 2.



Chris Ritchie  
Director  
Industry Assessments

Sydney 22 DECEMBER 2017

### SCHEDULE 1

Development Consent (DA 31-02-99), granted by the then Minister for Urban Affairs and Planning on 30 November 2000 for the Woodlawn Waste Management Facility at 619 Collector Road, Tarago, in the Goulburn Mulwaree and Palerang local government areas.

### SCHEDULE 2

This consent is modified as follows:

#### In Schedule 2: Conditions of Development Consent

1. Insert the following definitions in alphabetical order:

Coffer Dam	means coffer dam in ED1 as referred to in MOD 3
ED1	Evaporation Dam No. 1 as referred to in MOD 3 (the unlined portion of ED1)
LTP	Leachate Treatment Plant as referred to in MOD 3
ML	Megalitres
MOD 3	Modification Application titled <i>Modification of DA 31-02-99 and MP10_0012 for the construction of a leachate treatment plant and associated infrastructure and changes to regional waste limits and operating hours prepared by SG Haddad Advisory and CW Strategic Planning Services</i> , dated May 2017 and Response to Submissions dated October 2017

2. Delete the definition for "Water NSW" and insert the following definition in alphabetical order:

Water NSW	NSW manager and protector of the Sydney Drinking Water Catchment
-----------	--

3. Delete Condition 1 and replace with the following:

**Adherence to Terms of DA and EIS**

1. The 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;
  - (d) the Amended DA and accompanying information prepared by Woodward-Clyde, dated 12 November 1999;
  - (e) Modification Application DA31-02-99 Mod1 and accompanying Environmental Assessment titled "*Modification to DA31-02-99 to Receive Regional Council Waste at the Woodlawn Bioreactor*", prepared by Veolia Environmental Services, dated February 2010 and the associated '*Response to Submissions*' prepared by Veolia Environmental Services dated 12 April 2010;
  - (f) Modification Application DA 31-02-99 MOD 2; and
  - (g) Modification Application DA 31-02-99 MOD 3.

4. Delete Condition 18 and replace with the following:

**Conditions Compliance Reports**

18. The Applicant shall submit to the Secretary, the EPA, DPI Water, Water NSW 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 Secretary;
  - (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 Secretary;
  - (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 Secretary.

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

5. Delete Condition 19 and replace with the following:

**Independent Environmental Audits**

19. Every three years following the date of this consent, or at periods otherwise agreed to by the Secretary, and until such time as agreed to by the Secretary, 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 Secretary;
  - (b) be conducted by a suitably qualified independent person approved by the Secretary;
  - (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 Secretary, the EPA, DPI Water, Water NSW, Council and the Community Liaison Committee.

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

6. Delete Condition 55 and replace with the following:

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;
  - (d) an estimate of the full costs for implementing each aspect of this plan (*EPA GTA*);
  - (e) contingency measures in the event that the leachate storage dams reach capacity sooner than anticipated, this should include the provision for the construction and operation of additional lined coffer dams in ED1 to the satisfaction of the EPA; and
  - (f) contingency measures should the modelling as required by Condition 70G demonstrate that the dams will overflow.
7. Insert new conditions 55A and 55B immediately after Condition 55 as follows:
- 55A. Prior to operation of the LTP, or as otherwise agreed by the Secretary, the Applicant must submit a revised LCMP to the satisfaction of the Secretary. The LTP is not permitted to operate until the revised LCMP is approved by the Secretary. The plan must be prepared in consultation with the EPA and Water NSW and include contingency measures should the leachate dams fill sooner than anticipated.
- 55B. Should additional coffer dam(s) be required to be constructed as part of the LCMP the dam(s) must be designed constructed and maintained in accordance with Condition 70L to 70P.
8. Delete conditions 66A and 66B and replace with the following:
- 66A. Prior to the operation of the LTP or as otherwise agreed by the Secretary, the Applicant must submit a revised Stormwater Management Plan to the satisfaction of the Secretary. The plan must be prepared in consultation with the EPA and Water NSW and include the changes to stormwater management in MOD 2 and MOD 3, in accordance with the requirements of Condition 66.
- 66B. Prior to the operation of the LTP or as otherwise agreed by the Secretary, the Applicant must submit a revised Management Plan for ED3N, ED3S, ED3S-S and the Coffor Dam to the satisfaction of the Secretary. The LTP is not permitted to operate until the revised management plan is approved by the Secretary. The plan must be prepared in consultation with the EPA and Water NSW and include the changes to water and leachate management in MOD 2 and MOD 3, in accordance with the requirements of Condition 70. The plan must be documented in the LEMP.
9. Insert new Condition 66C immediately after Condition 66B as follows:
- 66C. Should any additional coffer dams in ED1 be required, the Applicant must submit revised management plans in accordance with conditions 70 and 70B to the satisfaction of the Secretary prior to any treated leachate being discharged to the coffer dams. The plans must be prepared in consultation with the EPA and Water NSW and be documented in the LEMP.
10. Delete Condition 70 and replace with the following:
- ED3N, ED3S and ED3S-S and Coffor Dam(s) – Management
70. The Applicant must prepare a management plan for ED3N, ED3S, ED3S-S and coffer dam(s), ED1, the LTP and pipeline to ensure that:
- (a) each dam is lined in consultation with Water NSW and to the satisfaction of the EPA and maintained to prevent leakage from the dams in order to protect groundwater and surface water;
  - (b) a monitoring and inspection program is implemented including installation of monitoring bores, a review of monitoring data and six-monthly inspections to evaluate the integrity of the barrier and to assess if leakage from the dam is occurring;
  - (c) adequate capacity is retained in ED3N, ED3S and coffer dam(s) to meet the environmental performance requirements in condition 58;
  - (d) measures are identified to maintain adequate capacity within a suitable time period after receiving water from a rainfall event;
  - (e) there is an emergency plan for the management of leachate in excess of the capacity of ED3N, ED3S and coffer dam(s);
  - (f) the sources of leachate that are collected or received in ED3N, ED3S and coffer dam(s) are identified;
  - (g) the quantity of leachate from each source that reports to ED3 is monitored and compared in graphical format with rainfall data;
  - (h) ED3N is emptied of effluent from the existing leachate system by 31 December 2022;
  - (i) all pipelines which transfer leachate and treated leachate are monitored to ensure leaks do not occur;
  - (j) the operational details of the LTP include:

- (i) the leachate quality targets;
    - (ii) a description of the performance indicators that would be used to judge the performance of the LTP;
    - (iii) a description of the management measures that would be implemented to manage the operational impacts of the LTP including the chemical storage area and sludge skip bin;
    - (iv) contingency measures to manage any unpredicted impacts such as the bioreactor membrane failing; and
    - (v) the roles, responsibility, authority and accountability of all key personnel involved in the environmental management of the LTP.
  - (k) An updated plan including MOD 2 and MOD 3 and must be documented in the LEMP.
11. Insert the following note after Condition 70C:
- Note: Conditions pertaining to ED2 will be triggered only in the event of transfer of water from ED3S to ED2.*
12. In Condition 70D, delete the word "Proponent" and replace with the word "Applicant".
13. Delete Condition 70F and replace with the following:
- 70F. The Long-term Leachate Management Strategy must be operational no later than 30 September 2018 or as otherwise agreed by the Secretary.
14. Insert the following new conditions after Condition 70F:

Future Modelling

- 70G. Prior to the operation of the LTP, the Applicant must provide modelling which demonstrates that the evaporation dams will not overflow for the period between 2029 to 2058. Should overflow be predicted, the Applicant must provide contingency measures in accordance with Condition 55A.

Leachate Treatment Plant

- 70H. The Applicant must construct the Leachate Treatment Plant (LTP) and associated infrastructure in accordance with the Construction Environment Management Plan prepared by Veolia dated 12 December 2017.
- 70I. All run-off during construction must be contained on the site in accordance with Condition 58.
- 70J. The LTP must be:
- (a) capable of processing at least 4 litres per second of leachate; and
  - (b) bunded to contain 110 % of the facilities largest sized tank.
- 70K. The sludge skip bin must be bunded and covered to prevent contaminants entering surface water.

Coffer Dam(s)

- 70L. Treated leachate must not be discharged to any part of ED1, other than within lined coffer dam(s).
- 70M. The coffer dam(s) in ED1 must be designed and constructed:
- (a) by a suitably qualified and experienced person(s);
  - (b) based on a geotechnical investigation and any recommendations prepared by a suitable qualified person(s); and
  - (c) ensuring that all coffer dams are lined with a High Density Polyethylene liner to the satisfaction of the EPA and in consultation with Water NSW.
- 70N. The Applicant must provide works-as-executed drawings signed by a registered surveyor demonstrating that the coffer dam(s) have been constructed in accordance with the design required by Condition 70M. The Applicant must submit the works-as-executed drawings to the EPA, Water NSW and Secretary prior to the discharge of treated leachate into the coffer dam(s).
- 70O. Prior to the discharge of treated leachate into any coffer dam(s) in ED1, the Applicant must confirm in writing and provide a quality assurance report to the EPA, Water NSW and the Secretary that the High Density Polyethylene dam lining has been adequately installed. From the commencement of discharge of treated leachate into the coffer dam(s), the Applicant shall provide quarterly updates to the EPA, Water NSW and the Secretary of the leachate volume in the coffer dam(s) and the remaining leachate storage volume.

- 70P. Prior to the discharge of treated leachate to any coffer dam(s), the Applicant must install a leak detection system which monitors flows along all pipelines which carry leachate. Any leaks must be investigated, contained and rectified.
- 70Q. Only treated leachate from the LTP is permitted to be stored within coffer dam(s) in ED1, unless otherwise agreed to by the Secretary.
- 70R. The coffer dam(s) are not permitted to exceed 80 per cent capacity until either:
- (a) a new coffer dam has been designed and constructed in accordance with condition 70M to 70P and is ready to accept treated leachate from the LTP and a revised management plan has been submitted to the satisfaction of the Secretary in accordance with Condition 70; or
  - (b) sections of ED3N have been emptied of partially treated leachate, had its liner assessed and, if necessary, repaired, and is capable of receiving treated leachate from the LTP.
- 70S. No interaction between the treated leachate in the coffer dam(s) and the mine stormwater in ED1 is permitted.
- 70T. Within six months of commissioning the LTP and annually thereafter, unless otherwise agreed to by the Secretary, the Applicant shall commission and pay the full cost of an independent assessment of the leachate and water management system. This audit must be conducted by a suitably qualified, experienced and independent expert whose appointment has been endorsed by the Secretary. During the audit, this expert must:
- (a) consult with the EPA, Water NSW and the Secretary;
  - (b) assess actual performance against the assumptions and predictions made in the project water balance prepared by WSP dated September 2017. This must include:
    - (i) actual versus predicted inputs and outputs into and out of each dam;
    - (ii) actual versus predicted mechanical evaporation from each dam;
    - (iii) actual versus predicted rainfall and evaporation; and
    - (iv) the actual versus predicted volume of water or treated leachate stored in each dam.
  - (c) assess actual versus predicted performance of the LTP. This must include:
    - (i) actual versus target effluent quality; and
    - (ii) actual versus target throughput.
  - (d) determine whether the leachate and water management system is achieving its intended objectives; and
  - (e) outline all reasonable and feasible measures that may be required to improve water and leachate management at the site.

#### ED1

- 70U. The volume of mine water stored in ED1 must be no more than 10 ML by 31 December 2023.

#### ED3N

- 70V. ED3N must be emptied of effluent from the existing leachate system by 31 December 2022.
- 70W. Prior to discharging treated leachate into sections of ED3N from the LTP, the Applicant must verify the integrity of the dam and prepare an integrity assessment of the ED3N liner to demonstrate the dam is not leaking and is suitable for the storage of treated leachate.
- 70X. Should the integrity assessment identified in Condition 70W find that the liner in ED3N is not adequate for treated leachate storage, the Applicant must submit management options to the Secretary, the EPA and Water NSW which will be adopted to rectify any integrity issues.
- 70Y. The Applicant must not store treated leachate from the LTP in ED3N until the Secretary and the EPA are satisfied that either ED3N is not leaking or the management options identified in Condition 70X are acceptable.

15. Delete Condition 131(a) and replace with the following:

- (a) location of bore holes around the perimeter of the mine void, ED3 and the coffer dam(s) including the depth at which they are screened to enable access of groundwater;

16. Delete Condition 132 and replace with the following:

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) coffer dam(s);
  - (iv) ED1;
  - (v) ED3N;
  - (vi) ED3S;
  - (vii) ED3S-S;
  - (viii) ED2;
  - (ix) Downstream receiving waters of ED2;
  - (x) All treated leachate effluent discharge lines;
  - (xi) Discharge line from ED3S to ED2;
  - (xii) 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 chemical composition of treated leachate in the effluent discharge line and the coffer dam;
- (i) the chemical composition of leachate within ED3S-S;
- (j) the quantity of water that reports to ED3, including its sources;
- (k) the quantity of water removed and/or discharged from ED3, including its destination;
- (l) the total quantity of water contained in ED3;
- (m) the quantity of water transferred from ED3S into ED2;
- (n) the quantity of water that reports to ED2 from Woodlawn Waste Management Facility, including its sources;
- (o) the total quantity of water contained in ED2;
- (p) the total quantity of treated leachate contained in the coffer dam(s);
- (q) the total quantity of water contained in ED1;
- (r) the parameters and substances that are proposed to be monitored, including sampling and analysis frequencies;
- (s) reporting and assessment of results; and
- (t) 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.*

*The Monitoring of ED2 will initially be at weekly intervals once the transfer of stormwater from ED3S to ED2 has commenced and will be reviewed 12 months after commencement of MOD 2.*

*Conditions pertaining to ED2 will be triggered only in the event of transfer of water from ED3S to ED2.*

17. Delete conditions 159 and 159A and replace with the following:

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;
  - (f) ensuring that all relevant employees are familiar with the emergency management plan; and
  - (g) any chemical storage required to operate the LTP and be consistent with the Department of Planning and Environment's Hazardous Industry Planning Advisory Paper No. 1, 'Emergency Planning'.

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.*

- 159A. Prior to the operation of the LTP, or within such further period as the Secretary may agree, the Applicant shall prepare and submit a revised Emergency Management Plan to the Secretary for approval. The plan shall include the site changes in MOD 2 and MOD 3, in accordance with the requirements of Condition 159.
18. Insert new conditions 159B and 159C immediately after Condition 159A as follows:

**Safety Management System**

- 159B. A comprehensive Safety Management System, covering all on-site operations and associated transport activities involving hazardous materials. Records from the Safety Management System must be kept on-site and must be available for inspection by the Secretary upon request. The Safety Management System shall be consistent with the Department of Planning and Environment's Hazardous Industry Planning Advisory Paper No. 9, 'Safety Management'.

**Chemical Storage**

- 159C. The Applicant must store all chemicals, fuels and oils used on-site in accordance with:
  - (a) the requirements of all relevant Australian Standards; and
  - (b) the NSW EPA's 'Storing and Handling of Liquids: Environmental Protection – Participants Handbook' if the chemicals are liquids.

In the event of an inconsistency between the requirements listed from (a) to (b) above, the most stringent requirement must prevail to the extent of the inconsistency.

## 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

---

#### **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	Mulwaree 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:

---

<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:
- (a) the dam is maintained to prevent the leakage of stored acid mine drainage waters in order to protect groundwater and surface water;
  - (b) adequate capacity is retained in ED3 to meet the environmental performance requirements in condition 58
  - (c) measures are identified to maintain adequate capacity within a suitable time period after receiving water from a rainfall event;
  - (d) there is an emergency plan for the management of water in excess of the capacity of ED3;
  - (e) the sources of water that are collected or received in ED3 are identified; and
  - (f) 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:
- (a) **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.
  - (b) **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 minute) noise emission criterion of 35 dB(A)  $L_{A10}$  (15 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**

---

#### **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**

---

### **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**

---

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**

---

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

---

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**

### **4.EPL 11436**



# Environment Protection Licence

Licence - 11436

Licence Details	
Number:	11436
Anniversary Date:	06-September

Licensee
VEOLIA ENVIRONMENTAL SERVICES (AUSTRALIA) PTY LTD
PO BOX 171
GRANVILLE NSW 2142

Premises
WOODLAWN LANDFILL
COLLECTOR ROAD
TARAGO NSW 2580

Scheduled Activity
Waste disposal (application to land)

Fee Based Activity	Scale
Waste disposal by application to land	Any capacity

Region
Waste & Resource Recovery
59-61 Goulburn Street
SYDNEY NSW 2000
Phone: (02) 9995 5000
Fax: (02) 9995 5999
PO Box A290
SYDNEY SOUTH NSW 1232





# Environment Protection Licence

Licence - 11436

<b>INFORMATION ABOUT THIS LICENCE</b>	4
Dictionary	4
Responsibilities of licensee	4
Variation of licence conditions	4
Duration of licence	4
Licence review	4
Fees and annual return to be sent to the EPA	4
Transfer of licence	5
Public register and access to monitoring data	5
<b>1 ADMINISTRATIVE CONDITIONS</b>	6
A1 What the licence authorises and regulates	6
A2 Premises or plant to which this licence applies	6
A3 Other activities	6
A4 Information supplied to the EPA	6
<b>2 DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND</b>	7
P1 Location of monitoring/discharge points and areas	7
<b>3 LIMIT CONDITIONS</b>	12
L1 Pollution of waters	12
L2 Concentration limits	12
L3 Waste	12
L4 Noise limits	13
L5 Hours of operation	14
L6 Potentially offensive odour	14
<b>4 OPERATING CONDITIONS</b>	14
O1 Activities must be carried out in a competent manner	14
O2 Maintenance of plant and equipment	14
O3 Dust	15
O4 Emergency response	15
O5 Processes and management	15
O6 Waste management	16
<b>5 MONITORING AND RECORDING CONDITIONS</b>	20
M1 Monitoring records	20
M2 Requirement to monitor concentration of pollutants discharged	20
M3 Testing methods - concentration limits	25



# Environment Protection Licence

Licence - 11436

M4	Weather monitoring	25
M5	Recording of pollution complaints	25
M6	Telephone complaints line	26
M7	Requirement to monitor volume or mass	26
<b>6</b>	<b>REPORTING CONDITIONS</b>	<b>27</b>
R1	Annual return documents	27
R2	Notification of environmental harm	28
R3	Written report	28
R4	Other reporting conditions	29
<b>7</b>	<b>GENERAL CONDITIONS</b>	<b>30</b>
G1	Copy of licence kept at the premises or plant	30
<b>8</b>	<b>POLLUTION STUDIES AND REDUCTION PROGRAMS</b>	<b>30</b>
U1	Longterm Leachate Treatment Solution	30
U2	Evaporation Dam 1 (ED1) and Evaporation Dam 2 (ED2) improvements	30
U3	Leachate Minimisation Plan	31
U4	Biofiltration Trial	31
<b>9</b>	<b>SPECIAL CONDITIONS</b>	<b>32</b>
E1	Financial assurance	32
<b>DICTIONARY</b>		<b>34</b>
	General Dictionary	34

# Environment Protection Licence

---

Licence - 11436



## Information about this licence

### Dictionary

A definition of terms used in the licence can be found in the dictionary at the end of this licence.

### Responsibilities of licensee

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

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

### Variation of licence conditions

The licence holder can apply to vary the conditions of this licence. An application form for this purpose is available from the EPA.

The EPA may also vary the conditions of the licence at any time by written notice without an application being made.

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

### Duration of licence

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

### Licence review

The Act requires that the EPA review your licence at least every 5 years after the issue of the licence, as set out in Part 3.6 and Schedule 5 of the Act. You will receive advance notice of the licence review.

### Fees and annual return to be sent to the EPA

For each licence fee period you must pay:

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

# Environment Protection Licence

Licence - 11436



The EPA publication “A Guide to Licensing” contains information about how to calculate your licence fees. The licence requires that an Annual Return, comprising a Statement of Compliance and a summary of any monitoring required by the licence (including the recording of complaints), be submitted to the EPA. The Annual Return must be submitted within 60 days after the end of each reporting period. See condition R1 regarding the Annual Return reporting requirements.

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

### Transfer of licence

The licence holder can apply to transfer the licence to another person. An application form for this purpose is available from the EPA.

### Public register and access to monitoring data

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

- licence applications;
- licence conditions and variations;
- statements of compliance;
- load based licensing information; and
- load reduction agreements.

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

### This licence is issued to:

VEOLIA ENVIRONMENTAL SERVICES (AUSTRALIA) PTY LTD
PO BOX 171
GRANVILLE NSW 2142

subject to the conditions which follow.

# Environment Protection Licence

Licence - 11436

## 1 Administrative Conditions

### A1 What the licence authorises and regulates

- A1.1 This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.

Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.

Scheduled Activity	Fee Based Activity	Scale
Waste disposal (application to land)	Waste disposal by application to land	Any capacity

### A2 Premises or plant to which this licence applies

- A2.1 The licence applies to the following premises:

Premises Details
WOODLAWN LANDFILL
COLLECTOR ROAD
TARAGO
NSW 2580
LOT 8 DP 534616, LOT 25 DP 754919, LOT 30 DP 754919, LOT 88 DP 754919, LOT 91 DP 754919, LOT 5 DP 830765
THE PREMISES IS DEFINED IN THE PLAN TITLED "ATTACHMENT 1 - WOODLAWN SITE EPL - MONITORING SITES - DRAWING NO: TOP-G-001", DRAWN BY DEAN OLIVER AND DATED 17 MARCH 2017. THE PLAN IS HELD BY THE EPA AS DOCUMENT DOC17/168187.

### A3 Other activities

- A3.1 This licence applies to all other activities carried on at the premises, including:

Ancillary Activity
Electricity Generating Works

### A4 Information supplied to the EPA

- A4.1 Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.

# Environment Protection Licence

Licence - 11436

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.

- A4.2 The Woodlawn Bioreactor Landfill Environmental Management Plan 2016 prepared by Veolia Environmental Services (Australia) Pty Ltd and including any future amendments, is not to be taken as part of the documentation in condition A4.1, other than those parts specifically referenced in this licence.

## 2 Discharges to Air and Water and Applications to Land

### P1 Location of monitoring/discharge points and areas

- 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>Air</i>			
EPA identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
1	Subsurface Gas Monitoring		GMBH1, as described in Appendix C of the Gas Management Plan in Section 8.10 of the LEMP dated August 2004. E734682 N6117145
2	Subsurface Gas Monitoring		GMBH2, as described in Appendix C of the Gas Management Plan in Section 8.10 of the LEMP dated August 2004. E734825 N6117674
4	Subsurface Gas Monitoring		GMBH4, as described in Appendix C of the Gas Management Plan in Section 8.10 of the LEMP dated August 2004. E733786 N6116790
5	Landfill Gas Input Monitoring		Gas Extraction Booster for Landfill Gas Engine identified in Appendix C of the Gas Management Plan in Section 8.10 of the LEMP dated August 2004. E733786 N6116790
6	Surface Gas Monitoring		Locations across the surface of the landfilled waste (30m x 30m grid)
7	Air Discharge - Landfill Gas Flare	Air Discharge - Landfill Gas Flare	Landfill Gas Flare. E735012 N6117421
8	Air Discharge - Landfill Gas Engine	Air Discharge - Landfill Gas Engine	Landfill Gas Engine Exhaust Point. E735002 N6117378
9	Meteorological		Meteorological station located at the premises. E734922 N6117469

# Environment Protection Licence

Licence - 11436



10	Dust Monitoring	DG28 - Pylara, as shown on the map titled Mine Site Ambient Air Monitoring Locations Overall Site, Appendix A to the Ambient Air Quality Monitoring Plan in Section 8.13 of the LEMP dated July 2004. E737459 N6115805
11	Dust Monitoring	DG22 as shown on the map titled Mine Site Ambient Air Monitoring Locations Mine Area, Appendix A to the Ambient Air Quality Monitoring Plan in Section 8.13 of the LEMP dated August 2004. E734956 N6116974
12	Dust Monitoring	DG24 as shown on the map titled Mine Site Ambient Air Monitoring Locations Mine Area, Appendix A to the Ambient Air Quality Monitoring Plan in Section 8.13 of the LEMP dated August 2004. E733866 N6117237

P1.2 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.

P1.3 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.

## Water and land

EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
13	Surface Water Monitoring		Site 115 - Allianoyonyige Creek, as shown on Drawing No. GO25/6/02 contained in the Surface Water Management Scheme in Section 8.6 of the LEMP dated August 2004. E731952 N6118394
14	Surface Water Monitoring		Spring 2 - Crisps Creek, as shown on Drawing No. GO25/6/02 contained in the Surface Water Management Scheme in Section 8.6 of the LEMP dated August 2004. E734806 N6118144
15	Surface Water Monitoring		Site 105 - Crisps Creek, as shown on Drawing No. GO25/6/02 contained in the Surface Water Management Scheme in Section 8.6 of the LEMP dated August 2004. E737459 N6115805

# Environment Protection Licence

Licence - 11436



16	Surface Water Monitoring		Site WM200 - Raw Water Dam, as shown on Drawing No. GO25/6/02 contained in the Surface Water Management Scheme in Section 8.6 of the LEMP dated August 2004. E733593 N6117249
17	Surface Water Monitoring and Discharge	Surface Water Monitoring and Discharge	Site WM201 - Existing Mine Buildings, as shown on Drawing No. GO25/6/02 contained in the Surface Water Management Scheme in Section 8.5 of the LEMP dated August 2004. E737459 N6115805
18	Surface Water and Volume Monitoring		ED3SS (Lagoon 5) as shown on Drawing No. 16800-180, Issue F, prepared by LandTeam Australia Pty Ltd and dated 21/7/16. E733651 N6117040
19	Surface Water and Volume Monitoring		ED3 North, as shown on Drawing No. 16800-180, Issue F, prepared by LandTeam Australia Pty Ltd and dated 21/7/16. E733627 N6117473
22	Surface Water Monitoring		Pond 3, located within the landfill void. 734211 N6117034
23	Leachate Quality Monitoring		Leachate Pond, northwestern side of void - near top. E734189 N6117233
24	Leachate Quality Monitoring		Leachate Recirculation System (In Void). E734400 N6117233
25	Groundwater Monitoring		MB1 as shown on Drawing GO25/5/01 Rev B contained in the Groundwater Monitoring Program in Section 8.12 of the LEMP dated August 2004. E734474 N6117559
26	Groundwater Monitoring		MB2 as shown on Drawing GO25/5/01 Rev B in the Groundwater Management Program in Section 8.12 of the LEMP dated August 2004. E734332 N6118045
27	Groundwater Monitoring		MB3 as shown on Drawing No. GO25/5/01 Rev B contained in the Groundwater Monitoring Program in Section 8.12 of the LEMP dated August 2004. E734710 N6118632
28	Groundwater Monitoring		MB4 as shown on Drawing GO25/5/01 Rev B in the Groundwater Monitoring Program in Section 8.12 of the LEMP dated August 2004. E734968 N6116965



# Environment Protection Licence

Licence - 11436



30	Groundwater Monitoring	MB6 as shown on Drawing No. GO25/5/01 Rev B contained in the Groundwater Monitoring Program in Section 8.12 of the LEMP dated August 2004. E733864 N61170797
31	Groundwater Monitoring	MB7 as shown on Drawing No. GO25/5/01 Rev B contained in the Groundwater Monitoring Program in Section 8.12 of the LEMP dated August 2004. E733204 N6117328
33	Groundwater Monitoring	MB10 as shown on Drawing No. GO25/5/01 Rev B contained in the Groundwater Monitoring Program in Section 8.12 of the LEMP dated August 2004. E734028 N6118065
41	Groundwater Monitoring	ED3B as shown on Drawing No. GO 25/5/01 Rev B contained in the Groundwater Monitoring Program in Section 8.12 of the LEMP dated August 2004. E733505 N6117045
42	Groundwater Monitoring	WM1 as shown on Drawing No. GO25/5/01 Rev B contained in the Groundwater Monitoring Program in Section 8.12 of the LEMP dated August 2004. E729012 N6115901
44	Groundwater Monitoring	WM4 as shown on Drawing No. GO25/5/01 Rev B contained in the Groundwater Monitoring Program in Section 8.12 of the LEMP dated August 2004. E728655 N6116052
45	Groundwater Monitoring	WM5 as shown on Drawing No. GO25/5/1 Rev B contained in the Groundwater Monitoring Program in Section 8.12 of the LEMP dated August 2004. E727738 N6116221
46	Groundwater Monitoring	WM6 as shown on Drawing No. GO25/5/1 Rev B contained in the Groundwater Monitoring Program in Section 8.12 of the LEMP dated August 2004. E733387 N6117459
48	Groundwater Monitoring	P38 as described in the Groundwater Monitoring Program in Section 8.12 of the LEMP dated August 2004. E734320 N6116639
49	Groundwater Monitoring	P44 as described in the Groundwater Monitoring Program in Section 8.12 of the LEMP dated August 2004. E734601 N6117010
50	Groundwater Monitoring	P45 as described in the Groundwater Monitoring Program in Section 8.12 of the LEMP dated August 2004. E734590 N6116968

# Environment Protection Licence

Licence - 11436



51	Groundwater Monitoring	P58 as described in the Groundwater Monitoring Program in Section 8.12 of the LEMP dated August 2004. E734068 N6117037
52	Groundwater Monitoring	P59 as described in the Groundwater Monitoring Program in Section 8.12 of the LEMP dated August 2004. E734059 N6116941
53	Groundwater Monitoring	P100 as described in the Groundwater Monitoring Program in Section 8.12 of the LEMP dated August 2004. E734284 N6117237
54	Surface Water and Volume Monitoring	ED3S as shown on Drawing No. 16800-180, Issue F, prepared by LandTeam Australia Pty Ltd and dated 21/7/16. E733654 N6117240
55	Groundwater Monitoring	Groundwater monitoring wells labelled as "MW8S" as referred to in Figure 1 Earth2Water Report on new groundwater well locations 15 November 2007. E733827 N6117392
56	Groundwater monitoring	Groundwater monitoring well labelled as "MW8D" in Figure 1 Earth2Water Report on new groundwater well locations 15 November 2007. E733829 N6117387
57	Groundwater Monitoring	Groundwater Monitoring well labelled as "MW9S" referred to in Figure 1 Earth2Water Report on new groundwater well locations 15 November 2007. E733632 N6117611
58	Groundwater Monitoring	Groundwater Monitoring Well labelled as "GW10"S as referred to in Figure 1 Earth2Water Report on new groundwater well locations 15 November 2007. E733919 N6117407
59	Surface water monitoring point	Evaporation Dam 1 (ED1) as shown on the plan titled "Attachment 1 - Woodlawn Site EPL Monitoring Sites - Drawing No TOP-G-001" prepared by Dean Oliver and dated 17 March 2017. The plan is held by the EPA as DOC17/168187.

## 3 Limit Conditions

# Environment Protection Licence

Licence - 11436

## L1 Pollution of waters

- L1.1 Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.
- L1.2 There must be no pollution of surface water or groundwater.
- 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).

## L2 Concentration limits

- 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.

Note: No water pollutants relevant to the above condition.

### L2.2 Air Concentration Limits

#### POINT 8

Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period
Hydrogen Sulfide	milligrams per cubic metre	5			
Sulfuric acid mist and sulfur trioxide (as SO <sub>3</sub> )	milligrams per cubic metre	100			
Nitrogen Oxides	milligrams per cubic metre	450			

- L2.3 This condition does not authorise the pollution of air by any pollutant other than those specified in the above tables.
- L2.4 The reference bases for the air pollutants specified in condition L2.4 for Point 8 are as follows:
- For Nitrogen oxides (NO<sub>2</sub> and/or NO): dry, 273 K, 101.3 kPa, 7% O<sub>2</sub>.
  - 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.

## L3 Waste

- 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.

# Environment Protection Licence

Licence - 11436

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

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

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

Code	Waste	Description	Activity	Other Limits
NA	General solid waste (non-putrescible)			NA
NA	General solid waste (putrescible)			NA
NA	Asbestos waste			NA
NA	Waste tyres			NA
NA	Waste			NA

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.

L3.3 The licensee must not exceed the maximum annual landfill input rates outlined in the table below.

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

## L4 Noise limits

L4.1 Noise from the premises must not exceed 35 dB(A) LAeq (15 minute) at the most affected residential receiver.

Where LAeq means the equivalent continuous noise level – the level of noise equivalent to the energy-average of noise levels occurring over a measurement period.

L4.2 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

# Environment Protection Licence

Licence - 11436



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.

- L4.3 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.

## **L5 Hours of operation**

- 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.
- 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.
- L5.3 Construction work carried out at the premises between 7:00pm and 6:00am on Mondays to Saturdays, and Sundays and Public Holidays, must be inaudible at residential premises.

## **L6 Potentially offensive odour**

- 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.
- 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.

## **4 Operating Conditions**

### **O1 Activities must be carried out in a competent manner**

- O1.1 Licensed activities must be carried out in a competent manner.  
This includes:
- a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
  - b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

### **O2 Maintenance of plant and equipment**

- O2.1 All plant and equipment installed at the premises or used in connection with the licensed activity:
- a) must be maintained in a proper and efficient condition; and

# Environment Protection Licence

Licence - 11436



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

## O3 Dust

- O3.1 All operations and activities occurring at the premises must be carried out in a manner that will minimise dust at the boundary of the premises.
- 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.
- 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.
- O3.4 All internal roadways between the container transfer area and Collector Road must be sealed, except roadways within the mine void.
- O3.5 All surfaces intended to carry vehicular traffic must be managed to minimise the quantity of wind blown dust emissions.
- O3.6 All unsealed roads must be treated so that there are no visible dust emissions.

## O4 Emergency response

- O4.1 The licensee must have in place and implement procedures to minimise the risk of fire at the premises.
- O4.2 The licensee must extinguish fires at the premises as soon as possible.
- 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.

## O5 Processes and management

- 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.
- O5.2 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.

# Environment Protection Licence

Licence - 11436



- O5.3 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.
- O5.4 The evaporation of water by spraying must not result in the drifting of the sprayed liquid from the premises.
- O5.5 Untreated leachate must not be transferred to Evaporation Dam 3 unless approved in writing by the EPA.
- O5.6 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.
- O5.7 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.
- 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 licensee receives only those types of wastes and in such quantities that do not exceed those permitted by this environment protection licence.
- O5.9 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.
- O5.10 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.

## O6 Waste management

- 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.
- O6.2 The landfill void must be managed to ensure the groundwater gradient directs groundwater flows towards the landfill void.
- O6.3 A leachate collection/storage/recirculation/treatment system must be designed, installed and operated to:
  - a) accept, in addition to leachate, other waste-waters and contaminated storm-waters allowed by this licence to be introduced into the waste;
  - b) efficiently operate, despite settlement of the waste;



# Environment Protection Licence

Licence - 11436



- c) ensure that liquid is not deliberately stored in the landfilled waste, unless it is necessary for the efficient decomposition of the landfilled waste;
- d) ensure that leachate can be recirculated within the biologically active zones of the landfilled waste;
- e) comply with condition O5.2; and
- f) ensure to the maximum extent practicable the biological decomposition of all organic waste and productive capture of methane.

O6.4 All dams used for the storage of treated leachate must be maintained with a minimum freeboard of 0.5m.

O6.5 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).

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.

O6.6 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.

O6.7 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.

O6.8 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.

O6.9 Cover material must be of a quality that will not inhibit the biological decomposition of the landfilled waste.

O6.10 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.

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.

O6.11 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



# Environment Protection Licence

Licence - 11436

the EPA.

**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.

O6.12 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.

O6.13 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.

O6.14 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.

O6.15 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.

O6.16 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.

Temperature (K)	Residence time (seconds)	Reference
1273 (1000°C)	0.3	UK Environment Agency Guidance on Landfill Gas Flaring (version 2.1)
933 (760°C)	0.6	US South Coast Air Quality Management District's Best Available Control Technology Guidelines (Landfill Gas Flare 17 August 2001)

O6.17 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.

Pollutant	Design Ground-Level Concentration Criteria (µg/m3)	Averaging Time	Percentile
Sulfuric acid	33	3 minute	99.9
Sulfur dioxide	571	1 hour	99.9

# Environment Protection Licence

Licence - 11436

Nitrogen dioxide	246	1 hour	99.9
Hydrogen sulfide	See following table	Nose response time	99

Note: The hydrogen sulphide glc criteria shall be applied at the nearest existing or likely future off-site sensitive receptor.

Population of affected community	glc criterion (µg/m <sup>3</sup> )	Averaging Time	Percentile
Urban (>~2000)	1.38	Nose response time	99
~500	2.07	Nose response time	99
~125	2.76	Nose response time	99
~30	3.45	Nose response time	99
~10	4.14	Nose response time	99
Single residence (<~2)	4.83	Nose response time	99

- O6.18 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.
- O6.19 Any landfill gas condensate must be collected and returned to the leachate recycling system.
- O6.20 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.
- O6.21 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.
- O6.22 The licensee must apply biofiltration media, or another material as approved in writing by the EPA, at the waste/rock interface around the perimeter of the landfill void to reduce odour from fugitive gas emissions.
- O6.23 The licensee must not exhumate any landfilled waste unless approved in writing by the EPA.
- O6.24 Vehicles leaving the premises must not track materials to external surfaces.
- O6.25 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.
- O6.26 The licensee must take all practical measures to prevent litter leaving the premises.

# Environment Protection Licence

Licence - 11436



## 5 Monitoring and Recording Conditions

### M1 Monitoring records

- M1.1 The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.
- M1.2 All records required to be kept by this licence must be:
- a) in a legible form, or in a form that can readily be reduced to a legible form;
  - b) kept for at least 4 years after the monitoring or event to which they relate took place; and
  - c) produced in a legible form to any authorised officer of the EPA who asks to see them.
- M1.3 The following records must be kept in respect of any samples required to be collected for the purposes of this licence:
- a) the date(s) on which the sample was taken;
  - b) the time(s) at which the sample was collected;
  - c) the point at which the sample was taken; and
  - d) the name of the person who collected the sample.

### M2 Requirement to monitor concentration of pollutants discharged

- M2.1 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:

#### M2.2 Air Monitoring Requirements

#### POINT 1,2,4

Pollutant	Units of measure	Frequency	Sampling Method
Methane	percent by volume	Quarterly	Special Method 1

#### POINT 5

Pollutant	Units of measure	Frequency	Sampling Method
Carbon dioxide	milligrams per cubic metre	Yearly	TM-24
Dry gas density	milligrams per cubic metre	Yearly	TM-23
Moisture content	percent	Yearly	TM-22
Oxygen (O <sub>2</sub> )	percent	Yearly	TM-2
Temperature	degrees Celsius	Yearly	TM-2
Volatile organic compounds	milligrams per cubic metre	Yearly	TM-34

# Environment Protection Licence

Licence - 11436

Volumetric flowrate	cubic metres per second	Yearly	TM-2
---------------------	-------------------------	--------	------

**POINT 6**

Pollutant	Units of measure	Frequency	Sampling Method
Methane	percent by volume	Quarterly	Special Method 2

**POINT 7**

Pollutant	Units of measure	Frequency	Sampling Method
residence time	seconds	Continuous	In line instrumentation
Temperature	degrees Celsius	Yearly	TM-2

**POINT 8**

Pollutant	Units of measure	Frequency	Sampling Method
Carbon dioxide	percent	Yearly	TM-24
Carbon monoxide	milligrams per cubic metre	Yearly	TM-32
Dry gas density	milligrams per cubic metre	Yearly	TM-23
Moisture content	percent	Yearly	TM-22
Molecular weight of stack gases	grams per gram mole	Yearly	TM-23
Nitrogen Oxides	milligrams per cubic metre	Yearly	TM-11
Oxygen (O <sub>2</sub> )	percent	Yearly	TM-25
Sulfuric acid mist and sulfur trioxide (as SO <sub>3</sub> )	milligrams per cubic metre	Yearly	TM-3
Sulphur dioxide	milligrams per cubic metre	Yearly	TM-4
Temperature	degrees Celsius	Yearly	TM-2
Velocity	metres per second	Yearly	TM-2
Volatile organic compounds	milligrams per cubic metre	Yearly	TM-34
Volumetric flowrate	cubic metres per second	Yearly	TM-2

**POINT 10,11,12**

Pollutant	Units of measure	Frequency	Sampling Method
Particulates - Deposited Matter	grams per square metre per month	Monthly	AM-19

# Environment Protection Licence

Licence - 11436

## M2.3 Water and/ or Land Monitoring Requirements

### POINT 13,14,15,16,17,18,19,22,54,59

Pollutant	Units of measure	Frequency	Sampling Method
BOD	milligrams per litre	Quarterly	Grab sample
Conductivity	microsiemens per centimetre	Quarterly	Grab sample
Dissolved Oxygen	milligrams per litre	Quarterly	Probe
Nitrogen (ammonia)	milligrams per litre	Quarterly	Grab sample
pH	milligrams per litre	Quarterly	Grab sample
Potassium	milligrams per litre	Quarterly	Grab sample
Redox potential	millivolts	Quarterly	Grab sample
Total dissolved solids	milligrams per litre	Quarterly	Grab sample
Total organic carbon	milligrams per litre	Quarterly	Grab sample

### POINT 23,24

Pollutant	Units of measure	Frequency	Sampling Method
Alkalinity (as calcium carbonate)	milligrams per litre	Yearly	Grab sample
Aluminium	milligrams per litre	Yearly	Grab sample
Arsenic	milligrams per litre	Yearly	Grab sample
Barium	milligrams per litre	Yearly	Grab sample
Benzene	milligrams per litre	Yearly	Grab sample
Cadmium	milligrams per litre	Yearly	Grab sample
Calcium	milligrams per litre	Yearly	Grab sample
Chloride	milligrams per litre	Yearly	Grab sample
Chromium (hexavalent)	milligrams per litre	Yearly	Grab sample
Chromium (total)	milligrams per litre	Yearly	Grab sample
Cobalt	milligrams per litre	Yearly	Grab sample
Conductivity	microsiemens per centimetre	Yearly	Grab sample
Copper	milligrams per litre	Yearly	Grab sample
Ethyl benzene	milligrams per litre	Yearly	Grab sample
Fluoride	milligrams per litre	Yearly	Grab sample
Lead	milligrams per litre	Yearly	Grab sample
Magnesium	milligrams per litre	Yearly	Grab sample
Manganese	milligrams per litre	Yearly	Grab sample
Mercury	milligrams per litre	Yearly	Grab sample
Nitrate	milligrams per litre	Yearly	Grab sample
Nitrite	milligrams per litre	Yearly	Grab sample
Nitrogen (ammonia)	milligrams per litre	Yearly	Grab sample

# Environment Protection Licence

Licence - 11436

Organochlorine pesticides	milligrams per litre	Yearly	Grab sample
Organophosphate pesticides	milligrams per litre	Yearly	Grab sample
pH	pH	Yearly	Grab sample
Phosphorus (total)	milligrams per litre	Yearly	Grab sample
Polycyclic aromatic hydrocarbons	milligrams per litre	Yearly	Grab sample
Potassium	milligrams per litre	Yearly	Grab sample
Sodium	milligrams per litre	Yearly	Grab sample
Sulfate	milligrams per litre	Yearly	Grab sample
Toluene	milligrams per litre	Yearly	Grab sample
Total dissolved solids	milligrams per litre	Yearly	Grab sample
Total organic carbon	milligrams per litre	Yearly	Grab sample
Total petroleum hydrocarbons	milligrams per litre	Yearly	Grab sample
Total Phenolics	milligrams per litre	Yearly	Grab sample
Total suspended solids	milligrams per litre	Yearly	Grab sample
Xylene	milligrams per litre	Yearly	Grab sample
Zinc	milligrams per litre	Yearly	Grab sample

## POINT 25,26,27,28,30,31,33,41,42,44,45,46,55,56,57,58

Pollutant	Units of measure	Frequency	Sampling Method
Alkalinity (as calcium carbonate)	milligrams per litre	Quarterly	Grab sample
Aluminium	milligrams per litre	Yearly	Grab sample
Arsenic	milligrams per litre	Yearly	Grab sample
Barium	milligrams per litre	Yearly	Grab sample
Benzene	milligrams per litre	Yearly	Grab sample
Cadmium	milligrams per litre	Yearly	Grab sample
Calcium	milligrams per litre	Quarterly	Grab sample
Chloride	milligrams per litre	Quarterly	Grab sample
Chromium (hexavalent)	milligrams per litre	Yearly	Grab sample
Chromium (total)	milligrams per litre	Yearly	Grab sample
Cobalt	milligrams per litre	Yearly	Grab sample
Copper	milligrams per litre	Yearly	Grab sample
Ethyl benzene	milligrams per litre	Yearly	Grab sample
Fluoride	milligrams per litre	Yearly	Grab sample
Lead	milligrams per litre	Yearly	Grab sample
Magnesium	milligrams per litre	Quarterly	Grab sample
Manganese	milligrams per litre	Yearly	Grab sample
Mercury	milligrams per litre	Yearly	Grab sample
Nitrate	milligrams per litre	Yearly	Grab sample
Nitrite	milligrams per litre	Yearly	Grab sample

# Environment Protection Licence

Licence - 11436



Nitrogen (ammonia)	milligrams per litre	Quarterly	Grab sample
Organochlorine pesticides	milligrams per litre	Yearly	Grab sample
Organophosphate pesticides	milligrams per litre	Yearly	Grab sample
pH	pH	Quarterly	Grab sample
Polycyclic aromatic hydrocarbons	milligrams per litre	Yearly	Grab sample
Potassium	milligrams per litre	Quarterly	Grab sample
Sodium	milligrams per litre	Quarterly	Grab sample
Standing Water Level	metres	Quarterly	In situ
Sulfate	milligrams per litre	Quarterly	Grab sample
Toluene	milligrams per litre	Yearly	Grab sample
Total dissolved solids	milligrams per litre	Quarterly	Grab sample
Total organic carbon	milligrams per litre	Yearly	Grab sample
Total petroleum hydrocarbons	milligrams per litre	Yearly	Grab sample
Total Phenolics	milligrams per litre	Yearly	Grab sample
Xylene	milligrams per litre	Yearly	Grab sample
Zinc	milligrams per litre	Yearly	Grab sample

## POINT 48,49,50,51,52,53

Pollutant	Units of measure	Frequency	Sampling Method
Standing Water Level	metres	Quarterly	In situ

Note: "Special Method 1" means methane monitoring must be performed on the gas within the landfill subsurface monitoring well before any admixture or purging of air into that well. The gas detector must:

- have a current calibration certificate
- a minimum level of detection and minimum resolution of 1% (v/v) methane
- be capable of accurately measuring methane in a reduced oxygen atmosphere
- be tested with an in-date calibration gas before and after the testing to ensure that all sensors are functional and accurate.

Subsurface gas monitoring must be performed following the procedures in benchmark techniques 15 and 16 in the EPA's Environmental Guidelines: Solid Waste Landfills.

Note: "Special Method 2" means methane monitoring must be performed on the gas at the landfill's surface following the procedures in benchmark technique 17 in the EPA's Environmental Guidelines: Solid Waste Landfills. The gas detector must:

- have a current calibration certificate
- a minimum level of detection and minimum resolution of 0.05% (v/v) methane
- be tested with an in-date calibration gas before and after the testing to ensure that all sensors are functional and accurate.

# Environment Protection Licence

Licence - 11436

## M3 Testing methods - concentration limits

- M3.1 Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with:
- any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or
  - 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
  - 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.
- 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.

Note: The *Protection of the Environment Operations (Clean Air) Regulation 2010* 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".

## M4 Weather monitoring

- M4.1 The licensee must undertake the following monitoring of meteorological parameters in accordance with the methods and frequencies specified in the table below.

Note: All meteorological monitoring done from EPA Point 9.

Parameter	Units of Measure	Averaging Period	Method	Frequency
Wind Speed @ 10m	m/s	1 hour	AM-2 & AM-4	Continuous
Wind Direction @ 10m	°	1 hour	AM-2 & AM-4	Continuous
Sigma Theta @ 10m	°	1 hour	AM-2 & AM-4	Continuous
Temperature @ 10m	K	1 hour	AM-4	Continuous
Temperature @ 2m	K	1 hour	AM-4	Continuous
Solar Radiation	W/m <sup>2</sup>	1 hour	AM-4	Continuous
Rainfall	mm	24 hours	AM-4	Continuous

## M5 Recording of pollution complaints

- M5.1 The licensee must keep a legible record of all complaints made to the licensee or any employee or agent



# Environment Protection Licence

Licence - 11436



of the licensee in relation to pollution arising from any activity to which this licence applies.

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.

M5.3 The record of a complaint must be kept for at least 4 years after the complaint was made.

M5.4 The record must be produced to any authorised officer of the EPA who asks to see them.

## M6 Telephone complaints line

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.

Note: For the purpose of condition M6.1, operating hours are defined as 24 hours a day, 7 days a week.

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.

M6.3 The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.

## M7 Requirement to monitor volume or mass

M7.1 For each discharge point or utilisation area specified below, the licensee must monitor:

- a) the volume of liquids discharged to water or applied to the area;
  - b) the mass of solids applied to the area;
  - c) the mass of pollutants emitted to the air;
- at the frequency and using the method and units of measure, specified below.

POINT 18,19,54

Frequency	Unit of Measure	Sampling Method
Quarterly	megalitres	Other Approved Method 1

Note: Other Approved Method 1 is by inspection of a calibrated marker post or through survey of water level.

# Environment Protection Licence

Licence - 11436



## 6 Reporting Conditions

### R1 Annual return documents

R1.1 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:

1. a Statement of Compliance,
2. a Monitoring and Complaints Summary,
3. a Statement of Compliance - Licence Conditions,
4. a Statement of Compliance - Load based Fee,
5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan,
6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and
7. a Statement of Compliance - Environmental Management Systems and Practices.

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.

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

R1.3 Where this licence is transferred from the 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.

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.

R1.5 The Annual Return for the reporting period must be supplied to the EPA via eConnect *EPA* or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').

R1.6 The 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.

R1.7 Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:

- a) the licence holder; or
- b) by a person approved in writing by the EPA to sign on behalf of the licence holder.

R1.8 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:

# Environment Protection Licence

Licence - 11436



- a) tabulated results of all monitoring data required to be collected by this licence;
- 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;
- c) an analysis and interpretation of all monitoring data;
- d) an analysis of and response to any complaints received;
- 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
- f) recommendations on improving the environmental performance of the facility.

R1.9 The items specified in condition R1.7 must be signed by the holder of Environment Protection Licence No. 11437 – the supervisory licence.

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

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

## R2 Notification of environmental harm

R2.1 Notifications must be made by telephoning the Environment Line service on 131 555.

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

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.

R2.3 The EPA must be notified within 24 hours if the landfill gas monitoring required by condition M2.1 indicates a methane gas concentration greater than 1.25% (v/v).

## R3 Written report

R3.1 Where an authorised officer of the EPA suspects on reasonable grounds that:

- a) where this licence applies to premises, an event has occurred at the premises; or
  - b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence,
- and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.

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

R3.3 The request may require a report which includes any or all of the following information:  
a) the cause, time and duration of the event;

# Environment Protection Licence

Licence - 11436



- 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;
- 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; and
- g) any other relevant matters.

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

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.

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.

## R4 Other reporting conditions

R4.1 Whenever the volume of water stored in Evaporation Dam 3 reaches the freeboard level in condition O6.4, 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 the 0.5m freeboard level and/or a program for the design and construction of works to increase the capacity of Evaporation Dam 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.

R4.2 Within 24 hours of receipt of an odour complaint, the Licensee must provide the EPA with a written report. The report must include the following information:

- a) The date, time and duration of the odour incident;
- b) A description of the nature of the odour;
- c) The meteorological conditions prevailing at the same time the odour was reported;
- d) The location(s) of the place where the odour was detected;
- e) The circumstances in which the odour incident occurred (including the cause of the odour, if known);
- f) Time and date stamped photographs of the active landfill cell showing intermediate and daily cover;

# Environment Protection Licence

Licence - 11436



- g) The action taken or proposed to be taken to deal with the incident, including follow-up contact with any complainants;
- h) Details of any measures taken or proposed to be taken to prevent or mitigate against a recurrence of such an incident; and
- i) The current level of leachate in each pond.

## 7 General Conditions

### G1 Copy of licence kept at the premises or plant

- G1.1 A copy of this licence must be kept at the premises to which the licence applies.
- G1.2 The licence must be produced to any authorised officer of the EPA who asks to see it.
- G1.3 The licence must be available for inspection by any employee or agent of the licensee working at the premises.

## 8 Pollution Studies and Reduction Programs

### U1 Longterm Leachate Treatment Solution

- U1.1 By 30 September 2018, the licensee must install, commission and implement the longterm leachate management solution detailed in the report titled "Longterm Leachate Treatment Solution Submission Report" submitted to the EPA on 5 August 2016 (as revised).
- U1.2 The membrane bioreactor (MBR) leachate treatment plant component of the longterm leachate management solution must be capable of continuously treating at least 4L/s of leachate.

Note: The longterm leachate treatment solution will require a modification to the premises' Development Approval.

- U1.3 Unless otherwise agreed to in writing by the EPA, the licensee must submit a monthly report detailing progress on the Longterm Leachate Treatment Solution project required by condition U1.1. The report must include, but not necessarily be limited to, the following:
  - 1. a brief narrative on the progress of the project;
  - 2. photographs of construction work completed; and
  - 3. a description of any anticipated or actual risks to the project timeline and the measures being implemented to mitigate those risks.The report must be submitted electronically on the fifth business day of the month for the previous month's activities.

### U2 Evaporation Dam 1 (ED1) and Evaporation Dam 2 (ED2) improvements

- U2.1 By 30 September 2016, the licensee must engage a suitably qualified independent consultant (as

# Environment Protection Licence

Licence - 11436



approved by the EPA) to investigate the integrity of the ED1 and ED2 liners, all points of potential leakage from ED1 and ED2 and the nature and extent of any leakage or migration from ED1 and ED2.

- U2.2 By 30 November 2016, the licensee must submit a report to the EPA detailing the results of the consultant's investigation required by condition U2.1. The report must include:
- a) an assessment of the geophysical conditions underlying and surrounding ED1 and ED2;
  - b) an assessment of the integrity of the liner mechanism for ED1 and ED2;
  - c) an assessment of the identified points of liner failure/faults;
  - d) an assessment of the pathways for the migration of pollutants from ED1 and ED2 into the surrounding environment (including into Allianoyonyiga Creek and Crisps Creek);
  - e) an assessment of the current nature and extent of groundwater and surface water pollution from ED1 and ED2; and
  - f) recommended control and remediation measures to improve the integrity of ED1 and ED2, prevent the occurrence of seepage from ED1 and ED2, and repair or make good any groundwater or surface water pollution caused by ED1 and ED2.

## U3 Leachate Minimisation Plan

- U3.1 By 30 December 2016, the licensee must submit a plan to the EPA detailing how it will reduce the amount of water entering the landfill void and making contact with the waste. The plan must:
- a) identify groundwater recharge points outside of the void;
  - b) identify groundwater seepage points within the void;
  - c) identify any other inputs; and
  - d) include a program of works aimed at minimising water ingress into the landfill void and increasing the capture and diversion of runoff from the walls of the void.

## U4 Biofiltration Trial

- U4.1 The licensee must develop a pilot-scale biofilter system to evaluate the effect of biofilter depth on landfill gas emissions.
- U4.2 By 15 October 2016, the licensee must submit a methodology for the biofiltration trial to the EPA for approval.
- U4.3 By 30 March 2017, the licensee must submit a report to the EPA detailing the outcomes of the trial. The report must be prepared by a suitably qualified independent consultant and include recommendations for:
- a) the most effective depth of filter medium for reducing odour emissions;
  - b) the most effective application method;
  - c) the optimum time frame for replacing biofilter material, where required; and
  - d) an action strategy for streamlining the application and management of this material.

## 9 Special Conditions

# Environment Protection Licence

Licence - 11436



## E1 Financial assurance

- E1.1 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.
- E1.2 The original bank guarantee must be provided to the EPA and be in a form approved by the EPA.
- E1.3 The Financial Assurance must contain a term that provides that any money claimed can be paid to the EPA or, at the written direction of the EPA, to any other person.
- E1.4 This financial assurance shall be adjusted each financial year in the following manner:
- a) the amount of the bank guarantee shall be increased by an amount equal to two hundred and twenty five thousand seven hundred and ninety dollars (\$225,790) adjusted by a percentage equal to the percentage increase in the Consumer Price Index between the June quarter of 2004 and the June quarter of the current year, plus
  - b) an amount equal to that needed to increase the previous year's financial assurance by a percentage equal to the percentage increase in the Consumer Price Index between the June quarter of the preceding year and the June quarter of the current year.
- E1.5 The licensee must:
- a) ensure the bank guarantee is adjusted as required under E1.4, and
  - b) provide the adjusted bank guarantee to the EPA by the Licence Anniversary Date each year.
- E1.6 The licensee must maintain the financial assurance at the full amount as adjusted under E1.4 during the operation of the facility and thereafter until such time as the EPA is satisfied the premises are environmentally secure.
- E1.7 The licensee must replenish the financial assurance to the full amount as adjusted under E1.4 if the EPA claims on or realises the financial assurance or any part of it to carry out or have carried out any work or program covered by the financial assurance if the licensee fails to carry out that work or program upon being given notice to do so.
- E1.8 The EPA may increase the amount of the financial assurance at any time as a result of a revised estimate of the total likely costs and expenses of remediation of the premises.
- E1.9 The financial assurance adjustment required in Condition E1.4 requires the calculation of two amounts which need to be added to the financial assurance of the previous year to arrive at the amount for the financial assurance for the current year to be submitted by the licensee:

Condition E1.4 (a) = \$225,790 x A/B, where;

A = the CPI Index Number (A) figure published by the Australian Bureau of Statistics for Sydney for the June quarter of the current calendar year, and

B = the CPI Index Number (A) figure published by the Australian Bureau of Statistics for Sydney for the June quarter of 2004. This CPI Index Number is 145.5.

# Environment Protection Licence

---

Licence - 11436



Condition E1.4 (b) =  $(FA \times A/C) - FA$ , where;

A = the CPI Index Number (A) figure published by the Australian Bureau of Statistics for Sydney for the June quarter of the current calendar year,

C = the CPI Index Number (A) figure published by the Australian Bureau of Statistics for Sydney for the June quarter of the previous calendar year, and

FA = the total financial assurance amount for the previous year.

The total amount of the financial assurance to be submitted to the EPA for the current year is:

$FA_{new} = FA + \text{Condition E1.4 (a)} + \text{Condition E1.4 (b)}$ , where;

$FA_{new}$  = the total financial assurance amount for the current year

CPI means the Consumer Price Index Number (A) for Sydney (All Groups) published by the Australian Bureau of Statistics.



# Environment Protection Licence

Licence - 11436

## Dictionary

### General Dictionary

<b>3DGM [in relation to a concentration limit]</b>	Means the three day geometric mean, which is calculated by multiplying the results of the analysis of three samples collected on consecutive days and then taking the cubed root of that amount. Where one or more of the samples is zero or below the detection limit for the analysis, then 1 or the detection limit respectively should be used in place of those samples
<b>Act</b>	Means the Protection of the Environment Operations Act 1997
<b>activity</b>	Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment Operations Act 1997
<b>actual load</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>AM</b>	Together with a number, means an ambient air monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
<b>AMG</b>	Australian Map Grid
<b>anniversary date</b>	The anniversary date is the anniversary each year of the date of issue of the licence. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
<b>annual return</b>	Is defined in R1.1
<b>Approved Methods Publication</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>assessable pollutants</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>BOD</b>	Means biochemical oxygen demand
<b>CEM</b>	Together with a number, means a continuous emission monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
<b>COD</b>	Means chemical oxygen demand
<b>composite sample</b>	Unless otherwise specifically approved in writing by the EPA, a sample consisting of 24 individual samples collected at hourly intervals and each having an equivalent volume.
<b>cond.</b>	Means conductivity
<b>environment</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>environment protection legislation</b>	Has the same meaning as in the Protection of the Environment Administration Act 1991
<b>EPA</b>	Means Environment Protection Authority of New South Wales.
<b>fee-based activity classification</b>	Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 2009.
<b>general solid waste (non-putrescible)</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997

# Environment Protection Licence

Licence - 11436

<b>flow weighted composite sample</b>	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
<b>general solid waste (putrescible)</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>grab sample</b>	Means a single sample taken at a point at a single time
<b>hazardous waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>licensee</b>	Means the licence holder described at the front of this licence
<b>load calculation protocol</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>local authority</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>material harm</b>	Has the same meaning as in section 147 Protection of the Environment Operations Act 1997
<b>MBAS</b>	Means methylene blue active substances
<b>Minister</b>	Means the Minister administering the Protection of the Environment Operations Act 1997
<b>mobile plant</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>motor vehicle</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>O&amp;G</b>	Means oil and grease
<b>percentile [in relation to a concentration limit of a sample]</b>	Means that percentage [eg.50%] of the number of samples taken that must meet the concentration limit specified in the licence for that pollutant over a specified period of time. In this licence, the specified period of time is the Reporting Period unless otherwise stated in this licence.
<b>plant</b>	Includes all plant within the meaning of the Protection of the Environment Operations Act 1997 as well as motor vehicles.
<b>pollution of waters [or water pollution]</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>premises</b>	Means the premises described in condition A2.1
<b>public authority</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>regional office</b>	Means the relevant EPA office referred to in the Contacting the EPA document accompanying this licence
<b>reporting period</b>	For the purposes of this licence, the reporting period means the period of 12 months after the issue of the licence, and each subsequent period of 12 months. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
<b>restricted solid waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>scheduled activity</b>	Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997
<b>special waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>TM</b>	Together with a number, means a test method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .

# Environment Protection Licence

Licence - 11436



<b>TSP</b>	Means total suspended particles
<b>TSS</b>	Means total suspended solids
<b>Type 1 substance</b>	Means the elements antimony, arsenic, cadmium, lead or mercury or any compound containing one or more of those elements
<b>Type 2 substance</b>	Means the elements beryllium, chromium, cobalt, manganese, nickel, selenium, tin or vanadium or any compound containing one or more of those elements
<b>utilisation area</b>	Means any area shown as a utilisation area on a map submitted with the application for this licence
<b>waste</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>waste type</b>	Means liquid, restricted solid waste, general solid waste (putrescible), general solid waste (non - putrescible), special waste or hazardous waste

Mr William Dove

Environment Protection Authority

(By Delegation)

Date of this edition: 05-September-2002

# Environment Protection Licence

Licence - 11436

## End Notes

- 1 Licence varied by notice 1036988, issued on 27-Jul-2004, which came into effect on 02-Aug-2004.
- 2 Licence varied by notice 1039740, issued on 12-Aug-2004, which came into effect on 20-Aug-2004.
- 3 Licence varied by change to record due to LGA amalgamation, issued on 01-Dec-2004, which came into effect on 01-Dec-2004.
- 4 Licence varied by notice 1051064, issued on 06-Jan-2006, which came into effect on 31-Jan-2006.
- 5 Licence varied by change to DEC Region allocation, issued on 02-Mar-2006, which came into effect on 02-Mar-2006.
- 6 Licence varied by notice 1063344, issued on 26-Jul-2006, which came into effect on 26-Jul-2006.
- 7 Licence varied by notice 1075615, issued on 14-Aug-2007, which came into effect on 14-Aug-2007.
- 8 Licence varied by notice 1077947, issued on 19-Feb-2008, which came into effect on 19-Feb-2008.
- 9 Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>
- 10 Licence varied by notice 1092825, issued on 01-Jun-2009, which came into effect on 01-Jun-2009.
- 11 Licence varied by notice 1506311 issued on 01-May-2013
- 12 Licence varied by notice 1533738 issued on 08-Jul-2016
- 13 Licence varied by notice 1544465 issued on 14-Oct-2016
- 14 Licence varied by notice 1550304 issued on 29-Mar-2017
- 15 Licence varied by notice 1558536 issued on 08-Nov-2017

## **APPENDIX 5**

### **5.EPL 11455**



# Environment Protection Licence

Licence - 11455

<b><u>Licence Details</u></b>	
Number:	11455
Anniversary Date:	06-September

<b><u>Licensee</u></b>
VEOLIA ENVIRONMENTAL SERVICES (AUSTRALIA) PTY LTD
PO BOX 171
GRANVILLE NSW 2142

<b><u>Premises</u></b>
CRISPS CREEK INTERMODAL FACILITY
BUNGENDORE ROAD
TARAGO NSW 2580

<b><u>Scheduled Activity</u></b>
Waste storage

<b><u>Fee Based Activity</u></b>	<b><u>Scale</u></b>
Waste storage - hazardous, restricted solid, liquid, clinical and related waste and asbestos waste	Any listed waste type stored
Waste storage - other types of waste	Any other types of waste stored
Waste storage - waste tyres	> Any tyres stored

<b><u>Region</u></b>
Waste & Resource Recovery
59-61 Goulburn Street
SYDNEY NSW 2000
Phone: (02) 9995 5000
Fax: (02) 9995 5999
PO Box A290
SYDNEY SOUTH NSW 1232

# Environment Protection Licence

Licence - 11455



<b>INFORMATION ABOUT THIS LICENCE</b>	4
Dictionary	4
Responsibilities of licensee	4
Variation of licence conditions	4
Duration of licence	4
Licence review	4
Fees and annual return to be sent to the EPA	4
Transfer of licence	5
Public register and access to monitoring data	5
<b>1 ADMINISTRATIVE CONDITIONS</b>	6
A1 What the licence authorises and regulates	6
A2 Premises or plant to which this licence applies	6
A3 Information supplied to the EPA	6
<b>2 DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND</b>	7
P1 Location of monitoring/discharge points and areas	7
<b>3 LIMIT CONDITIONS</b>	8
L1 Pollution of waters	8
L2 Waste	8
L3 Noise limits	9
L4 Hours of operation	9
L5 Potentially offensive odour	9
<b>4 OPERATING CONDITIONS</b>	10
O1 Activities must be carried out in a competent manner	10
O2 Maintenance of plant and equipment	10
O3 Dust	10
O4 Emergency response	10
O5 Waste management	10
O6 Other operating conditions	11
<b>5 MONITORING AND RECORDING CONDITIONS</b>	11
M1 Monitoring records	11
M2 Requirement to monitor concentration of pollutants discharged	12
M3 Testing methods - concentration limits	13
M4 Recording of pollution complaints	13
M5 Telephone complaints line	14

# Environment Protection Licence

Licence - 11455



<b>6</b>	<b>REPORTING CONDITIONS</b>	14
R1	Annual return documents	14
R2	Notification of environmental harm	15
R3	Written report	15
<b>7</b>	<b>GENERAL CONDITIONS</b>	16
G1	Copy of licence kept at the premises or plant	16
<b>DICTIONARY</b>		17
	General Dictionary	17



# Environment Protection Licence

---

Licence - 11455



## Information about this licence

### Dictionary

A definition of terms used in the licence can be found in the dictionary at the end of this licence.

### Responsibilities of licensee

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

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

### Variation of licence conditions

The licence holder can apply to vary the conditions of this licence. An application form for this purpose is available from the EPA.

The EPA may also vary the conditions of the licence at any time by written notice without an application being made.

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

### Duration of licence

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

### Licence review

The Act requires that the EPA review your licence at least every 5 years after the issue of the licence, as set out in Part 3.6 and Schedule 5 of the Act. You will receive advance notice of the licence review.

### Fees and annual return to be sent to the EPA

For each licence fee period you must pay:

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

# Environment Protection Licence

Licence - 11455



The EPA publication “A Guide to Licensing” contains information about how to calculate your licence fees. The licence requires that an Annual Return, comprising a Statement of Compliance and a summary of any monitoring required by the licence (including the recording of complaints), be submitted to the EPA. The Annual Return must be submitted within 60 days after the end of each reporting period. See condition R1 regarding the Annual Return reporting requirements.

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

### Transfer of licence

The licence holder can apply to transfer the licence to another person. An application form for this purpose is available from the EPA.

### Public register and access to monitoring data

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

- licence applications;
- licence conditions and variations;
- statements of compliance;
- load based licensing information; and
- load reduction agreements.

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

### This licence is issued to:

VEOLIA ENVIRONMENTAL SERVICES (AUSTRALIA) PTY LTD
PO BOX 171
GRANVILLE NSW 2142

subject to the conditions which follow.

# Environment Protection Licence

Licence - 11455

## 1 Administrative Conditions

### A1 What the licence authorises and regulates

- A1.1 This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.

Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.

Scheduled Activity	Fee Based Activity	Scale
Waste storage	Waste storage - hazardous, restricted solid, liquid, clinical and related waste and asbestos waste	Any listed waste type stored
Waste storage	Waste storage - other types of waste	Any other types of waste stored
Waste storage	Waste storage - waste tyres	> tyres stored

- A1.2 The only scheduled activity that may be carried on by the licensee is waste transfer in accordance with the conditions of this licence.

### A2 Premises or plant to which this licence applies

- A2.1 The licence applies to the following premises:

Premises Details
CRISPS CREEK INTERMODAL FACILITY
BUNGENDORE ROAD
TARAGO
NSW 2580
PART LOT 2 DP 1045652

### A3 Information supplied to the EPA

- A3.1 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:

- 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
- the licence information form provided by the licensee to the EPA to assist the EPA in connection with

# Environment Protection Licence

Licence - 11455

the issuing of this licence.

- A3.2 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.

## 2 Discharges to Air and Water and Applications to Land

### P1 Location of monitoring/discharge points and areas

- 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>Air</i>			
EPA identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
4	Ambient air pollutant		Nearest sensitive receptor to premises

- P1.2 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.

- P1.3 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>Water and land</i>			
EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
1	Surface water		Site 110 shown on Drawing Nos. GO25/6/01 Rev. A and GO25/6/02 in plan 11 of the Landfill Environmental Management Plan submitted with the licence application - in Crisps Creek, upstream of premises

# Environment Protection Licence

Licence - 11455



2	Surface water	Site 150 shown on Drawing Nos. GO25/6/01 Rev. A and GO 25/6/02 in plan 11 of the Landfill Environmental Management Plan submitted with the licence application - in Mulwaree River, downstream of premises
3	Surface water	Outlet of stormwater treatment system in north east corner of the premises as shown on Figure 4.1 in plan 11 of the Landfill Environmental Management Plan

## 3 Limit Conditions

### L1 Pollution of waters

- L1.1 Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.
- 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.

### L2 Waste

- L2.1 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.

Code	Waste	Description	Activity	Other Limits
NA	Waste tyres	As defined in Schedule 1 of the POEO Act, in force from time to time. For transfer to the Woodlawn Bioreactor.	Waste storage	NA
NA	Asbestos waste	As defined in Schedule 1 of the POEO Act, in force from time to time. For transfer to the Woodlawn Bioreactor.	Waste storage	NA
NA	General solid waste (non-putrescible and	As defined in Schedule 1 of the POEO Act, in	Waste storage	NA

# Environment Protection Licence

Licence - 11455



putrescible)

force from time to time.  
For transfer to the  
Woodlawn Bioreactor.

- L2.2 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.

## L3 Noise limits

- L3.1 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.
- L3.2 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.
- L3.3 For the purpose of Conditions L6.1 and L6.2:
- 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.
  - 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 conditions and winds up to 3 metres per second, except under conditions of temperature inversions.

## L4 Hours of operation

- L4.1 All operational activities at the premises including road haulage may only be conducted between 6:00 am to 10:00 pm on Mondays to Saturdays. There must be no activities on Sundays or public holidays.

## L5 Potentially offensive odour

- L5.1 The licensee must not cause or permit the emission of offensive odour beyond the boundary of the premises.

# Environment Protection Licence

Licence - 11455



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

## 4 Operating Conditions

### O1 Activities must be carried out in a competent manner

O1.1 Licensed activities must be carried out in a competent manner.

This includes:

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

### O2 Maintenance of plant and equipment

O2.1 All plant and equipment installed at the premises or used in connection with the licensed activity:

- a) must be maintained in a proper and efficient condition; and
- b) must be operated in a proper and efficient manner.

### O3 Dust

O3.1 All operations and activities occurring at the premises must be carried out in a manner that will minimise dust at the boundary of the premises.

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.

O3.3 All sealed and unsealed surfaces must be managed to minimise the quantity of wind blown dust emissions.

### O4 Emergency response

O4.1 The licensee must extinguish fires at the premises as soon as possible.

### O5 Waste management

O5.1 Vehicles leaving the premises must not track materials to external surfaces.

# Environment Protection Licence

Licence - 11455



- O5.2 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.
- O5.3 All pressure relief valves on the containers must be fitted with appropriate mechanisms to filter and remove odours.

## O6 Other operating conditions

- O6.1 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.
- O6.2 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.
- O6.3 Contaminated stormwater and any sludges collected at the premises must be disposed of at the Woodlawn Bioreactor Facility (Environment Protection Licence No. 11436).
- O6.4 There must be no vehicle or container wash down at the premises.
- O6.5 All sewage generated on the premises must be disposed of into the sewerage system at the Woodlawn Bioreactor Facility (Environment Protection Licence No. 11436).
- O6.6 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.

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.

## 5 Monitoring and Recording Conditions

### M1 Monitoring records

- M1.1 The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.
- M1.2 All records required to be kept by this licence must be:
  - a) in a legible form, or in a form that can readily be reduced to a legible form;
  - b) kept for at least 4 years after the monitoring or event to which they relate took place; and
  - c) produced in a legible form to any authorised officer of the EPA who asks to see them.
- M1.3 The following records must be kept in respect of any samples required to be collected for the purposes of this licence:
  - a) the date(s) on which the sample was taken;
  - b) the time(s) at which the sample was collected;



# Environment Protection Licence

Licence - 11455

- c) the point at which the sample was taken; and  
d) the name of the person who collected the sample.

## M2 Requirement to monitor concentration of pollutants discharged

M2.1 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:

### M2.2 Air Monitoring Requirements

#### POINT 4

Pollutant	Units of measure	Frequency	Sampling Method
Particulates - Deposited Matter	grams per square metre per month	Continuous	AM-19

### M2.3 Water and/ or Land Monitoring Requirements

#### POINT 1,2,3

Pollutant	Units of measure	Frequency	Sampling Method
Ammonia	milligrams per litre	Quarterly	Grab sample
BOD	milligrams per litre	Quarterly	Grab sample
Conductivity	microsiemens per centimetre	Quarterly	In situ
Copper	milligrams per litre	Quarterly	Grab sample
Flow	cubic metres per second	Quarterly	Estimate
Iron	milligrams per litre	Quarterly	Grab sample
Lead	milligrams per litre	Quarterly	Grab sample
Oil and Grease	milligrams per litre	Quarterly	Grab sample
pH	pH	Quarterly	In situ
Phosphorus	milligrams per litre	Quarterly	Grab sample
Sulfate	milligrams per litre	Quarterly	Grab sample
Total dissolved solids	milligrams per litre	Quarterly	Grab sample
Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	Grab sample
Total organic carbon	milligrams per litre	Quarterly	Grab sample
Total suspended solids	milligrams per litre	Quarterly	Grab sample

# Environment Protection Licence

Licence - 11455



Zinc	milligrams per litre	Quarterly	Grab sample
------	----------------------	-----------	-------------

M2.4 Siting of point 4 must be in accordance with Method AM-1 in the Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales.

M2.5 The EPA will review the need to monitor particulates-deposited matter at point 4 after twelve months operation of the premises.

## M3 Testing methods - concentration limits

M3.1 Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with:

- any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or
- 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
- 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.

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.

Note: The *Protection of the Environment Operations (Clean Air) Regulation 2010* 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".

## M4 Recording of pollution complaints

M4.1 The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.

M4.2 The record must include details of the following:

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

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

# Environment Protection Licence

Licence - 11455



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

## M5 Telephone complaints line

- M5.1 The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.
- M5.2 The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.
- M5.3 The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.

## 6 Reporting Conditions

### R1 Annual return documents

- R1.1 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:
1. a Statement of Compliance,
  2. a Monitoring and Complaints Summary,
  3. a Statement of Compliance - Licence Conditions,
  4. a Statement of Compliance - Load based Fee,
  5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan,
  6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and
  7. a Statement of Compliance - Environmental Management Systems and Practices.

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.

- R1.2 An Annual Return must be prepared in respect of each reporting period, except as provided below.
- R1.3 Where this licence is transferred from the 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.
- 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

# Environment Protection Licence

Licence - 11455



b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.

- R1.5 The Annual Return for the reporting period must be supplied to the EPA via eConnect *EPA* or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').
- R1.6 The 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.
- R1.7 Within the Annual Return, the Statements 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.

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

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

## R2 Notification of environmental harm

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

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.

## R3 Written report

- R3.1 Where an authorised officer of the EPA suspects on reasonable grounds that:
- a) where this licence applies to premises, an event has occurred at the premises; or
  - b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence,
- and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.
- R3.2 The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.
- R3.3 The request may require a report which includes any or all of the following information:
- a) the cause, time and duration of the event;
  - b) the type, volume and concentration of every pollutant discharged as a result of the event;
  - c) the name, address and business hours telephone number of employees or agents of the licensee, or a

# Environment Protection Licence

---

Licence - 11455



- specified class of them, who witnessed the event;
- 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; and
- g) any other relevant matters.

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

## 7 General Conditions

### G1 Copy of licence kept at the premises or plant

G1.1 A copy of this licence must be kept at the premises to which the licence applies.

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

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

# Environment Protection Licence

Licence - 11455

## Dictionary

### General Dictionary

<b>3DGM [in relation to a concentration limit]</b>	Means the three day geometric mean, which is calculated by multiplying the results of the analysis of three samples collected on consecutive days and then taking the cubed root of that amount. Where one or more of the samples is zero or below the detection limit for the analysis, then 1 or the detection limit respectively should be used in place of those samples
<b>Act</b>	Means the Protection of the Environment Operations Act 1997
<b>activity</b>	Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment Operations Act 1997
<b>actual load</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>AM</b>	Together with a number, means an ambient air monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
<b>AMG</b>	Australian Map Grid
<b>anniversary date</b>	The anniversary date is the anniversary each year of the date of issue of the licence. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
<b>annual return</b>	Is defined in R1.1
<b>Approved Methods Publication</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>assessable pollutants</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>BOD</b>	Means biochemical oxygen demand
<b>CEM</b>	Together with a number, means a continuous emission monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
<b>COD</b>	Means chemical oxygen demand
<b>composite sample</b>	Unless otherwise specifically approved in writing by the EPA, a sample consisting of 24 individual samples collected at hourly intervals and each having an equivalent volume.
<b>cond.</b>	Means conductivity
<b>environment</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>environment protection legislation</b>	Has the same meaning as in the Protection of the Environment Administration Act 1991
<b>EPA</b>	Means Environment Protection Authority of New South Wales.
<b>fee-based activity classification</b>	Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 2009.
<b>general solid waste (non-putrescible)</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997

# Environment Protection Licence

Licence - 11455

<b>flow weighted composite sample</b>	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
<b>general solid waste (putrescible)</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>grab sample</b>	Means a single sample taken at a point at a single time
<b>hazardous waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>licensee</b>	Means the licence holder described at the front of this licence
<b>load calculation protocol</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>local authority</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>material harm</b>	Has the same meaning as in section 147 Protection of the Environment Operations Act 1997
<b>MBAS</b>	Means methylene blue active substances
<b>Minister</b>	Means the Minister administering the Protection of the Environment Operations Act 1997
<b>mobile plant</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>motor vehicle</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>O&amp;G</b>	Means oil and grease
<b>percentile [in relation to a concentration limit of a sample]</b>	Means that percentage [eg.50%] of the number of samples taken that must meet the concentration limit specified in the licence for that pollutant over a specified period of time. In this licence, the specified period of time is the Reporting Period unless otherwise stated in this licence.
<b>plant</b>	Includes all plant within the meaning of the Protection of the Environment Operations Act 1997 as well as motor vehicles.
<b>pollution of waters [or water pollution]</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>premises</b>	Means the premises described in condition A2.1
<b>public authority</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>regional office</b>	Means the relevant EPA office referred to in the Contacting the EPA document accompanying this licence
<b>reporting period</b>	For the purposes of this licence, the reporting period means the period of 12 months after the issue of the licence, and each subsequent period of 12 months. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
<b>restricted solid waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>scheduled activity</b>	Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997
<b>special waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>TM</b>	Together with a number, means a test method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .

# Environment Protection Licence

Licence - 11455



<b>TSP</b>	Means total suspended particles
<b>TSS</b>	Means total suspended solids
<b>Type 1 substance</b>	Means the elements antimony, arsenic, cadmium, lead or mercury or any compound containing one or more of those elements
<b>Type 2 substance</b>	Means the elements beryllium, chromium, cobalt, manganese, nickel, selenium, tin or vanadium or any compound containing one or more of those elements
<b>utilisation area</b>	Means any area shown as a utilisation area on a map submitted with the application for this licence
<b>waste</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>waste type</b>	Means liquid, restricted solid waste, general solid waste (putrescible), general solid waste (non - putrescible), special waste or hazardous waste

Mr William Dove

Environment Protection Authority

(By Delegation)

Date of this edition: 05-September-2002



# Environment Protection Licence

Licence - 11455

## End Notes

- 1 Licence varied by notice 1036952, issued on 27-Jul-2004, which came into effect on 02-Aug-2004.
- 2 Licence varied by change to record due to LGA amalgamation, issued on 01-Dec-2004, which came into effect on 01-Dec-2004.
- 3 Licence varied by notice 1051103, issued on 06-Jan-2006, which came into effect on 31-Jan-2006.
- 4 Licence varied by change to DEC Region allocation, issued on 02-Mar-2006, which came into effect on 02-Mar-2006.
- 5 Licence varied by correction to DEC region, issued on 12-Apr-2007, which came into effect on 12-Apr-2007.
- 6 Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>
- 7 Licence varied by notice 1100703, issued on 01-Jun-2009, which came into effect on 01-Jun-2009.
- 8 Licence varied by Correction to EPA Regional data record., issued on 24-Jun-2010, which came into effect on 24-Jun-2010.
- 9 Licence varied by notice 1557352 issued on 07-Mar-2018