



4 April 2012

INDEPENDENT ENVIRONMENTAL AUDIT

Woodlawn Waste Management Facility

Submitted to:

Veolia Environmental Services Pty Ltd
Cnr Unwin & Shirley Street,
Rosehill NSW 2142

REPORT



Report Number. 127623109

Distribution:

Veolia Environmental Services
Golder Associates





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1.0 INTRODUCTION

This report presents the Independent Environmental Audit Report (IEAR) for the Woodlawn Bioreactor Facility (the site) located at Collector Road, Tarago and the Intermodal Facility, Bungendore Road, Tarago, NSW. This report has been prepared for Veolia Environmental Services (VES) by Golder Associates Pty Ltd (Golder).

1.1 Objectives

In accordance with the requirements of Condition 19 of Development Consent (DC) (DA No. 31-02-99) for the site, VES is required to commission an Independent Environmental Audit Report every three years following the date of this consent, or at periods otherwise agreed to by the Director-General. The Independent Environmental Audits must:

(a) be conducted pursuant to ISO 14010 – Guidelines and General Principles for Environmental Auditing, ISO 14011 – Procedures for Environmental Auditing and any specifications of the Director-General;

(b) be conducted by a suitably qualified and 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 Applicant's expense.

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

The Development Consent is dated 30 November 2000. The previous audit was commissioned on 21 September 2007 and reported in June 2008.

1.2 Background

VES owns and operates the Woodlawn Waste Management Facility which comprises the following:

- Crisps Creek Intermodal Facility, where containerised waste is off-loaded from trains and loaded onto trucks for delivery to the Woodlawn Bioreactor Facility; and
- The Woodlawn Bioreactor Facility, a lined solid waste placement facility where the waste containers are emptied and the waste is deposited.

Both facilities are required to be addressed by the three-yearly Independent Environmental Audits.

1.3 Compliance with the Audit Objectives

Compliance with the objectives of the audit (refer to Section 1.1) has been achieved by the following:

- The Audit was conducted by Mr Tom Carmichael, Principal Environmental Scientist, Golder Associates. Tom is registered by RABQSA International as a Certified Lead Environmental Auditor (Certificate Number 14544, expires July 2012) and has been endorsed by the Director-General of the Department of Planning to undertake the audit.
- The Audit has been undertaken in accordance with AS/NZS 19011:2003: Guidelines for quality and/or environmental management which has superseded both ISO14010 – Guidelines and General Principles for Environmental Auditing and ISO14011 – Procedures for Environmental Auditing (as referred to in Condition 19 of the Development Consent).



- The Audit has assessed compliance of the development against the Conditions of Consent.
- The Audit has assessed the implementation of the LEMPs and reviewed the effectiveness of the environmental management of the development.
- The Audit has recommended measures or actions to improve the environmental performance of the operations and/or the environmental management and monitoring systems where relevant.



2.0 COMPLIANCE WITH CONSENT CONDITIONS

The audit has assessed compliance with the applicable consent conditions (Development Consent DA No. 31-02-99, dated 30 November 2000) as detailed in Table 1. Table 1 identifies the following information:

- Condition number and requirements
- Applicability of condition – either yes or no
- Auditor's observations – description of auditor's findings
- Assessment of compliance and recommendations where action is required to achieve compliance. Compliance is assessed as either compliant or non-compliant.

**Table 1: Compliance with Development Consent
Woodlawn Bioreactor, Tarago, New South Wales, Environmental Audit of Consent Conditions, January 2012**

Condition		Compliance	Comments
No.	Wording		
	GENERAL WORDING		
	<i>Adherence to terms of DA and EIS</i>		
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.		The Environmental Audit of Consent Conditions undertaken by Golder Associates in June 2008 concluded that the Development met the conditions of the Development Consent. The only potentially significant change is that the site started receiving local waste in January 2012. A variation to the Consent was approved by the Minister for Planning on 11 August 2010, permitting receipt of up to 50,000 tonnes of waste from the local government areas in the vicinity of the facility. The variation to the Consent required the facility to prepare and implement a Transport Code of Conduct to the satisfaction of the Director-General. The operation's Transport Code of Conduct was approved by the Director-General on 29 April 2011.
	<i>Deferred Commencement</i>		
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.	Yes	Compliance was confirmed in a letter from the Department of Urban Affairs and Planning dated 5 September 2002.
	<i>Duration of the Consent</i>		
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.	Yes	Current operations are within the 20-year approved life of the project and the approved input rates.
	<i>Input Rate Variations</i>		
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	Yes	The operation complies with the annual input rates in Table 1 (refer below).



Condition	Compliance	Comments
<p>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>		
Table 1: Maximum Input Rates		
<p>Years from date of operational commencement</p>	<p>Maximum Input Rate</p>	
<p>0-5</p>	<p>400,000 tpa</p>	<p>The licensee conducts volumetric surveys on a half-yearly basis. An electronic Container weight register is maintained. In Calendar Year 2009 (Year 5 of operations) the site received 387,000 tonnes of waste.</p>
<p>6-10</p>	<p>360,000 tpa</p>	<p>This Audit addresses Years 5, 6 and 7 of the operations. The operation received approval from the Minister for Planning, dated 30 June 2010, authorizing an increase in the permissible waste input rate to 450,000 tonnes per annum until 31 December 2010. In 2010 the site received 427,000 tonnes.</p> <p>The operation received approval from the Minister for Planning and Infrastructure, dated 23 October 2011, permitting a temporary increase in the amount of deposited waste to 500,000 tonnes until 31 December 2011 or the date of determination of the current Part 3A application. In 2011 the site received 461,000 tonnes of waste per annum.</p>
<p>11-15</p>	<p>325,000 tpa</p>	<p>This number of years of operation has not yet been reached.</p>
<p>16-20</p>	<p>290,000 tpa</p>	<p>This number of years of operation has not yet been reached.</p>



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Condition	Compliance	Comments	
5	In any event, no more than 500,000 tonnes shall be landfilled at the site in any one year.	Yes	Refer above. The operation is compliant with this condition.
<i>Compliance with Requirements of the Director-General and Prescribed Conditions</i>			
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.	Yes	The site has not been subject to any requirements of the Director-General in respect of any measures arising from reports submitted in accordance with the conditions of consent.
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.		The site constructed an equipment shed in 2010, with dimensions of approximately 30 metres by 10 metres. The construction of the shed was approved as DA/0103/1011 by Goulburn Mulwaree Council on 27 October 2010. A Construction Certificate was issued by Council on 14 December 2010. Council inspected and approved the foundations of the shed on 14 February 2011. The shed is still under construction. No other works subject to Part 7 of the Environmental Planning and Assessment Regulation 2000 have been undertaken in the last 3 years.
<i>Obligation to minimise harm to the environment</i>			
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	Yes	There have not been any incidents resulting in harm to the environment in the last 3 years.
	(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.	Yes	The site has undertaken modifications to its landfill drainage system to dry the waste and increase gas generation and increase resulting power generation from 2 MW to 4 MW.
<i>Structural adequacy</i>			
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	Yes	This was assessed in the 2008 audit.



Condition	Compliance	Comments
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		
<p>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:</p> <ul style="list-style-type: none"> (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. <p>The certificate/s shall demonstrate at what stage of construction inspections were undertaken.</p>	Yes	This was assessed in the 2008 audit. The construction of the new equipment shed, which is underway, has been inspected and approved by Council during the construction works.
Dispute Resolution		
<p>11 In the event that the Department or the PCA cannot agree on the specification or requirements Applicant, Council, a government authority other than the 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.</p>	Yes	The only construction works undertaken in the last 3 years relate to the new equipment shed. There have not been any disputes with Council or a PCA regarding the construction works.
ENVIRONMENTAL MANAGEMENT		
Environmental Services		
<p>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)</p>	Yes	The appointed EMR is Mr Justin Houghton, who is employed by Veolia and works on the site. Mr Houghton has a Bachelor Degree in Environmental Science and is a suitable and appropriate person to fulfill this role. The Environmental



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Condition	Compliance	Comments
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.		Management of the Site is outlined in the LEMP, which was most recently updated in May 2007.
The EMR/s shall:		
(a) be responsible for the preparation or certification of all environmental management plans and procedures;	Yes	This condition is within the scope of the EMRs services to the site.
(b) be responsible for considering and advising on matters specified in the conditions of this consent and compliance with such matters;	Yes	This condition is within the scope of the EMRs services to the site.
(c) oversee the receipt of, and response to, complaints about the environmental performance of the project;	Yes	This condition is within the scope of the EMRs services to the site.
(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	Yes	The site uses an Induction Checklist to advise new employees on obligations at the site. A 10 minute induction video is shown for visitors and new employees. The site has a rolling tool box talk program with materials prepared by Veolia's corporate training team in Sydney. The training is delivered by site management. The training materials do not specifically reference the Environment Protection Licence and Consent Conditions, however, address the relevant aspects such as spill control and incident response. The level of environmental performance at the site suggests that the induction and training program is effective.
(e) be present on-site during any critical construction or operational activities as defined in the relevant Landfill Environmental Management Plan (LEMP).	Yes	The EMR is the site manager, who is employed by Veolia and works on the site.
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	Yes	The LEMP was last updated in 2007. The operations have not changed significantly since 2007. The EPL was issued in September 2004.



Condition	Compliance	Comments
and protocols as required by the conditions of this consent. The LEMP shall accompany the application for an EPL. (EPA GTA).		
Licence Application		
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)	Yes	These conditions relate to the EPL Application in 2004.
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:	Yes	These conditions relate to the EPL Application in 2004. The PCLRMP is documented within the LEMP and addresses the requirements of this Condition.
(a) closure strategies in the event that landfilling activities conclude prior to filling of the mine void;	Yes	
(b) site capping and revegetation in accordance with benchmark technique 28 of the Environmental Guidelines: Solid Waste Landfills;	Yes	
(c) post closure environmental monitoring;	Yes	
(d) post closure management of surface water in the event that the void is not filled with waste;	Yes	
(e) post closure management of Evaporation Dam No 3 (ED3);	Yes	
(f) post closure leachate management, including the management of the bioreactor process;	Yes	
(g) post closure landfill gas management;	Yes	
(h) post closure maintenance; and	Yes	
(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)	Yes	



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Condition	Compliance	Comments
Community Liaison Committee		
16	Yes	<p>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.</p> <p>Quarterly Community Liaison Committee meetings are held and minuted. The meetings are attended by representatives of Council and local residents and the Supervisory Licensee (a Council employee). The Committee is presented with a detailed operational review of the facility at each meeting.</p>
Annual Environmental Management Report		
17	Yes	<p>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.</p> <p>Annual Environmental Management Reports were sighted for the periods:</p> <ul style="list-style-type: none"> - 2008 – 2009, dated 8 April 2010 - 2009 – 2010 - 6 September 2010 to 5 September 2011 <p>Letters of acknowledgement of receipt were received from the DG of the Department of Environment, Climate Change & Water for the years 2008 – 2009 (dated 28 July 2010) and 2010 – 2011 (dated 10 October 2011).</p>
Conditions Compliance Reports		
18		<p>The Applicant shall submit to the Director-General, the EPA, DLWC and Council Conditions Compliance Reports as follows:</p>
	Partial	<p>(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;</p> <p>The date of commencement of construction works was not available to the Auditor. The Pre-Construction Condition Compliance Report was included in the original LEMP dated 23 April 2001.</p>
	Partial	<p>(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;</p> <p>The date of commencement of construction works was not available to the Auditor. The Pre-Construction Condition Compliance Report was included in the original LEMP dated 23 April 2001.</p>
	Partial	<p>(c) every two years following the date of commencement of construction for the purposes of landfilling activity, or within such</p> <p>The most recent Conditions Compliance Report was dated December 2009. The next Conditions Compliance Report</p>



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period as otherwise agreed to by the Director-General.		was due in December 2011, however, has yet to be completed.
<i>Independent Environmental Audits</i>		
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:	Yes	The previous audit was conducted in June 2008. The current audit was conducted in January 2012.
(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;	Yes	The Audit has been undertaken in accordance with AS/NZS 19011:2003: Guidelines for quality and/or environmental management which has superseded both ISO14010 – Guidelines and General Principles for Environmental Auditing and ISO14011 – Procedures for Environmental Auditing (as referred to in Condition 19 of the Development Consent.
(b) be conducted by a suitably qualified independent person approved by the Director-General;	Yes	The Audit was conducted by Mr Tom Carmichael, Principal Environmental Scientist, Golder Associates. Tom is registered by RABQSA International as a Certified Lead Environmental Auditor (Certificate Number 14544, expires July 2012) and has been endorsed by the Director-General of the Department of Planning to undertake the audit.
(c) assess compliance with the requirements of this consent;	Yes	The audit has assessed 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	Yes	The audit has assessed the implementation of the LEMP and the effectiveness of the environmental management of the development.
(e) be carried out at the Applicants' expense.	Yes	The audit has been carried out at Veolia's expense.
The audits shall be submitted to the Director-General, the EPA, DLWC, Council and the Community Liaison Committee.		Noted. The audit report will be submitted to the these parties.
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.		Noted.



Condition	Compliance	Comments
SITE REHABILITATION		
<i>Whole of Site Rehabilitation</i>		
20	Yes	The filling is being undertaken in accordance with the LEMP. It is noted that the mine void has been filled to only about 10% of its capacity as yet.
21	Yes	Noted. This is addressed in the LEMP. The landfilling works are not impeding or limiting the rehabilitation works.
<i>Rehabilitation Management Plan</i>		
22	Yes	The RMP is included in the LEMP. The Landscape and Vegetation Management Plan (LVMP) outlines revegetation for the intermodal facility and the bioreactor area. Pest and Weed Management is outlined.
	Yes	Refer above.



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Condition	Compliance	Comments
(h) integration of rehabilitation works with the rehabilitation of the Woodlawn mine site.	Yes	Refer above.
The RMP shall be included in the LEMP.	Yes	Refer above.
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.	Yes	No approvals have been sought in the last three years. All movements of material at the site are addressed in the AEMRs for the EPL and Special Mining Lease (SML20). The AEMRs are provided to the EPA and the End of Mine Life Steering Committee.
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.	Yes	The Applicant is the holder of the Woodlawn Special Mining Lease.
<i>EPA Financial Assurance</i>		
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:	Yes	There have not been any changes to the financial assurance requirements in the last three years.
(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		The financial assurance was last updated in 2010. The Bank Guarantee was adjusted in accordance with written instruction from the NSW Department of Environment, Climate Change and Water dated 17 September 2010. Confirmation of payment required.
(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.		Clarification required as to whether bank guarantee addresses both pre-closure and post closure costs.
The financial assurance shall be maintained during the operation of the facility and thereafter until such time as the EPA notifies the		



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Condition	Compliance	Comments
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.		
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.	Yes	All waste is sourced from the Sydney region and delivered by rail except for waste sourced from local government areas in accordance with the approval modification issued by the Department of Planning.
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;	Yes	The site receives inert and solid waste.
(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;	Yes	The site does not receive asbestos waste.
(c) tyres in accordance with the EPA's tyre disposal specification; and	Yes	No tyres are disposed of at the site.
(d) other types of waste as expressly approved by the EPA. (EPA GTA)	Yes	No other types of waste are received at the site.
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)	Yes	No containerized sludge is handled at the intermodal site.
Waste Transportation		

Condition		Compliance	Comments
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)	Yes	The containers are sealed to prevent loss of leachate from waste containers during transport and handling activities. The container design was submitted to the Department of Planning on 30 October 2003.
30	All pressure relief valves on the containers must be designed to meet the environmental requirements of condition 29. (EPA GTA)	Yes	Refer above.
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)	Yes	The Container Maintenance Procedure was submitted to DIPNR on 30 October 2003. Container Maintenance Procedure approved. A maintenance employee inspects each trainload of containers and records any container requiring maintenance. Records are kept of the maintenance works for each container.
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).	Yes	The site's Emergency Management Plan addresses spills on the site and during transit. The site has not had any major spills in the last three years.
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)	Yes	A visual check of the waste is undertaken at Clyde prior to placement in the containers. The LEMP, Appendix A, outlines a "Screening and Recording of Waste Received" Procedure.
34	The Applicant shall use its best endeavours to ensure that all waste received at the intermodal facility is containerised.	Yes	The only waste received at the site which is not containerized is local waste, which is delivered in a standard enclosed waste collection truck directly to the bioreactor site. All other waste is received in enclosed containers via the intermodal facility.
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.	Yes	The filling schedule is presented in the LEMP with reference to year, tonnage and elevation of the landfill floor. A waste Volume Fill Plan is also maintained by the site with target dates of filling of the landfill to specific elevations.

Condition	Compliance	Comments
Cover Material		
36	Yes	Both VENM and a polymer based (concover, paper mache based) ADC approved by the EPA area used. There has not been any change to the type of cover material used in the last three years.
37	Yes	Refer above. The cover material is of suitable quality for biological decomposition processes.
38	Yes	Cover material is placed to a minimum depth of 15 centimetres over the exposed waste at the end of each day.
39	Partial	Cover material is applied to a depth of 30 centimetres over landfilled areas which are exposed for more than 90 days.
40	Partial	The site keeps at least two weeks supply of cover material on the site in the form of soil.
Landfill Gas		
41	Yes	Surface Gas Monitoring is undertaken each quarter in a grid format over the surface of the landfill, comprising 13 transects, monitoring methane levels to provide an indication of the effectiveness of landfill gas collection. The quantity of landfill gas collected has increased such that the power generation has increased from 3 MW in March 2010 to 4 MW in January 2012.
42	Yes	This commitment is made in the LEMP. The flare has been installed in accordance with the destruction specifications. No monitoring has been undertaken of the performance of the flare.
43		This commitment is made in the LEMP. The flare system was commissioned in November 2006. The flare has been installed in accordance with the destruction specifications. No monitoring has been undertaken of the

Condition	Compliance	Comments
		performance of the flare.
44	Yes	This commitment is made in the LEMP. The Gas Management Plan, Section 2.3 and Appendix A outlines gas condensate collection. Condensate is collected at a knock-out vessel and returned to the mine void.
45	Partial	The Gas Management Plan, Section 2.3 and Appendix A outline the design of the gas extraction system. However, no design calculations in regards to pipe stability have been reviewed.
46	Yes	The landfill gas pipeline is buried beneath an earth bund to protect it from damage by haul trucks.
WATER QUALITY AND MANAGEMENT		
Waste Management Facility Site		
47	Yes	There have not been any surface water or groundwater pollution incidents in the last three years.
<u>Groundwater and Leachate Management</u>		
48	Yes	Groundwater bore depths are monitored every quarter and reported in the EPL AEMR. The groundwater contours indicate that the groundwater gradient is directed towards the mine void.
49	Not applicable	Noted. Not yet relevant.
50	Yes	There have not been any changes to the leachate collection/storage/recirculation/treatment system in the last 3 years. We understand that the leachate collection system exists as described in the Leachate Management Plan.



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Condition	Compliance	Comments
(a) accept other waste-waters and contaminated storm-waters generated as a result of the operation of the facility;	Yes	
(b) efficiently operate, notwithstanding the settlement of the waste;	Yes	
(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;	Yes	
(d) ensure that liquid is not deliberately stored in the landfilled waste, unless it is necessary for the efficient decomposition of the landfilled waste.	Yes	
(e) ensure that leachate can be recirculated within the biologically active zones of the landfilled waste; and	Yes	
(f) comply with Conditions 48 and 8(b).	Yes	
Details of this system must be documented in the LEMP. (EPA GTA)	Yes	
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)	Yes	The barrier system is continuing to be installed. In the least 3 years one of the adit portals from the former mine operations has been sealed in accordance with the specification of independent engineers.
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:	Yes	Refer to Condition 51.
(a) the base and the top elevation of the mine void; and	Yes	Refer to Condition 51.
(b) the localised joints, fracture zones and adits/portals.	Yes	Refer to Condition 51.
53 The barrier system must at least achieve the performance of a 900 mm thick recompacted clay liner with an in-situ coefficient of permeability of less than 10^{-9} metres per second.	Yes	This is implemented as required. The only area requiring 900 mm thick recompacted clay liner in the last three years is currently being lined. An independent survey and compaction testing will be undertaken as part of these works.
54 A Construction Quality Assurance Plan (CQAP) for the barrier system shall be prepared and included in the LEMP.	Yes	The Construction Quality Assurance Plan for the barrier system is detailed in the LEMP.
55 The Applicant shall prepare a Leachate Contingency Management Plan (LCMP) that addresses, but not necessarily be limited to the	Yes	The Leachate Contingency Management Plan is detailed in the LEMP which addresses these requirements.



INDEPENDENT ENVIRONMENTAL AUDIT

Condition	Compliance	Comments
		following matters:
	Yes	(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;
	Yes	(b) the storage of leachate external to the landfilled waste in the mine void;
	Yes	(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
	Yes	(d) an estimate of the full costs for implementing each aspect of this plan. (EPA GTA)
56	Yes	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	Yes	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.
		<u>Surface Water Management</u>
58	Yes	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 in100 year ARI of 72 hours duration). (EPA GTA)
59	Yes	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	Yes	The Applicant shall install drainage so that the West Ridge Catchment shall not drain into the mine void.
61	Yes	Contaminated water shall only be applied for dust suppression in the
		Contaminated water is not being used at the site.



INDEPENDENT ENVIRONMENTAL AUDIT

Condition	Compliance	Comments
62		
63	Yes	
64	Yes	
65	Yes	
	Yes	
	Not applicable	
	Not applicable	
66	Yes	
67	Yes	
68	Yes	

Condition	Compliance	Comments
the LEMP. (EPA GTA)		
69	Yes	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) The diesel and oil tanks on the site are all bunded or double-skinned.
<u>ED3-Management</u>		
70	Yes	The Applicant must prepare a management plan for ED3 to ensure that: The ED3 Management Plan is detailed in the LEMP. The limits have been removed from the EPL.
	Yes	(a) the dam is maintained to prevent the leakage of stored acid mine drainage waters in order to protect groundwater and surface water; The ED3 Management Plan summarises a water balance for the Site, indicating that even for a high rainfall year, adequate capacity for the design rainfall event is maintained.
	Yes	(b) adequate capacity is retained in ED3 to meet the environmental performance requirements in condition 58 The capacity in ED3 is monitored monthly.
	Yes	(c) measures are identified to maintain adequate capacity within a suitable time period after receiving water from a rainfall event; The ED3 Management Plan summarises a water balance for the Site, indicating that even for a high rainfall year, adequate capacity for the design rainfall event is maintained.
	Yes	(d) there is an emergency plan for the management of water in excess of the capacity of ED3; Section 4.7 of the ED3 Management Plan outlines emergency procedures in case of dam structural fault or failure and Dam overflow. Options include an increase in capacity of ED3 and use of other storage ponds on site.
	Yes	(e) the sources of water that are collected or received in ED3 are identified; and The catchment areas that contribute to ED3 are: ED3 surface area and stormwater from the mine void.
	Yes	(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. In accordance with Section 4.5 of the ED3 Management Plan, the volume of water pumped from the mine void is recorded and the volume of water stored in ED3 is calculated on a monthly basis.
<u>Waste-water Management</u>		
71	Yes	The sewage management system must be designed, installed and operated to meet the following criteria: The LEMP details a waste-water management plan. The wastewater treatment plant is located near the gate house and is licensed by Council.



INDEPENDENT ENVIRONMENTAL AUDIT

Condition	Compliance	Comments
(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.	Yes	An Aerated Wastewater Treatment System (AWTS) has been designed and installed to use the existing sewer drainage network to convey sewage to the treatment system. Following treatment, the secondary effluent is irrigated. Mulwara Shire Council issued a licence on 8 October 2003 (application No: 012/487) to operate the designed AWTS under the conditions of achieving certain performance standards. These standards appear to be met.
(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.	Yes	Refer to 71(a)
(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.	Yes	Refer to 71(a)
(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.	Yes	Refer to 71(a)
(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.	Yes	Refer to 71(a)
(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)	Yes	Refer to 71(a)
72 Waste-water must only be applied to utilisation areas in conformance with Condition 71. (EPA GTA)	Yes	This condition is being complied with. The irrigation area is located near the AWTS in the vicinity of the Site entrance area.
73 Spray from waste-water application must not drift beyond the boundary of the waste-water utilisation area to which it is applied.	Yes	The irrigation area is located approximately 200 metres from the site boundary (road). The predominant wind direction is



INDEPENDENT ENVIRONMENTAL AUDIT

Condition	Compliance	Comments
(EPA GTA)		towards the east. The eastern boundary of the irrigation area has a line of well established trees to manage spray drift.
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)	Yes	Visual monthly inspections are undertaken of the irrigation area, including checks for run-off, to ensure that the area is managed in accordance with this condition.
<i>Intermodal Facility Site</i>		
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 Condition76 (EPA GTA)	Yes	The Stormwater Management Scheme for the Intermodal Facility Site is detailed in the LEMP. The facility appears to be built and operated as outlined in the drawings and the SWMS.
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)	Yes	The Stormwater Management Scheme for the Intermodal Facility Site is detailed in the LEMP. The facility appears to be built and operated as outlined in the drawings and the SWMS. A first flush system has been installed at the Intermodal Facility. VES has approval to irrigate the collected stormwater as no significant contamination was detected in the first flush water.
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)	Yes	No such discharge has been identified at the site.
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)	Yes	The container handling area is concrete paved.
<u>Waste Water Management</u>		
79 Contaminated stormwater and any sludges collected at the Crisps Creek intermodal facility must be disposed of at the landfill site. (EPA GTA)	Yes	Water quality testing is undertaken of the sump is undertaken after a 25 mm rain event and if suitable discharged to site. No contaminated stormwater has been detected at the site or



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Condition	Compliance	Comments
		in the adjacent creek.
80	Yes	No washing of vehicles or containers is undertaken at the premises.
81	Yes	A compost toilet has been installed at the site.
<i>Rivers and Foreshore Improvement Act 1948 - Part 3A Permit (DLWC GTAs)</i>		
<u>General</u>		
82	Not applicable	
83	Not applicable	
84	Not applicable	
85	Not applicable	
86	Not applicable	
<u>Conditions Specific to the DA</u>		
87	Not applicable	



Condition	Compliance	Comments
88	Not applicable	
89	Not applicable	
90	Not applicable	
91	Not applicable	
92	Not applicable	
93	Not	



INDEPENDENT ENVIRONMENTAL AUDIT

Condition	Compliance	Comments
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	applicable	
NOISE		
<i>Hours of Construction and Operation</i>		
<u>Construction</u>		Site construction works were completed prior to the period addressed by the current audit.
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 applicable	
95 The delivery of material outside the hours of operation permitted by Condition 94 may take place if that delivery is required by police or other authorities for safety reasons; and/or because the operation, personnel or equipment are endangered. In such circumstances, prior notification is to be provided to the EPA and affected residents as soon as possible, or within a reasonable period in the case of an emergency. (EPA GTA)	Not applicable	
96 The hours of construction specified in Condition 94 may be varied with the written consent of the EPA if the EPA is satisfied that the amenity of the residents in the locality will not be adversely affected. (EPA GTA)	Not applicable	
<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). (EPA GTA)	Yes	Any works outside the nominated hours have been approved by the EPA.

Condition	Compliance	Comments
98	Yes	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
		<u>Waste Management Facility Site</u>
99	Yes	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. (EPA GTA)
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:
	Yes	(a) documenting noise complaints received to identify any patterns of temperature inversions or increased level of impacts from temperature inversions;
	Yes	(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)
		<u>Intermodal Facility Site</u>
101	Yes	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. (EPA GTA)
102	Yes	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. (EPA GTA)
103	Yes	Noise from the premises is to be measured at the most affected residential receiver to determine compliance with Conditions 101 and



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Condition	Compliance	Comments
102. (EPA GTA)		has been undertaken.
104	Yes	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:
	Yes	(a) documenting noise complaints received to identify any higher level of impacts or patterns of temperature inversions; and
	Yes	(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	Yes	The Road Traffic Noise Management Protocol is addressed in the LEMP. There have not been any changes to the road traffic operations in the last 3 years other than upgrading the trucks for a greater weight, from 45.5 tonnes to 50.5 tonnes gross.
		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:
	Yes	(a) scheduling movements outside critical time periods (for example, 6:00am to 7:00am);
	Yes	(b) more stringent limits for noise emission from vehicles (eg. using specially designed "quiet" trucks and/or trucks required to use air bag suspension);
	Yes	(c) driver education;
	Yes	(d) limiting usage of exhaust brakes;
	Yes	(e) type of road surface;
	Yes	(f) in consultation with Mulwree Shire Council exploring opportunities



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Condition	Compliance	Comments
	Yes	Refer above.
106	Yes	The Noise Management Protocol (refer Section 4) included in the LEMP addresses the requirements of this condition.
	Yes	Refer above.
107	Not applicable	The construction works were completed prior to the time period addressed by the current audit.



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Condition	Compliance	Comments
(a) compliance standards;	Not applicable	
(b) community consultation;	Not applicable	
(c) complaints handling monitoring/system;	Not applicable	
(d) site contact person to follow up complaints;	Not applicable	
(e) mitigation measures;	Not applicable	
(f) the design and operation of the proposed mitigation methods demonstrating	Not applicable	
best practice;	Not applicable	
(g) construction times;	Not applicable	
(h) contingency measures where noise complaints are received; and	Not applicable	
(i) monitoring methods and programs.	Not applicable	
NOISE IMPACTS		
<i>Consultation with Pylara Pty Ltd</i>		
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	Not applicable Veolia purchased the Pylara Pty Ltd property in 2001. Hence this condition is not relevant.



Condition	Compliance	Comments
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 077672), 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:	Not applicable	Veolia purchased the Pylara Pty Ltd property in 2001, prior to the period addressed by the current audit.
(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 Mulwara Shire, or within such other location as may be determined by the Director-General in exceptional circumstances; and		



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Condition	Compliance	Comments
(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:	Not applicable	Veolia purchased the Pylara Pty Ltd property in 2001, prior to the period addressed by the current audit.
(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.	Not applicable	Veolia purchased the Pylara Pty Ltd property in 2001, prior to the period addressed by the current audit.
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	Not	Veolia purchased the Pylara Pty Ltd property in 2001, prior to the period addressed by the current audit.

Condition	Compliance	Comments
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.	applicable	
AIR QUALITY		
Odour		
<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)	Partial	Odour complaints have been received. Odour modelling was undertaken in 2010 as part of the application for expansion of the facility. The report (Heggies Pty Ltd 2010) concludes that the modelled odours will be within the project objectives. The number of odour complaints has diminished over the last three years and site management attribute this improvement to better capturing of landfill gas.
114 A meteorological station shall be installed and operated on the landfill site in accordance with the following Australian Standards:	Yes	The site has a meteorological station.
(a) AS 2922-1987 Ambient air – Guide for the siting of sampling units; and	Yes	
(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)	Yes	A review of the station monitoring software indicates that the relevant parameters are monitored.
<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)	Partial	
Dust		
<u>Waste Management Facility Site</u>		

Condition	Compliance	Comments
116	Yes	Water sprays and sealing of haul roads has been used to effectively manage dust in the last 3 years.
117	Yes	Various dust mitigation strategies are outlined in the Ambient Air Quality Monitoring Plan (AAQMP), Section 5.2. These include sealed containers, wheel wash, container wash-down facility, minimised truck speed, use of water carts, operator training and waste covering.
118	Yes	Refer to conditions 116 and 117.
119	Yes	All trucks entering and leaving the premises and carrying loads are sealed and covered, except during loading and unloading.
120	Yes	Completed.
121	Yes	Completed.
122	Yes	Completed.
123	Yes	Progressive rehabilitation works are underway.
<u>Intermodal Facility Site - Construction and Operational Phases</u>		
124	Yes	The intermodal site is sealed. There is no dust generation.
125	Yes	Dust mitigation strategies are outlined in the Ambient Air Quality Monitoring Plan (AAQMP), Section 5.2.1. These include train speed limits, sealed containers, sealing of all



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Condition	Compliance	Comments
		roads and minimising truck speeds.
126	Yes	Under general operation, there are no trucks entering or leaving the premises carrying excavated materials. In the event that such truck movements are conducted, the loads are covered.
127	Yes	The site was not observed to be a significant source of dust emissions during the site inspection.
ENVIRONMENTAL MONITORING (EPA GTAs)		
<i>Waste Management Facility Site</i>		
<u>Odour Monitoring</u>		
128		The Odour Monitoring Plan is detailed in the LEMP and reported in the AEMR.
<u>Ambient Air Quality Monitoring</u>		
129	Yes	The Ambient Air Quality Monitoring Plan (AAQMP) is contained in the LEMP and addresses the requirements of this condition.
	Yes	Refer above.
		Refer above.
<u>Landfill Gas Monitoring</u>		



Condition	Compliance	Comments
130	Yes	A detailed landfill gas monitoring system is outlined in Table 3.1 of the Bioreactor Performance Monitoring Program (BPMP) contained in the LEMP. The system appears to be implemented as outlined in the BPMP.
<u>Groundwater Monitoring</u>		
131	Yes	A comprehensive groundwater monitoring program has been implemented in the site, which is outlined in the Groundwater Monitoring Program (GWMP) contained in the LEMP.
The program must include details on:		
	Yes	(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;
	Yes	(b) monitoring the height of the groundwater table;
	Yes	(c) monitoring the groundwater gradient and to determine the direction of groundwater flow;
	Yes	(d) monitoring methodologies and standards to be employed;
	Yes	(e) reporting and assessment of results;
	Yes	(f) opportunities to integrate the monitoring program with other monitoring programs in the vicinity;
	Yes	(g) the parameters and substances that are proposed to be monitored, including sampling and analysis frequencies; and
	Yes	(h) groundwater height should be reported against water table contours around the site to assess any variation over time.
<u>Surface Water Monitoring</u>		
132	Yes	A surface water monitoring scheme (SWMS) is contained in the LEMP which addresses the required elements of this



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



Condition	Compliance	Comments
133	Yes	A Leachate Management Plan (LMP) is contained in the LEMP and addresses the requirements of this condition. The system appears to be implemented as outlined in the LMP.
	Yes	
134	N/A	
<u>Environmental Performance of the Bioreactor Landfill</u>		
135	Yes	A Bioreactor Performance Monitoring Program (BPMP) is contained in the LEMP and addresses the requirements of this condition. The system appears to be implemented as outlined in the BPMP.
	Yes	



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Condition	Compliance	Comments
	Yes	
	Yes	
136	Yes	
137	Yes	Quarterly monitoring of geotechnical stability is undertaken by independent geotechnical consultants in accordance with the Geotechnical Stability Management Plan and guidelines set out in the LEMP.
138	Yes	Annual returns are submitted to the EPA.



Condition	Compliance	Comments
calculation work-sheets with the return.		
<i>Intermodal Facility Site</i>		
<u>Water Monitoring Program</u>		
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:	Yes	Refer to the LEMP and the AEMR.
(a) monitoring locations including:		
(i) Crisps Creek ;	Yes	
(ii) Mulwaree River; and	Yes	
(iii) the bypass from the first flush structure(s);	Yes	
(b) the monitoring methodologies and standards to be employed;	Yes	
(c) monitoring frequency based on rainfall event and creek flow assessment;	Yes	
(d) the quantity of water collected weekly in the first flush structure;	No	This item is not specifically addressed by the LEMP.
(e) reporting and assessment of results;	Yes	
(f) the parameters and substances which are proposed to be monitored; and	Yes	
(g) opportunities to integrate the monitoring program with other monitoring programs in the vicinity.	Yes	
The monitoring program must be documented in the LEMP.	Yes	
<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:	Yes	Refer to LEMP and AEMR.
(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.		



Condition	Compliance	Comments
ROADWORKS		
141	Yes	No road construction works have been undertaken in the last three years. Some sealing of haul roads and road maintenance works have been undertaken. Council undertakes all road maintenance works outside of the site in accordance with Section 94 contributions.
142	Yes	Refer above.
143	Yes	Refer above.
144	Yes	Refer above.
145	Yes	Refer above.
		(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.



Condition	Compliance	Comments
146	Yes	Golder understands that this has been undertaken.
147	Yes	Golder understands that this has been undertaken.
148	Yes	Golder understands that this has been undertaken.
LANDSCAPING AND VEGETATION MANAGEMENT		
149	Yes	Refer to the LEMP.
	Yes	(a) details of likely vegetation loss, means to minimise such loss and additional tree planting to offset this loss;
	Yes	(b) proposed plant species; and
	Yes	(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	Yes	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	Yes	Refer to Section 4 of the Emergency Management Plan in the LEMP.
152	Yes	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

Condition	Compliance	Comments
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		
<i>Terrestrial Flora and Fauna</i>		
153 The Applicant shall consult with NPWS on measures to conserve the population of the vulnerable orchid (<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.	Yes	No action has been required in the last 3 years. The area of the vulnerable orchid has not been disturbed.
<i>Aquatic Flora and Fauna</i>		
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.	Yes	The site has not disturbed any water ways or aquatic flora or fauna over the last 3 years.
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.	Yes	
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.	Yes	
HERITAGE AND ARCHAEOLOGY		
<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	N/A	No new clearing has been undertaken in the last 3 years. No items of potential heritage significance have been identified.



Condition	Compliance	Comments
of the item/s and advise on appropriate management measures.		
CONTINGENCY PLANNING		
<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:	Yes	Refer to the LEMP. The only emergency events in the last 3 years comprised two fires in the landfill which were extinguished on the same day of ignition, and a truck roll over at the intermodal facility where no waste was released to the environment. The Emergency Management Plan was activated on both occasions.
(a) conduct an assessment to determine the potential internal and external causes of disruption of operations at the premises;	Yes	Refer above.
(b) determine how these disruptions would impact on operations; and	Yes	Refer above.
(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.		Refer above.
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:	Yes	The Emergency Management Plan is contained in the LEMP and addresses the requirements of this condition.
(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;	Yes	Refer above.
(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;	Yes	Refer above.
(c) an estimate of the cost of implementation;	No	Cost details are not included in the LEMP.
(d) actions to effectively respond to the disruption of operations so the risk of pollution is minimised;	Yes	Refer above.



INDEPENDENT ENVIRONMENTAL AUDIT

Condition	Compliance	Comments
(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	Yes	Refer above.
(f) ensuring that all relevant employees are familiar with the emergency management plan.	Yes	Refer above.
The Applicant should regularly review the adequacy of the plan obtaining expert advice as required.	Yes	
COMPLAINTS PROCEDURE		
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.	Yes	The site has a complaints telephone line which goes to the mobile phone of the site's Environmental and Operations Manager.
161 The complaints register shall be available for inspection upon request by the Director-General, EPA, DLWC, and the CLC.	Yes	A copy was provided to the auditor.



3.0 SUMMARY AND CONCLUSIONS

The site is in compliance with the requirements of its consent conditions with the following exceptions:

Condition No.	Requirement	Status
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:	There have not been any changes to the financial assurance requirements in the last three years.
159	(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	The financial assurance was last updated in 2010. The Bank Guarantee was adjusted in accordance with written instruction from the NSW Department of Environment, Climate Change and Water dated 17 September 2010. Confirmation of payment required.
	(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.	Clarification required as to whether bank guarantee addresses both pre-closure and post closure costs.
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: (c) an estimate of the cost of implementation	Cost details are not included in the LEMP.



4.0 REPORT LIMITATIONS

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Report Signature Page

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