



Environmental Management Plan

For Crisps Creek Intermodal Facility

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Definitions/Abbreviations

AEMR	Annual Environmental Management Report
AHD	Australian Height Datum
BTT	Banksmeadow Transfer Terminal
CLC	Community Liaison Committee
COC	Development Conditions of Consent
CTT	Clyde Transfer Terminal
DA	Development Application
DECCW	Department of Environment, Climate Change and Water
DPE	Department of Planning and Environment
DPI	Department of Primary Industries
EA	Environmental Assessment
EIS	Environmental Impact Statement
EMR	Environmental Management Representative
EMP	Environmental Management Plan
EPA	NSW Environment Protection Authority
EP&A	Environmental Planning and Assessment (Act and Regulations)
EPL	Environment Protection Licence
GMC	Goulburn Mulwaree Council
IMF	Crisps Creek Intermodal Facility
LEMP	Landfill Environmental Management Plan
LEP	Local Environmental Plan
LGA	Local Government Area
NIMS	National Integrated Management System
PA	Project Approval
POEO	Protection of the Environment Operations (Act and Regulations)
SEPP	State Environmental Planning Policy
SML20	Special (Crown & Private Lands) Mining Lease 20
TPA	Tonnes per annum
WMBT	Woodlawn Mechanical Biological Treatment Facility
Woodlawn site	Bioreactor and MBT facility

Section 1 Introduction

1.1 Overview

Veolia Australia and New Zealand (Veolia) owns the Woodlawn Eco Project Site (the Eco Project Site), which is located in the Southern Tablelands of NSW, approximately 250 kilometres (km) South West of Sydney (refer Figure 1.1).

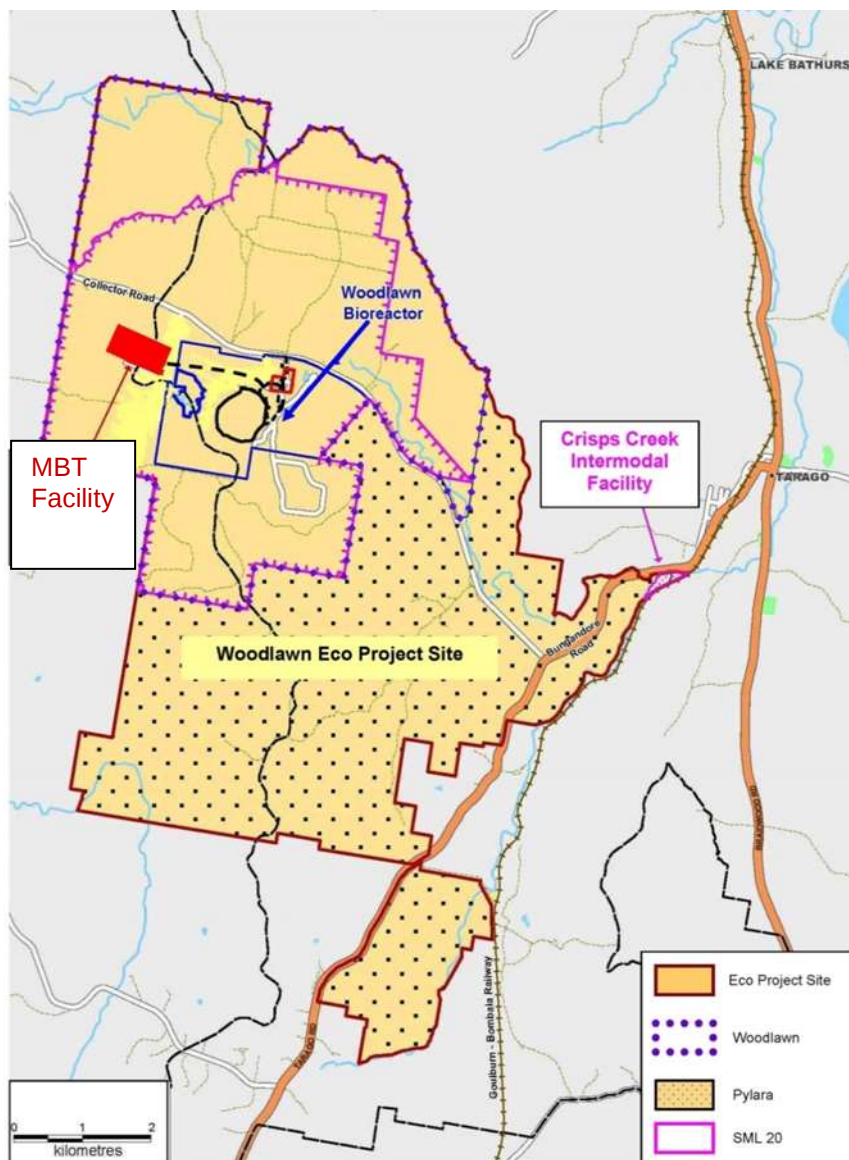


Figure 1.1 Eco Project Site Location Plan

The Eco Project Site consists of two properties on approximately 6,000 hectares (ha) of land, namely Woodlawn and Pylara and includes the area of the Special (Crown & Private Lands) Lease 20 (SML 20), encompassing the Woodlawn Mine, a former lead,

copper and zinc mine which ceased mining operations in 1998. The first stage of the Eco Project Site developed by Veolia was the Woodlawn Bioreactor (the Bioreactor), which commenced operations in September 2004 and is located in the void of the former Woodlawn Mine.

Construction of a rail yard, known as Crisps Creek Intermodal Facility (IMF), enabled the transfer of waste by rail to the Eco Project site. The IMF was constructed adjacent to the existing rail line between Goulburn and Canberra, approximately 8 km from the Bioreactor. A rail siding was constructed to facilitate loading and unloading of the train.

On 16 March 2012, the Department of Planning and Environment (DPE) granted approval for the Bioreactor to increase its annual maximum input rate from 500,000 tonnes per annum (tpa) to 1,130,000 tpa. Simultaneously, the IMF was approved to accept 1,180,000 tpa, of which 280,000 tpa is for processing at the Mechanical Biological Treatment Facility.

This Environmental Management Plan (EMP) defines the site-specific environment management tools to be used for the IMF operation for the Bioreactor and has been prepared to reflect the requirements of Development Application (DA) No. 31-02-99, the Project Approval (PA) 10_0012 for the Woodlawn Waste Expansion Project and the Environmental Guidelines: Solid Waste Landfills (NSW Environment Protection Authority 1996).

1.1.1 IMF Site Context

The IMF is located to the east of the Eco Project Site boundary (Figure 1.1). The IMF serves as the central hub for transfer of waste by rail from Sydney and is integral component of the Eco Project Site to encompass the innovative practices undertaken. Access to the Site is off Tarago-Bungendore Road, which connects the towns of Tarago and Bungendore.

The context with which the IMF fits within the Eco Project Site is described in Table 1.1 and depicted in Figure 1.1:

Table 1.1 – Eco Project Operations

Operation	Description
The Crisps Creek Intermodal Facility (IMF)	The IMF, which forms an integral part of the logistical operations of the Eco Project Site, is located 8km from the Bioreactor in the township of Tarago, adjacent to the Goulburn-Bombala Railway line. Waste containers transported from the Sydney region via rail are unloaded and transferred onto road trailers at the IMF for transport to the Bioreactor. The IMF was approved to accept 1,180,000 tpa from Sydney when the Bioreactor was granted expanded operations.
The Bioreactor, including the Woodlawn Bioenergy Power Station (the Power Station);	The Bioreactor was the first stage of the Eco Project Site developed by Veolia. Landfilling operations, which commenced in September 2004 are located in the void of the former open cut Woodlawn Mine. Waste is deposited in the Bioreactor and with the use of optimal moisture and temperature conditions, achieves enhanced degradation to produce landfill gas, collected through a vast network of infrastructure within the void.

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Operation	Description
	Methane is extracted from the landfill gas within the Power Station for conversion and supply as electricity into the energy grid. The Bioreactor forms part of Veolia's integrated waste management services and is augmented with the following transfer facilities: • The Crisps Creek Intermodal Facility (IMF). • The Clyde Transfer Terminal (CTT) in Sydney; and • The Banksmeadow Transfer Terminal (BTT) in Sydney (operational from mid 2016). Refer to Chapter 3 for detailed description
Aquaculture and horticulture operations;	Waste heat from the Power Station's engines is utilised in aquaculture operations to cultivate fish, with a horticultural system operating to remove excess nutrients from the aquaculture set up.
Woodlawn and Pylara farms;	The surrounding land on the 3,000 ha Woodlawn property is utilised either for farming practices or requires rehabilitation from former mining activities. Adjacent to the south of the Woodlawn property is the 3,000 ha Pylara property which is a working farm utilising sustainable farming practices such as a sheep breeding program that includes genetic selection, nutrition and grazing rotation, to increase meat and wool productivity and reduce impacts on soils.
The Woodlawn Wind Farm (the Wind Farm) operated by Infigen Energy and	The 48 MW Woodlawn Wind Farm comprises 23 turbines and is located along a ridgeline running through both the Woodlawn and Pylara properties. This operation commenced in 2011. While on Veolia land it is owned and operated by Infigen Energy and supplements the Eco Project Site's renewable energy production.
The Woodlawn Mechanical Biological Treatment (MBT) Facility	The MBT facility, located on the Eco Project Site has been designed with a maximum capacity to accept 240,000 tpa of mixed waste and 40,000 tpa of green waste generated with the Sydney Region. The facility shall enable processing of mixed waste to extract recyclable material and produce compost. The term mechanical biological treatment refers to several combinations of a hybrid process that combines mechanical techniques (used to sort mixed waste with potential recovery of inert recyclable material) and biological techniques (to stabilise the organic fraction). This type of technology to be used at the MBT Facility will be a composting process to treat the residual fraction of municipal, commercial and industrial solid waste (MSW) received from councils (or commercial/industrial customers) opting to utilise this waste management option over landfilling. Residual material from the MBT process will be deposited in the Bioreactor.

In addition to these operations, Heron Resources Limited (formerly TriAusMin Pty Ltd) were granted planning approval for the Woodlawn Mine Project (Application No. 07_0143) to recommence mining operations within the Eco Project Site for both re-mining of existing tailings dams and further underground mining. There are remnant mining degraded areas within the Eco Project Site that are subject to remediation requirements under the SML20 mining lease. The compost derived from the MBT

Facility shall provide for the undertaking of this remediation in agreement between Veolia and Heron.

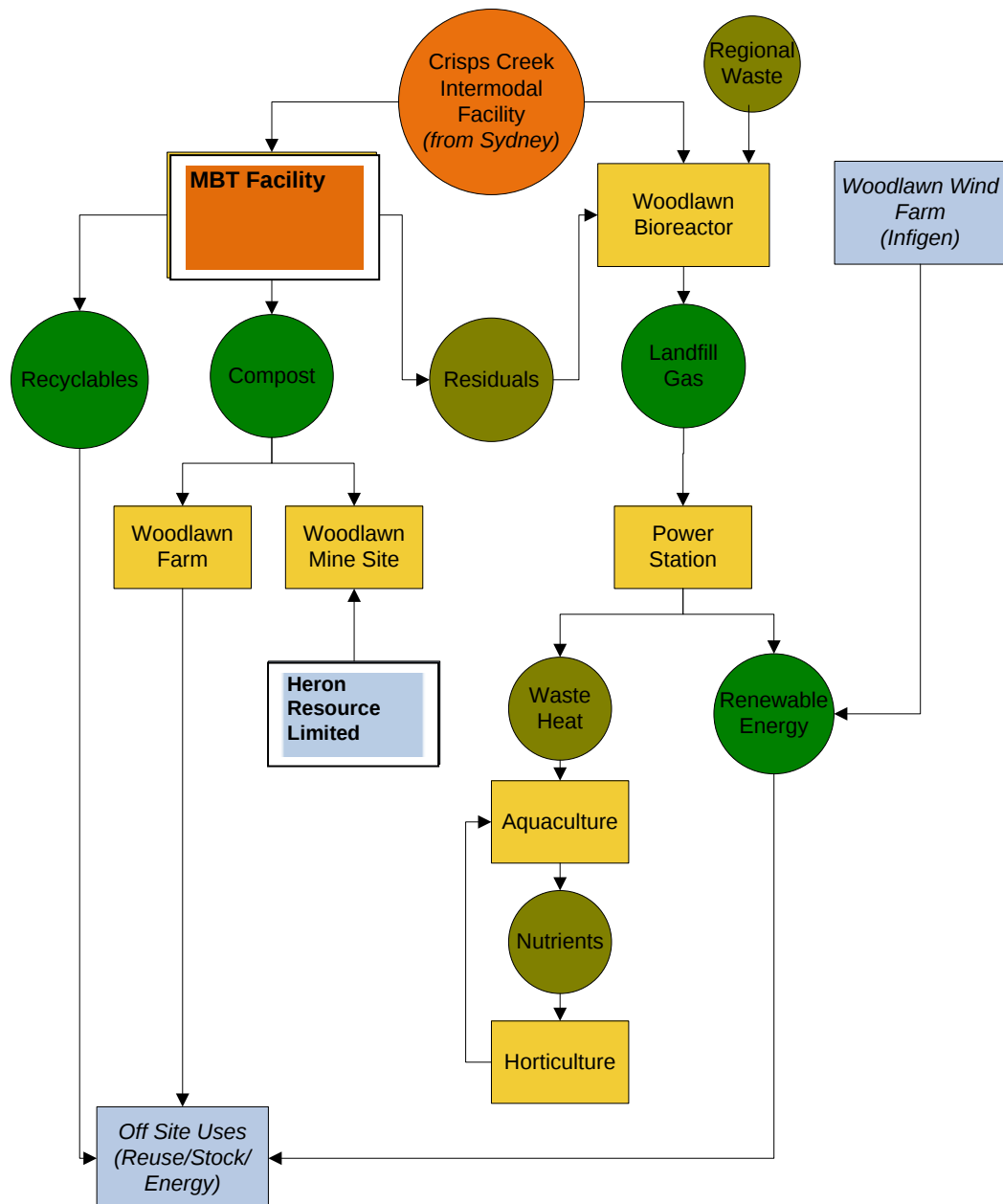


Figure 1.1

Context of IMF within the Eco Project Site

1.1.2 Auxiliary Operations

The IMF forms part of Veolia's integrated waste management services and is augmented with the following transfer facilities in Sydney:

- The Clyde Transfer Terminal (CTT); and

- The Banksmeadow Transfer Terminal (BTT).

The CTT receives up to 500,000 tpa of putrescible waste from within the Sydney Metropolitan Area (SMA) which is unloaded, screened, compacted and containerised into shipping containers for transport via rail to the IMF.

In order to facilitate the expansion of the Eco Project through the increased waste receipt capability, Veolia has constructed an additional waste transfer station and associated rail infrastructure at an existing industrial site in Banksmeadow (southern Sydney).

The BTT receives up to 400,000 tpa of putrescible waste from municipal, commercial and industrial sectors of the SMA.

Waste is destined for either the Bioreactor or the MBT Facility, depending on Veolia's contractual obligations with its customers.

1.2 Scope and Objectives

The purpose of this EMP is to provide an overview of the potential environmental impacts of the IMF and describe the management and mitigation measures to protect the environment on site and sensitive receivers off site.

The key objectives of this EMP are to provide:

- An overview of the IMF operations (refer Site Plans in Appendix A);
- A guidance document for specifying regulatory requirements and interacting with relevant Government authorities (refer to Regulatory and Policy Documents in Appendix B and the Condition Compliance Report in Appendix C);
- An environmental management tool for the operation of the IMF;
- A means of identifying and concentrating on the key operational and environmental issues; and
- A basis for monitoring, reporting and maintaining compliance with both Veolia and regulatory requirements for the IMF;

The EMP documents the main waste transfer operations at the IMF and the management strategies and controls to administer these in an environmentally sound and safe manner. The operations covered under this EMP are:

- Arrival, departure and shunting of trains and wagons at the IMF;
- Transfer of the waste (and empty) containers by rail between Sydney and Tarago; and
- Loading and unloading waste containers to and from semi-trailers at the IMF for transfer to the Bioreactor.

The management strategies outlined in the EMP are intended for periodic review. Where necessary, the EMP will be amended as new strategies and technologies are adopted.

Section 2 Statutory And Policy Considerations

This section provides an overview of the environmental planning and statutory context for the operations of the IMF. Veolia is committed to complying with all of its legal obligations and other voluntary commitments made by the company. Compliance to applicable regulatory requirements concerning the operations of the IMF will be achieved through:

- identifying and accessing legal and other requirements which are directly applicable to the organisation;
- consulting and involving relevant government agencies;
- internally communicating relevant information regarding legal and other requirements;
- continually auditing, reviewing and upgrading company systems, management plans and supporting documentation; and
- providing relevant training.

2.1 Legal and Other Requirements

2.1.1 Acts and Regulations

The EMP has been developed in consideration with the following key legislation:

2.1.1.1 Environmental Planning and Assessment Act 1979

The *Environmental Planning and Assessment 1979* (EP&A Act) and the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation), provide the framework for development and environmental assessment in NSW. Part 3A of the EP&A Act provides for a category of development known as Major Projects. *State Environmental Planning Policy (Major Development) 2005* (SEPP Major Development) identifies categories of development which are considered to be Major Projects to which Part 3A of the EP&A Act applies..

2.1.1.2 Protection of the Environment Operations Act 1997

The *Protection of the Environment Operations Act 1997* (POEO Act) and associated Regulations relate to the management of pollution, licencing and waste disposal in NSW and is administered by the NSW Environment Protection Authority (EPA). Under section 48 of the POEO Act, premise based scheduled activities (as defined in Schedule 1 of the Act) require an Environment Protection Licence (EPL).

The IMF is licensed as a waste storage facility that undertakes the premises based scheduled activity “waste storage”. Waste classified under Schedule 1 Part 3 of the POEO Act as “hazardous waste, restricted solid waste, liquid, clinical or related, waste, Asbestos waste, other types of waste including general solid waste (putrescible and non-putrescible) and waste tyres” and those materials which have been pre-classified as general solid waste (putrescible) can be stored at the IMF. The Waste

Classification Guidelines Part 1: Classifying Waste (EPA, 2014) provides further guidance on waste types.

2.1.1.3 Water Management Act 2000

The *Water Management Act 2000* (WMA) aims to facilitate the sustainable and efficient use of water in such a way that benefits the environment and communities.

The WMA provides for the preparation of water management plans that outline arrangements for water sharing, water source protection and drainage management. As the IMF falls within the Water NSW Drinking Water Catchment, the operations on site need to be undertaken with the principles of the WMA to ensure a secure supply of water to meet the needs of Sydney, as well as protect the health of the catchment.

2.1.2 Environmental Planning Instruments

The following environmental planning instruments apply to the Bioreactor. Further details are provided in the EA.

- **State Environmental Planning Policy (Major Development) 2005:** In accordance with Schedule 1 of the Major Development SEPP, Group 9(27) “Resource recovery or waste facilities” the Bioreactor Project complies with the following criteria: (1) Development for the purpose of regional putrescible landfills or an extension to a regional putrescible landfill that:(a) has a capacity to receive more than 75,000 tonnes per year of putrescible waste, or (b) has a capacity to receive more than 650,000 tonnes of putrescible waste over the life of the site.
- **State Environmental Planning Policy 2007 (Infrastructure):** Development for the purpose of waste or resource management facilities is permitted with consent in a prescribed zone. “Development” is taken to include the expansion of an existing facility. The current zoning of the subject site is IN3 Heavy Industrial, which is one of the prescribed zones listed under Division 23.
- **State Environmental Planning Policy (Rural Lands) 2008:** Applicable to the IMF, as it is sited within local government areas to which the SEPP applies for the protection of state and regionally significant rural lands from inappropriate land use changes, and the orderly and economic use and management of rural lands.
- **Drinking Water Catchments Regional Environmental Plan No. 1:** While regional environmental plans no longer apply to the hierarchy of environmental planning instruments in NSW (now deemed SEPPs), this REP applies to the IMF as it is located within the drinking water catchment. Clause 25 of this REP requires that the recommended practices and performance standards of the Water NSW are incorporated into any developments within the catchment area.

The current recommended practice for landfills is the “Environmental Guidelines for Solid Waste Landfills” (EPA, 1996);
- **State Environmental Planning Policy 33 – Hazardous and Offensive Development (SEPP 33):** Applies to development for the purpose of potentially hazardous and/or offensive industries. The IMF constitutes a potentially hazardous and offensive industry as defined under clauses 3 and 4 of SEPP 33.

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- **Goulburn Mulwaree Local Environmental Plan 2009:** The Goulburn Mulwaree Local Environmental Plan 2009 (Goulburn Mulwaree LEP) covers the land on which the IMF is sited and zoned RU2 Rural.
- **Goulburn Mulwaree Development Control Plan 2009:** Supports the Goulburn Mulwaree LEP and provide guidance for developments within the Goulburn Mulwaree Council Local Government Area (LGA). It also provides guidelines for managing Aboriginal and European heritage, landscaping, vegetation protection, dryland salinity, waterbody protection, groundwater, biodiversity, heavy vehicle generating developments, etc.

Both the bioreactor and intermodal facility sites are zoned 1(a) - Rural (General Rural) under the Mulwaree Local Environmental Plan 1995 (LEP),

2.1.4 Relevant Planning Strategies

- **Sydney–Canberra Corridor Regional Strategy:** Applies to the local government areas of Wingecarribee, Goulburn Mulwaree, Upper Lachlan, Yass Valley, Palerang and Queanbeyan to accommodate and manage growth while ensuring that the rural landscapes and environmental settings of the Region are not compromised. It seeks to ensure that land is available and appropriately located to sustainably accommodate the projected population growth and associated housing, employment and environmental needs over the period until 2031. The IMF facilitates the continued operation of a significant industrial site in the Region which is an important local employment generator for the local population based in Tarago.
- **Goulburn-Mulwaree Strategy:** Establishes a framework for the future growth and development of the various settlements within the Council area up to 2020. A number of key principles underpin the Strategy, including the managed and sustainable growth of Tarago so that it retains its distinct rural, village like atmosphere. The Bioreactor and IMF provide for local economic development for the local population of Tarago as per the Sydney-Canberra Regional Strategy requirements.

2.1.5 Other Requirements (Licences and Permits)

The following environmental approvals outlined in table 2-1 are in place for the IMF Crisps Creek:

Table 2-1 Environmental Approvals

Description	Number
Project Approval: Woodlawn Waste Expansion Project (issued by Department of Planning and Environment)	10_0012
Conditions of Development Consent: The Woodlawn Waste Management Facility (issued by Department of Planning and Environment)	31-02-99
Environment Protection Licence (issued by Environment Protection Authority)	11455

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Permit for the movement of solid waste from Sydney to Woodlawn Bioreactor for deep burial or composting for mine site rehabilitation on account of the pest Phylloxera (issued by Department of Primary Industries)	OUT13/13188
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2.1.6 PA Conditions

Schedule	Condition	Requirement	EMP Reference	
3	8	The Proponent shall not exceed the annual throughput rates in Table 2 for the Crisps Creek IMF.	Noted	
		<i>Table 2: Maximum putrescible waste throughput rates at the Crisps Creek IMF</i>		
		<table><tr><th>Received by rail from Sydney</th><th>Received by rail from Sydney for processing at the Woodlawn AWT</th></tr><tr><td>900,000 tpa</td><td>280,000 tpa</td></tr></table>		Received by rail from Sydney
Received by rail from Sydney	Received by rail from Sydney for processing at the Woodlawn AWT			
900,000 tpa	280,000 tpa			
5	1	The Proponent shall only receive waste on site that is authorised for receipt by an EPL.	Noted	
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.	3.4.2.3	
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	3.3.3	
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.	3.4.2.1	
5	5	Litter The Proponent shall inspect daily and clear the site (and if necessary, surrounding area) of litter on at least a weekly basis.	3.3.4.5	
5	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). <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>	3.4.2.4	
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	3.4.2.2	
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.	3.4.2.1	
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.	3.4.2.1	

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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.	3.4.2.3															
5	11	The Proponent shall ensure that there is no vehicle or container wash down at the Crisps Creek IMF.	3.4.2.3															
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> .	3.4.2.5															
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 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> .	3.3.4.4															
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.	Noted															
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>Table 8: Noise impact assessment criteria dB(A).</i> <table><tr><th>Receiver</th><th>53m – 100m</th><th colspan="2">100m – 63m</th></tr><tr><td></td><td>L_{Aeq}(15 minute)</td><td>L_{Aeq}(15 minute)</td><td>L_{Amax}</td></tr><tr><td>Any private residential receiver</td><td>35</td><td>35</td><td>45</td></tr></table> <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>	Receiver	53m – 100m	100m – 63m			L _{Aeq} (15 minute)	L _{Aeq} (15 minute)	L _{Amax}	Any private residential receiver	35	35	45	3.4.2.7			
Receiver	53m – 100m	100m – 63m																
	L _{Aeq} (15 minute)	L _{Aeq} (15 minute)	L _{Amax}															
Any private residential receiver	35	35	45															
5	16	Noise emissions from freight trains entering and leaving the site must not exceed the noise limit of 45 dB(A) L _{Aeq} (15 minute) prior to 7:00 am and 50 dB(A) L _{Aeq} (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>	3.4.2.6															
5	17	The Proponent shall comply with the operating hours in Table 9 for the site, unless otherwise agreed in writing by the OEH. <i>Table 9: Operating Hours</i> <table><tr><th>Activity</th><th>Day</th><th>Hours</th></tr><tr><td rowspan="3">Construction</td><td>Monday - Friday</td><td>7 am – 6 pm</td></tr><tr><td>Saturday</td><td>7 am – 1 pm</td></tr><tr><td>Sunday & Public Holidays</td><td>Nil</td></tr><tr><td rowspan="2">Operations</td><td>Monday - Saturday</td><td>6am – 10 pm</td></tr><tr><td>Sunday & Public Holidays</td><td>Nil</td></tr></table>	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	3.3
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																
5	18	Lighting The Proponent shall ensure that the lighting associated with the project: (a) complies with the latest version of AS 4282(INT) - <i>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.	Noted 3.4.2.8															
5	19	SECURITY The Proponent shall: (a) install and maintain a perimeter stock fence and security gates on the site; and	3.3.4.1															

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		(b) ensure that the security gates on site are locked whenever the site is unattended.	
5	20	RAIL TRAFFIC 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.	3.3.1 3.4.2.6
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.	Noted
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.	3.4.2.6
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.	3.4.2.6
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.	3.4.2.6
7	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;	Noted Noted 3.4 3.4.2.3 & 5.3.2 3.4.2.7 3.4.2.8 3.4.2.3 3.4.2.9, 3.4.2 & 4.4.2 2.1

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	e) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the Crisps Creek IMF;	4.1.1
	f) include procedures to keep the local community informed about the operation and environmental management of the Crisps Creek IMF;	4.3.2
	g) describe the procedure for stakeholder consultation and complaints handling; and	4.3.4
	h) include a clear plan depicting all the monitoring currently being carried out within and around the Crisps Creek IMF.	5.3.2

2.2 Management System

Veolia has developed and implemented a National Integrated Management System (NIMS) to assist in meeting the corporate objective of its waste operations through sustainable development. "Hippo Station" is the information and contractor management system or technology platform that houses NIMS documentation and information on contractors and "The Vault" is the system for reporting and managing incidents, recording audit and regulator enforcement information. The Vault is design to log all issues arising as a result of:

- audit
- workplace inspection
- complaint
- risk assessment/hazard identification
- debrief
- change notification or
- casual observation.

Combined, the systems allow Veolia employees access to Veolia policies and processes. Veolia continually audit, review and upgrade company systems, management plans and supporting documentation to maintain business and best practice standards, as well as comply with relevant legislation. To achieve this, Veolia has a program for independent third-party certification/ accreditation to the following standards:

Table 2-2 Certification

Description	Number
ISO 9001 Quality Management System	FS 603945
AS/NZS 4801 Work Health and Safety Management System	OHS 603946
ISO14001 Environmental Management System	EMS 603944

2.3 Environmental Policies

Veolia's business strategy is guided by five elements: our business, our customers, our people, our environment and our community. These elements shape all aspects of Veolia's future performance, and our corporate policies and practices are linked to delivering excellence in one or many of them.

Veolia has developed variety of company-wide policies in support of the sound management of its facilities. All policies have been endorsed by Veolia senior executive team and are reviewed periodically. All Veolia employees are required to commit to the implementation of these policies.

Veolia environmental policies support minimisation of emissions to land, air and water and the wise use of natural resources. This commitment is documented in Veolia's environmental and sustainability policies..

2.3.1 Environment Policy

Veolia is committed to minimising the environmental impacts of its operations and continually improving its environmental performance within a framework of sustainable development by:

- Effectively managing our significant environmental impacts, monitoring progress and reviewing environmental performance against objectives and targets on a regular basis.
- Driving continual improvement, and meeting the requirements of ISO 14001 environmental management systems standard as part of the integrated business management system.
- Complying with applicable environmental legislation, contractual and other necessary requirements related to our activities and assist customers and suppliers to use products and services in an environmentally sensitive way.
- Striving to ensure that our policies, objectives and achievements are communicated to all persons working for and on behalf of the business and to educate and train employees and ensure competence in environmental issues and the environmental effects of their activities.
- Preventing pollution and harm to the natural, heritage and built environments and to reduce the use of all raw materials, energy and supplies.
- Consulting with relevant stakeholders, taking into account local environmental conditions and working with local communities to achieve shared and lasting outcomes. All managers, employees, contractors and visitors are responsible for being aware of, and complying with this policy

Veolia's Environment Policy can be found at:

<http://www.veolia.com.au/Content/Documents/sustainable-solutions/environment-policy.pdf>

2.3.2 Sustainability Policy

For Veolia, sustainable development means adopting business strategies and activities that meet the needs of Veolia and its stakeholders today, while protecting,

supporting and enhancing the human and natural resources that will be needed in the future. This outcome is expressed clearly in Veolia's Sustainability Policy:

- Being ethically responsible, to create value in what we do, and to use sound risk and hazard management principles in conducting our business. As part of its 'non-negotiables' Veolia will comply with all relevant legislation including pollution prevention and will strive to develop and improve our integrated business management system to support a consistent and disciplined approach to business processes. We will ensure that appropriate resources (both internally and externally) are utilised to assist in achieving our goals.
- Partnering in innovation and to understand and support our customers in achieving their business objectives.
- Attracting and retaining diverse and talented employees. This will include providing development opportunities so our employees are continually learning, communicating, providing workplace consultation, and creating an 'Always Safe' workplace, with an aspiration of no workplace injury or illness for our employees, visitors and contractors. Continually designing and implementing sustainable solutions to develop access to resources and to protect and replenish them. Additionally, Veolia is committed to providing environmental leadership in its operations and solutions, which includes the management of its own environmental impacts, improving waste, water, energy and carbon outcomes, as well as protecting and conserving biodiversity and natural capital.
- Working closely with local communities to achieve shared and lasting outcomes. Additionally Veolia will engage with government, policy makers, advocacy groups, industry associations and other stakeholders in the areas which we operate to create better value and outcomes in sustainable practices.

Veolia's Sustainability Policy can be found at:

<http://www.veolia.com.au/Content/Documents/sustainable-solutions/sustainability-policy.pdf>

Section 3 Facility Overview

The IMF is located off Tarago-Bungendore Road, Tarago and adjacent to the Goulburn to Canberra main train line. The IMF is approximately 2km southwest of the village of Tarago and 40km south of Goulburn, NSW. The current zoning of the site is IN3 Heavy Industrial within the Goulburn Mulwaree LEP.

The Crisps Creek IMF has a total site area of approximately 10ha within land titles:

- Part Lot 10, Deposited Plan (DP) 703260; and
- Part Lot 3, DP 754894.

Approximately 1.75ha of land is currently occupied by the IMF. The site layout plan is provided in Appendix A provides an overview of the IMF layout and facilities.

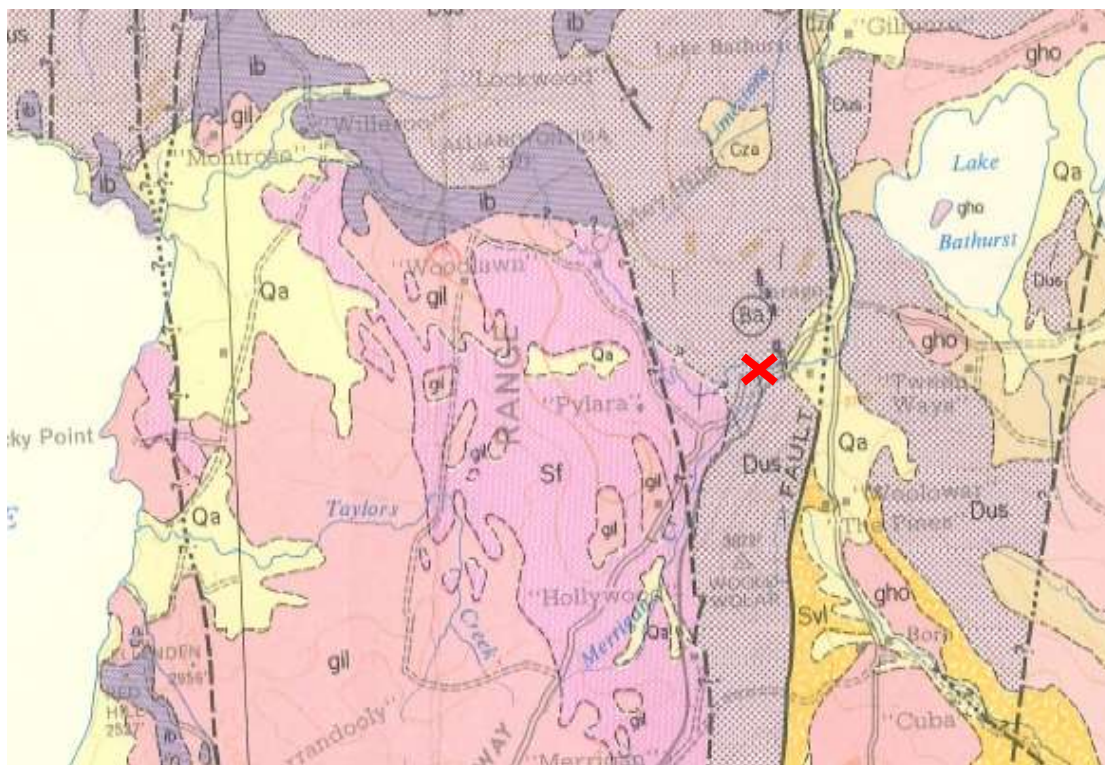
3.1 Site Setting

3.1.1 Geology and Hydrogeology

The IMF lies within the South Eastern Highlands Bioregion. The South Eastern Highlands Bioregion covers the dissected ranges and plateau of the Great Dividing Range that are topographically lower than the Australian Alps, which lie to the southwest. It extends to the Great Escarpment in the east and to the western slopes of the inland drainage basins. The Bioregion continues into Victoria. The substrate is formed of Palaeozoic granites, metamorphosed sedimentary rocks and Tertiary basalts. (DECC, 2008).

The highlands are part of the Lachlan fold belt that runs through the eastern states of Australia as a complex series of metamorphosed Ordovician to Devonian sandstones, shales and volcanic rocks intruded by numerous granite bodies and deformed by four episodes of folding, faulting and uplift. The general structural trend in this bioregion is north-south and the topography strongly reflects this (DECC, 2008).

The geology of the Tarago area is illustrated on the Canberra 1:2500 000 Geology Map. An extract from the map is illustrated in Figure 3-1.



As the site lies within the Lachlan Fold Belt, it is also underlain by a series of metamorphosed Ordovician Age sediments and Devonian sandstones. The Silurian to Devonian pink granite intrusions (gif) lie to the south east of the site, and form the western boundary of the site. The dominant rock unit in the area is the volcanic and sedimentary rocks of the Mount Fairy Group (sf). These include shale, phyllite, sandstone, limestone, tuff and minor intrusions.

Higher permeabilities in the fractured bedrock aquifer are associated with secondary (solution derived) porosity in limestone rocks which occur in outcrop to the north-east of the Bioreactor.

Groundwater recharge occurs to the bedrock primarily through direct rainfall infiltration to open fractures and joints in areas where bedrock outcrops. Groundwater discharges from the bedrock aquifer only where open fracture conduits exist and where the permeability of these conduits is sufficient to produce a flow rate.

Regional groundwater flow gradients are a subdued reflection of surface topography and gradients away from the Great Dividing Range can be expected to exist.

3.1.2 Topography and Drainage

The natural ground surface surrounding the Crisps Creek lies at an elevation of approximately 720 m AHD, Figure 3-2 illustrates the topography of the site and surrounding area, including the area of the Crisps Creek IMF.

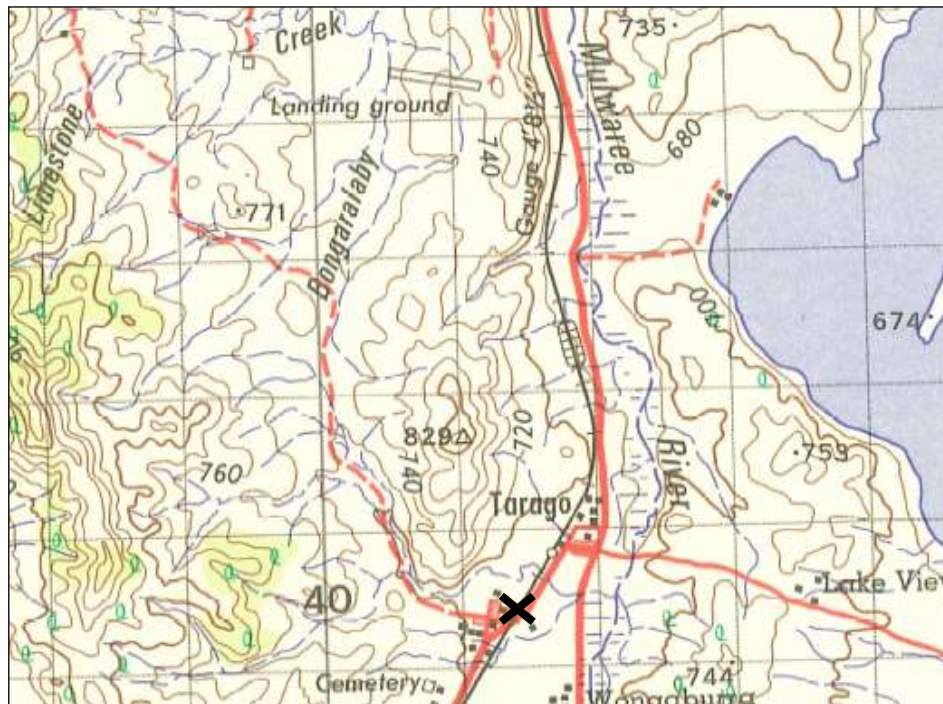


Figure 3-2 General area and site topography

The IMF is located in the Crisps Creek / Mulwaree River catchment approximately 8 kilometres downstream of the Woodlawn Bioreactor facility and immediately upstream from the Crisps Creek / Mulwaree River confluence. This falls within the Water NSW drinking water catchment regulatory area.

Surface water drainage from the IMF passes through a first flush system prior to discharge to Crisps Creek.

3.1.3 Flooding

The site is located on a topographic high, which is not subject to flooding. No flood study data or flood inundation maps are currently available for either the bioreactor or the IMF. However, it should be noted that the intermodal facility site is at a higher elevation than the Tarago railway sidings and several residences located within Tarago. Anecdotal evidence from residents of Tarago indicate that the railway siding has never been flooded (Woodward Clyde, 1999).

Based on the elevation of the ground surface around the perimeter of the mine void, and the relatively small size of the catchment upslope of the landfill site, the implications of flood events or drainage flows on the mine void are expected to be insignificant. Increasing the filling rate of the void will have no impacts on the flooding potential of the site.

3.2 Facility Description

Operational since September 2004, the IMF is located within the Eco Project area along the rail line between Goulburn and Canberra. An access road connects the site to Tarago / Bungendore Road. Principal elements of the Crisps Creek IMF comprise:

- access road;
- hard stand areas for container storage;
- two rail sidings to enable train sets to be split for unloading;
- Facility amenities; and
- Undercover shelters for container handlers

Figure 3.3 and 3.4 provides recent photos taken of the site, which illustrate the key site components and activities.



Figure 3.3 – Photo showing hardstand and loaded train



Figure 3.4 – Photo showing container loading / unloading process

3.3 Operations Overview

The IMF operational hours are Monday to Saturday: 6am – 10 pm in accordance with the PA and EPL.

3.3.1 Waste and Train Movements

The IMF can accept up to 1,180,000 tpa of putrescible, containerised waste received via rail from Sydney (from BTT and CTT) of which 280,000 tpa is to be directed to the MBT Facility. The site can accept the following waste types:

- Putrescible solid waste
- Non-putrescible solid waste:
- Asbestos waste
- Waste tyres
- General of specific exempted waste
- Liquid waste derived from leachate or wash down water from CTT and BTT

Liquid waste (leachate and wash down water) is received from CTT and BTT as needed. Liquid waste is transferred in ISO tanks specifically manufactured with a 40 foot frame to fit within the current transport and lifting operations at the IMF.

Two morning trains (one early morning and the other late morning) arrive at the IMF for unloading within the approved operational hours. Upon arrival at the IMF the locomotive positions the train wagons at the dedicated rail siding for unloading. Shunting of the wagons occurs as required upon arrival and prior to departure. The departing train from the IMF leaves during the allocated operating hours of the site.

Automated signalling on the Canberra – Goulburn rail network enables the arrival and departing trains to proceed directly through the town without causing significant delays at the Tarago Road level crossing. This system is known as Train Order Working and administered by the Country Rail Network.

3.3.2 Unloading and Loading

Once the wagons have been positioned at the siding, a container handler unloads each 40-foot waste container from the train. The containers are transferred onto quad axle trailers, which are transported by a prime mover (truck) to the Woodlawn site. Upon return to the IMF, each truck returns an empty container for re-loading onto the train. The train is fully loaded with empty containers prior to departure.

3.3.3 Storage

Storage of waste at the IMF is temporary and generally consists of the time taken from the arrival of a train to the dispatch of the final waste container to Woodlawn site.

Overnight storage would only be required in extreme circumstances, such as an event causing road closure between the IMF and Bioreactor. In circumstances such as this, EPA approval will be sought for overnight storage.

3.3.4 General Considerations**3.3.4.1 Access Controls**

The site displays signage to advise that it is a private site, not for public use. Additional signage includes:

- Details of the types of waste accepted at the site
- Details that flammable liquids are not permissible
- Directional and speed limit signs for vehicles,
- Adequate signage to satisfy work health and safety requirements

Security is maintained by locking all gates outside of normal operating hours and a boom gate prevents unauthorised entry during operational hours.

3.3.4.2 Plant and Equipment Maintenance

All plant and equipment installed or used at the IMF are maintained in a proper and efficient condition and operated in a proper and efficient manner in accordance with PA and EPL requirements. For the IMF this includes:

- Container Handlers
- Waste containers (maintained at the Bioreactor)
- All drainage systems
- Pollution control equipment; and
- Buildings and facilities;

Maintenance is completed in accordance with the NSW Woodlawn and IMF Plant Maintenance Procedure (PRO-NSW-218-055).

3.3.4.3 Fire Prevention

Immediately upon becoming aware of a fire at the site or within a waste container, all necessary measures to extinguish the fire will be taken.

Adequate fire prevention measures have been put in place, and all personnel are able to access fire-fighting equipment and manage fire outbreaks at the IMF in accordance with the guidance provided in the ERP.

3.3.4.4 Dangerous Goods Storage

All fuels or flammable solvents for operational use will be stored in an appropriately ventilated and secure store in accordance with the PA and EPL requirements. The procedure Veolia Chemical and Hazardous Materials Management (PRO-COL-000-038) provides guidance on storage of such substances on Veolia sites. Storage of all hazardous liquids is within a bund of 110% capacity of the volume of those liquids.

3.3.4.5 Litter Control

Litter control for the IMF will be carried out in accordance with Veolia Housekeeping and Inspection Procedure (PRO-COL-000-0290) which provides guidance on litter

management on Veolia sites. At the IMF, litter is unlikely to be encountered as the waste transfer process remains sealed at all times.

Perimeter fences and gates are inspected daily and cleared of litter on a weekly basis. Drivers of the transfer trucks understand that they can be fined for any litter on public roads resulting from their improper transport of waste. All container doors and hatches stay closed and locked until unloading at the Bioreactor.

3.4 Operational Environmental Impacts

The PA stipulates the environmental impacts to be addressed for the IMF with expanded operations.

The following potential environmental impacts are relevant to this EMP:

- Surface and groundwater impacts;
- Noise related impacts; and
- Landscaping impacts and visual amenity;
- Traffic related impacts;
- Pest and vermin impacts;
- Odour impacts;
- Socio economic impacts; and
- Cumulative impacts.

The identification and prioritisation of such environmental issues take into account the following:

- The planning and legislative requirements affecting the IMF;
- The environmental context of the IMF area and the region;
- The outcomes of the community and stakeholder consultation;
- A review of previous investigations that have considered the IMF site;
- Existing operational and management plans used by Veolia; and
- The findings of the specialist environmental studies undertaken for EA.

3.4.1 Environmental Risk Assessment

On the basis of the potential environmental impacts highlighted above and a thorough review of the environmental management practices at the Bioreactor and IMF, a risk assessment was undertaken as part of the EA to reflect the expanded operations (refer Table 3-1). Given that the site operates under existing approvals issued by the DPE and the EPA, suitable environmental controls have already been implemented and continue to be assessed.

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Table 3-1 Potential environmental Impacts

Issue	Environmental Risk	Likelihood of Occurrence	Key Issue? (Y/N)
Air quality (odour)	Emission of odour above the DECCW guidelines.	Low Sealed containers, carbon filters and short storage times at the IMF	N
Landscaping and visual amenity	Excessive energy consumption and related GHG emissions compared to similar facilities.	Rare Transfer by rail is a more greenhouse friendly option than transfer by road	N
Surface Water	Contamination of surface water.	Low Unlikely due to existing surface water controls, such as first flush system	N
Groundwater	Contamination of ground water.	Rare Possible without control measures, however unlikely due to hardstand surface directing flow to surface water systems	N
Pest and vermin	Attraction of rodents, birds and other pest animals	Low Sealed containers and no open waste at the IMF means there is unlikely to be any material onsite to attract pests and vermin	N
Riparian rehabilitation and vegetation	Continuous erosion of riparian zone and loss of native vegetation	Possible Without measures to rehabilitate riparian zone erosion processes will continue to occur	Y
Noise	Increased noise impacts above the EPA guidelines. Impacts on local residents.	Possible Train and truck movements will need to be controlled in accordance with approved operating hours	Y
Traffic and transport	Significant impacts on local Tarago community, impacting levels of service and traffic flow.	Possible Train and truck movements will need to be controlled in accordance with approved operating hours. Increased truck movements, although low number of trucks operating over 16 hours	Y
Socio economic	Negative impact on existing social conditions and on economic vitality of the Tarago district.	Rare The Project will support the Bioreactor to generate additional employment demand, while amenity impacts are low.	N
Cumulative impacts	Possible cumulative	Possible	Y

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Issue	Environmental Risk	Likelihood of Occurrence	Key Issue? (Y/N)
	impacts include noise, air quality and odour, surface water, groundwater, and traffic.	Without adequate control measures and management techniques.	

3.4.2 Management Measures

Management measures for the key environmental issues and PA conditions are discussed below and the mitigation management measures are provided.

3.4.2.1 Odour

Maintaining the waste in sealed and enclosed containers while at the IMF, significantly mitigates the risk of the release of odour emissions from the transfer of waste. Carbon filters, which are located at the vents are effective at reducing odour emissions from these points. Carbon filters are inspected and maintained as part of the container maintenance actions.

Odour mitigation measures at the IMF are also assessed as part of the annual odour audit for the project. No actions have been recommended by the audit for the IMF and no IMF related complaints have been received. This indicates the current measures are suitable for the expanded operations.

Container Maintenance

Containers are inspected at all key areas of Veolia's operations, including:

- During tipping at the Bioreactor;
- During unloading and loading at the Intermodal Facility; and
- During unloading, loading, storage or compacting at the Sydney Transfer Terminals.

Inspections and maintenance actions are detailed in Appendix F

Where a container is suspected to be compromised at the Bioreactor, the following process will be followed:

- An incident is logged and recorded in Veolia's incident management system
- An action will be assigned to the relevant personnel to undertake the appropriate repairs the container.
- Temporary repairs or containment will be applied so that any waste can be emptied at the Bioreactor, if required
- The container is and then stored for cleaning and maintenance.

3.4.2.2 Greenhouse Gas

Greenhouse gas emissions are unlikely to be significant at the IMF. The contributors would be energy use and fuel use.

Energy use is purely for operational lighting, which is installed to illuminate the IMF to meet the WorkCover Code of Practice - Managing the Environment and Facilities.

Fuel use is restricted to the container handler and truck movements at the site, which are critical operations. Traffic movements on the site are set and fuel usage is tracked

and recorded for each asset. Where fuel use appears to increase, a review of operating procedures and training will be undertaken.

3.4.2.3 Soil and Water

Surface Water

All surface water falling on the hardstand surface of the site is drained to a specific drainage point. A first flush system is operated to ensure that any potential contaminants contained within runoff from the first 15mm of rainfall is captured, contained and tested. The first flush system (refer to Appendix G) operates by collecting the first flush flow within a retention dam. A swing valve is in a normally open position to allow flow through to the retention pond. Once the first flush (15mm) is captured, the pressure causes the valve to close and any additional water is discharged to Crisps Creek.

The residual water remaining in the low points will be tested for the parameters provided in Section 5.3.2. Following testing, if the water is determined to be contaminated, then it can be pumped out for disposal at the Bioreactor, or if it is determined to be clean, it can be returned to the drainage channel to Crisps Creek.

Any rainfall falling on green areas is allowed to drain according to natural topography.

Any spills of fuel, oils, chemicals or leachate that may occur are controlled using onsite spill kits. A triple interceptor is located in the container handling bays where servicing and maintenance is carried out. Operators are trained in the use of spill kit contents and the spill will be managed in accordance with the Emergency Response Plan (ERP).

Wash down of containers is actioned at the Bioreactor. Waste laden containers are not opened and no container wash down facilities are provided at the IMF.

Soil

As a part of the ongoing, maintenance regime for the rehabilitation and vegetation of riparian zones, Veolia holds an agreement at Woodlawn with subcontractors (South – East Local Land Services) to:

- Protect and improve the condition of native riparian vegetation through fencing
- Increase the extent of native riparian vegetation and native habitat
- Enhance native vegetation condition through bush regeneration and weed control activities to reduce the impact of weeds and encourage natural regeneration of native plants
- Protect and improve the condition of native terrestrial vegetation through fencing.

3.4.2.4 Pest, disease and agriculture related impacts

The introduction of pests and the spreading of disease, as a result of expanded operations can be possible, however control measures such as the screening and acceptance of waste in line with EPL requirements is well implemented. Veolia also holds a permit for the movement of solid waste, excluding agricultural or horticultural waste, from the Sydney Metropolitan Phylloxera Infested Zone into Woodlawn site

within the NSW Phylloxera Exclusion Zone (OUT 13/13188) issued by the Department of Primary Industries.

All waste received at the IMF is fully contained until it reaches Woodlawn site. The IMF is manned during active operations and any larger pests will be identified quickly. Monthly inspections of the IMF for smaller pests and noxious weeds will be undertaken as part of the site inspection checklist.

If required, specific baiting or weeding programs will be undertaken to deal with any potential pests or weeds identified at the site.

3.4.2.5 Sewerage Management

A compost toilet is provided at the IMF. This is cleaned out, as required, using a septic services contractor and taken offsite.

No licence for this system is required as there is no discharge of treated wastewater to land.

3.4.2.6 Transport **Road**

All truck movements between the IMF to Woodlawn follow the route detailed in Figure 3.4.



Figure 3-4 –Route details for trucks

Rail

Train movements are restricted to two train arrivals and two train departures per day during the approved operational hours, unless previously agreed with the EPA. Two incoming trains is considered sufficient to transfer the required waste tonnages through to the Eco Project site.

Where a reasonable reason exists and the need for an extra train exists, Veolia may seek an approval from DPE and EPA to request an additional train or to operate outside of the approved hours.

A Rail Transport Code of Conduct has been prepared by Pacific National (PN) to detail operational train movements and procedures at the IMF, including measures to minimise rail noise impacts (refer to Appendix D-1).

3.4.2.7 Noise

Noise level criteria for the IMF is shown in Table 3-2

Table 3-2 Noise Level Criteria

Receiver	6am – 10pm	10pm – 6am	
	L _{Aeq} (15 minute)	L _{Aeq} (15 minute)	L _{AMax}
Any private residential receiver	35	35	45

Noise modelling completed, as part of the EA did not indicate that noise levels from the expanded operations would impact on sensitive receptors. Spacing of the incoming trains will assist in not concentrating noise emissions at certain periods of the day.

Veolia uses feedback from the community to demonstrate that the site is operating within acceptable levels. This might be noted through community liaison or direct feedback from residents. Noise sources at the site are from truck movements, train movements and container handler operations. To minimise noise from trucks, a circular traffic route around the IMF minimises the need for reversing and sounding of reverse alarms.

The natural topography of the land, also shields the operations at the IMF from the nearest sensitive receptors.

Since operations commenced in 2004, zero noise complaints have been received which indicates that the noise is not impacting on sensitive receptors..

3.4.2.8 Landscaping and Visual Amenity

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.

Landscaping of the site attempts to provide visual screening through natural vegetation. Where practical, Veolia has, and will continue to plant and nurture native vegetation that will provide additional screening. New planting programs will focus on perimeter areas with views from the public road, where appropriate.

3.4.2.9 Other Environmental Considerations

Socio Economic Impacts

The expanded operations at Woodlawn results in benefits such as employment in the local area and further contributions to the community.

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Veolia has well established mechanisms in place for addressing community concerns for engaging with the community to assist in the management of issues raised (refer Section 4 of this EMP).

Hazard and Risk

Consideration of risk to human health and the environment from the expanded operations were carried out in the form of a hazard analysis, with the main hazards associated with transport, including trucks and trains, container handling, fire, explosion (predominantly due to the potential ignition of methane gas) and general safety hazards). The risk screening indicate that the site is not consider potentially hazardous, and as no additional hazards would be introduced, no further quantification of risks were required. The qualitative assessment for offsite and onsite impacts are provide in Table 3-3 below.

All known hazards are understood and managed by Veolia, with any incidents dealt with as part of the Emergency Management Plan Crisps Creek Intermodal Facility appended to this EMP.

Table 3-3 Hazards and Risk

Hazard	Description	Safeguards	Risk Assessment
Offsite Risk			
Fire and explosion hazard during transport	Methane gas can be generated in the containers during transport to the Woodlawn facility. Methane gas may be ignited though static electricity charges generated through the movement in the containers during transit.	Containers are fitted with vents to minimise the amount of methane that can build up. Transit time for waste is kept below the time needed for the significant formation of methane gas. Railcars are grounded and static electricity is unlikely to occur.	Risk of an explosion occurring during transport of the waste would be minimal even with the associated increase in waste quantities.
Biological hazards - disease	An effective and efficient waste disposal system significantly reduces the risk of diseases spreading throughout the population. Proper waste disposal is an important component of the public health infrastructure.	Control of pests which can transmit diseases, control of diseases relating to the health and the public and on-site personnel, and control of agricultural pests are described in detail in Section 21 of the EIS (Woodward-Clyde, 1999).	Pest and disease control are an integral part of landfill operation. With the implementation of correct operating and control procedures, the potential public health risks related to landfills are minimised.
Onsite Risk			
Biological hazards	Risk of infection such as tetanus from cuts and abrasions when waste is handled.	Restricting public access to the IMF, controlling waste at CTT and BTT,	Careful maintenance of the identified safeguards will ensue that the risk is

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Hazard	Description	Safeguards	Risk Assessment
	Solid, putrescible waste can also contain varying degrees of other pathogens with the potential to cause illness.	minimising accumulation and movement of litter. Promoting and ensuring adherence to good hygiene practices and wearing PPE directly handling waste. All employees must have Hep A, Hep B and tetanus inoculations.	kept low.
Safety hazards	The site may contain a number of safety hazards such as uneven terrain, mobile plant, heavy vehicles, etc.	General safety precautions such as PPE, high visibility vests worn, speed limits, training and procedures apply.	The increase in waste transfer rate is likely to increase the risk of general safety hazards to on-site populations.
Noise	The effect from noise from mobile plant and vehicles could lead to the following hazards: Hearing damage; communication interference leading to misunderstanding or confusion or to the inability to warn of a danger; and workers being startled, annoyed or distracted	Hearing guards such as ear muffs or plugs worn in certain high-noise areas (such as at the generators). Visual demarcations are used in conjunction with audible information and alarms.	The increase in waste transfer rate would increase noise generation from heavy machinery and vehicles on-site. The risk of hearing loss is minimal due to the safeguards available and enforced on-site. The risk of communication loss will be managed.
Heat stress	Heat is a major hazard especially for workers wearing PPE in hot conditions.	Sensible scheduling of work and rest periods, and frequent replacement of fluids. Control of lone worker.	The risk from heat stress can be reduced to as low as reasonably practicable. Adhere to lone worker procedure.

Section 4 Implementation of the EMP

4.1 Structure, Roles and Responsibility

Figure 4.1 indicates the staffing and organisational structure for operations at Woodlawn, which will be amended from time to time as required. The IMF falls under the same management structure with a single operator dedicated to the IMF site operations.

4.1.1 Roles and Responsibilities

All IMF staff will be made aware of the manner in which the site is to be operated and managed, to ensure compliance with this EMP. A summary of the authorities and environmental responsibilities of key personnel for the operation of the EMP is outlined below:

4.1.1.1 Woodlawn Facilities Manager

- Ensure that the site complies with the site relevant licence, acts and regulations
- Implement the EMP;
- Appoint/nominate the Environmental Management Representative (EMR);
- Allocate project resources to handle environmental issues;
- Take action to resolve major non-conformances and notify the site nominated Safety Health Environment Quality (SHEQ) Officer or NSW Environment Officer;
- Authorise and confirm the implementation of mitigation measures;
- Ensure suppliers and subcontractors comply with requirements;
- Review the EMP and associated documentation, as required;
- Provide support to the site to ensure they are aware of their environmental obligations and enable them to meet their environmental commitments;
- Ensure that site personnel receive appropriate environmental awareness training;
- Report to senior management on the performance of the system, environmental issues/breaches etc. and improvement opportunities;

4.1.1.2 Environmental Officer (Woodlawn)

- Making sure that the IMF complies with the site relevant licence, acts and regulations;
- Undertake and/or co-ordinate environmental monitoring requirements of the EPL;
- Ensure that environmental records and files are maintained;

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- Identify non-conformances and notify the Woodlawn Facilities Manager/ Safety Health Environment Quality (SHEQ) Representative/ NSW Environment Officer;
- Ensure that environmental non-conformances are recorded and actioned;
- Review and updates the EMP and associated documentation, as required;
- Prepare environmental performance reports;
- Deliver environmental awareness training; and
- Collate and maintain records of complaints, respond to complainant

4.1.1.3 Safety Health Environment Quality (SHEQ) Representative/ NSW Environment Officer

- Ensure that the IMF complies with the site relevant licence, acts and regulations;
- Liaising with regulators on behalf of the site;
- Assist with environmental incident investigations;
- Audit environmental records;
- Review the EMP and associated documentation, as required;
- Review environmental performance reports;
- Develop and deliver environmental training; and
- Provide technical advice as required.

4.1.1.4 Subcontractors

- Comply with all legal and contractual requirements;
- Comply with management / supervisory directions; and
- Participate in induction and training as directed.

4.1.1.5 All Personnel

- Comply with the relevant Acts, Regulations and Standards;
- Comply with Veolia policies and procedures;
- Promptly report to management on any non-conformances and/or breaches of the system; and
- Undergo induction and training in environmental awareness as directed by management.

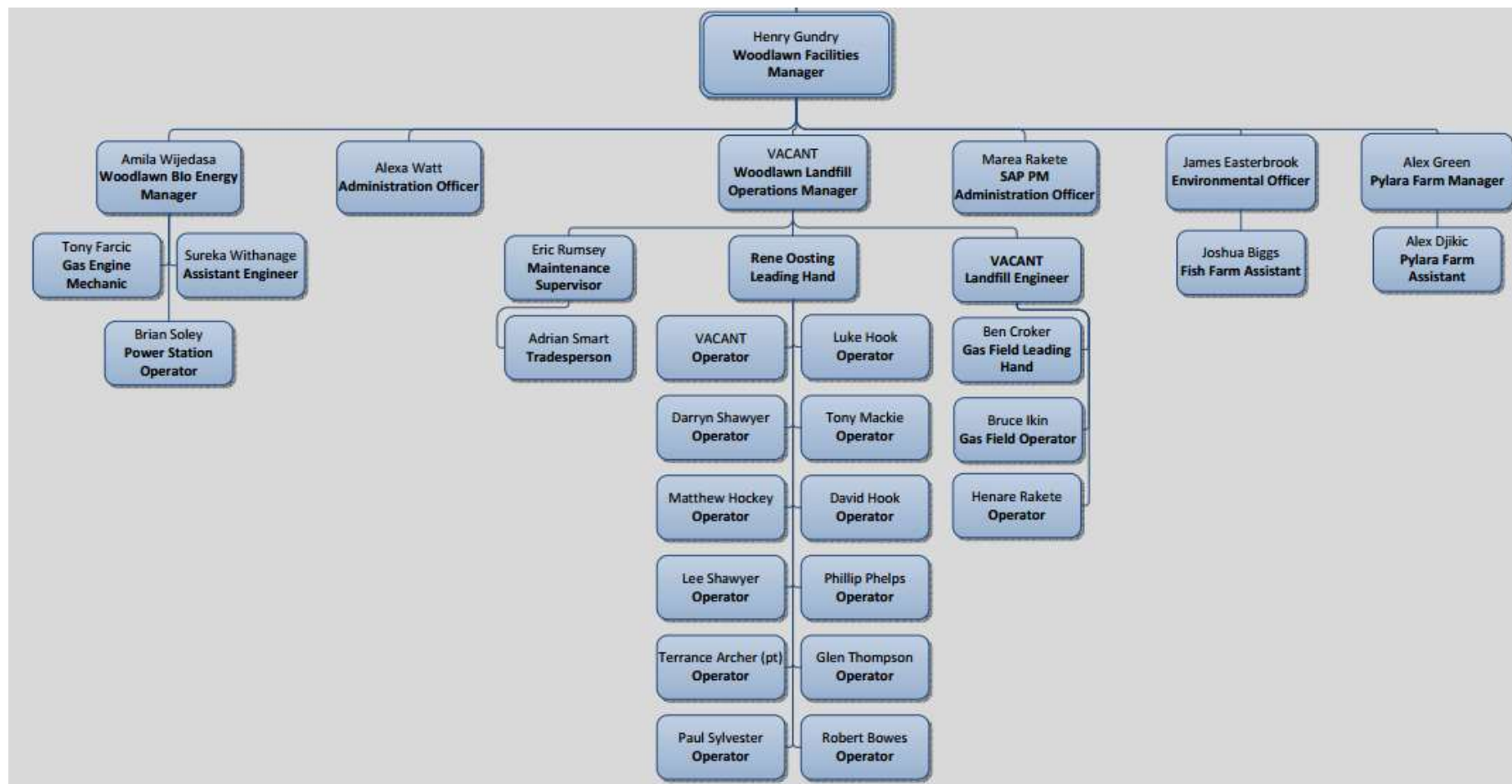


Figure 4.1 Woodlawn Bioreactor Organisational Chart

4.2 Training

All IMF employees (and subcontractors, where required) receive suitable environmental training, to ensure they are aware of their responsibilities and are competent to carry out their work.

Environmental requirements are explained to employees as part of Veolia corporate inductions and refreshers and national sustainability awareness training. In addition, during site inductions and on an ongoing basis, training will be provided in meetings and alike. All inductions and ongoing training shall be recorded.

All employees (including subcontractors, as relevant) receive induction/training in the following areas:

- Veolia environmental and sustainability policy;
- EMP and related documents;
- Environmental objectives and targets;
- Understanding individual authorities and responsibilities;
- Significant risks, environmental aspects, impacts and controls;
- Potential consequences of departure from procedures;
- Emergency procedure and response; and
- Understanding their legal obligations.

Personnel performing tasks that can cause significant environmental impacts shall be competent on the basis of appropriate education, training and/or experience.

In addition to routine environmental awareness, the minimum requirements for training exercises pertaining to incidents and emergencies are provided in the Emergency Management Plan Crisps Creek Intermodal Facility appended to the LEMP.

All IMF employees will be trained in response procedures, which will include potential impacts of operational failures and environmental incidents. Depending on the type of scenario, the simulation may be run as a simple desktop exercise, practical exercise involving IMF staff or broad exercise involving emergency services (when deemed necessary).

All scenarios will be followed by a formal debrief session. Any issues/actions raised will be managed via The Vault.

4.3 Communication and Consultation

Veolia is committed to meaningful stakeholder engagement and has worked in collaboration with relevant government agencies and the local community in the township of Tarago since the commencement of operations of the Bioreactor to resolve issues that impact local environmental amenity, as a result of operations at the Bioreactor.

4.3.1 Government Bodies

The following government bodies have been consulted with in relation to the expanded operations of the IMF and the requirements of this EMP:

- NSW Department of Planning and Environment;
- NSW Environment Protection Authority;
- Australian Rail Track Corporation (ARTC)

4.3.2 Community Consultation

Veolia aims to ensure that the local community is kept informed of the progress of the project in a pro-active and responsive manner. This is undertaken by way of local newsletters, leaflets, newspaper advertisements, and community notice boards as appropriate, to include notices such as:

- Hours of operation.
- Contact telephone number.
- Major changes to the programme of operations and work required outside the normal working hours; and
- Any major works proposed which may impact the community;

The key objectives of the communication and consultation program include:

- Educating stakeholders regarding key aspects of the; and
- Informing community groups and neighbours to help Veolia understand concerns.

Community consultation activities include:

- A dedicated Veolia webpage, offering general information on the Woodlawn Eco Project operations, including the IMF (refer section 4.3.3);
- A community telephone line to provide a central point of contact for community enquiries (refer section 4.3.3);
- Providing sponsorship and a regular column in the local newspaper, The Tarago Times, which is non-profit community service, published monthly by the Tarago Sporting Association Inc. It is distributed throughout Tarago, Lake Bathurst, Mayfield, Boro, Taylors Creek and the surrounding district. Veolia keeps the residents informed of the activities within the Eco Project site via this medium and promotes the feedback telephone line.
- Active participation in the Tarago Progress Association Inc (TADPAI), which is a community group aimed at promoting the district and assisting the community in the development and maintenance of a rural lifestyle.

4.3.2.1 Community Liaison Committee

Veolia formed a Community Liaison Committee (CLC) in 2004, which acts as an open forum to interface between the residents of Tarago and Veolia to proactively resolve

PLAN**Operational Environmental Management**

issues that impact on local amenity potentially from operations at the Bioreactor and IMF.

The CLC is made up of representatives from Veolia, the local community and Goulburn Mulwaree Council. The CLC's meeting schedule is on a monthly basis and its minutes are available to members of the public.

The Woodlawn Facilities Manager ensures that the minutes from the CLC meetings and results and interpretation of monitoring required by regulations are accessible to the public, as required.

4.3.2.2 Veolia Mulwaree Trust

In addition to the community consultative activities, Veolia with the local community's cooperation established the Veolia Mulwaree Trust in 2003. The objective of the Veolia Mulwaree Trust (which includes 1 Veolia company representative together with 3 independent members with strong standing in the local community) is to provide funding to any charitable purpose and/or projects for the benefit of the community associated with the former Mulwaree Shire Council area.

The Veolia Mulwaree Trust has supported numerous organisations through its grants and donations since 2005, including distribution of some \$3.2million. A web site (<http://mulwareetrust.org.au/>) has also been established to provide information about the Veolia Mulwaree Trust's Community Grants Program.

4.3.3 Information Availability

The following avenues provide availability of information about the Bioreactor and IMF:

- Dedicated Veolia webpage:

<http://www.veolia.com.au/sustainable-solutions/community-development/woodlawn-bioreactor>

- Community telephone line:

Location	Contact
Woodlawn 24 hour feedback line	1800 241 750
Woodlawn Bioreactor Reception	(02) 8588 1360

- Published monitoring data:

<http://www.veolia.com.au/sustainable-solutions/environmental-compliance/nsw-environmental-monitoring-data>

In accordance with the PA, the following information will be made available on the webpage:

- a copy of all current statutory approvals;
- a copy of the Environmental Management Plan required under this approval;
- a copy of any Annual Environmental Management Report including monitoring results (over the last 5 years);

PLAN**Operational Environmental Management**

- a copy of any Independent Environmental or Odour Audit and Veolia's response to the recommendations in any audit; and
- A report detailing response/action taken to resolve a complaint
- any other matter required by the DPE.

4.3.4 Complaints Handling

Close liaison is maintained between residences near the IMF to provide effective feedback in regard to perceived emissions.

In this manner, operations can be co-ordinated where necessary to minimise disturbance to neighbouring residents, and to ensure prompt response to complaints, should they occur.

The telephone feedback line be used for receiving public comments, including complaints and is published locally in the press or by other suitable means so that impacted community knows how to contact Veolia.

In addition, Veolia supplies and monitors odour diaries for logging by selected local residents who form part of the TADPAI, particularly for managing potential odour offences.

Complaints or adverse reports received from any external source shall be recorded and the Woodlawn Facilities Manager and/or Environmental Officer (Woodlawn) shall be notified of all public complaints. Records of any complaints will be kept for at least four years after the complaint was made.

All public complaints received (either written or verbal) will be documented to contain the following information:

- Nature and extent of the complaint;
- Method by which the complaint was made;
- Name and address of the person lodging the complaint;
- Details of all related factors including location, dates, frequency, duration, site conditions and effects of the complaint; and
- Action taken to address the complaint including follow up contact with the complainant.

The Woodlawn Facilities Manager and/or Environmental Officer (Woodlawn) or nominee record the details of all complaints received in an up-to-date log-book to ensure that a response is provided to the complainant within 24 hours or as soon as practicable.

The Woodlawn Facilities Manager, or their nominee, investigate and determine appropriate corrective/preventive actions to be taken to address all complaints. The complainant be informed in writing the results of the investigation and action to be taken to rectify or address the matter(s). Where no action is taken the reasons why are to be recorded. The response to the complaint will be uploaded onto Veolia's website within 7 days of the complaint receipt.

The corrective action may involve supplementary monitoring to identify the source of the non-conformance, and/or may involve modification of operational techniques to avoid any recurrence or minimise its adverse effects.

The Woodlawn Facilities Manager or nominee will make available a report on complaints received to the CLC and relevant parties upon request.

The Woodlawn Facilities Manager establishes and maintains procedures for the collection, indexing, filing, storage and maintenance of site records. Archived records are kept in accordance with Veolia's document control procedures.

The records of the complaints are available all the times for the EPA in case requested.

4.4 Incident and Emergency Response

Veolia operates the IMF where a major incident, emergency or crisis could lead to public health, safety or environmental issues. A key objective of this EMP is to identify potential risks, develop, and maintain measures to manage them.

Veolia's approach to incident and emergency response management includes:

- Risk Analysis - The identification of hazards and risks that could impact the community, environmental and operational implications.
- Prevention – The planning and documentation of prevention and mitigation activities for all major hazards, and allocation of responsibility for their implementation.
- Preparedness – The development, implementation and review of specific incident management plans and processes to manage identified risks, the training of staff, and establishment of facilities to ensure the company can respond effectively to an incident.
- Response – The issue of warnings and establishment of processes for effective notification of incidents, and mobilisation of resources to combat the incident or threat.
- Recovery – The return to normal operations, management of debriefs, and implementation of lessons learnt from the response process.

The following priorities are adopted when combating an incident / crisis:

- Protection of human life and welfare;
- Protection of the environment; and
- Protection of Veolia's assets.

Potential threats to the environment or public health that may arise in relation to the operation of the IMF (as presented in Section 3.4.2.6) include:

- Fire;
- Explosion;
- Spillage;
- Natural disaster;

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- Surface water and groundwater contamination; and
- Traffic accident.

4.4.1 Emergency Response

The Emergency Management Plan Crisps Creek Intermodal Facility should be followed when dealing with an emergency or incident and is aimed at:

- Addressing various types of emergencies, including fire, explosion, traffic accidents and wind and structural damage
- Minimising the risk to all personnel in an emergency
- Controlling any incident to minimise damage to plant, equipment, property and the environment.

The IMF Emergency Management Plan is appended to this EMP as Appendix D2 and outlines:

- Facility description, site plans and maps
- Incident identification and notification process;
- Emergency contact details;
- Emergency response procedures; and
- Training requirements

4.4.2 Incident Notification Requirements**4.4.2.1 Incident Reporting**

Incident notification processes will reflect the extent of the event and the incident classification. Reporting will be in accordance with the Veolia NSW Incident Reporting Procedure (PRO-NSW-000-134) as summarised in Figure 4-2 below. This procedure is used for the identification and reporting of hazards and/or incidents that have affected or have the potential to affect the environment or health and safety of a worker, contractor, subcontractor or a visitor to Veolia.

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Operational Environmental Management

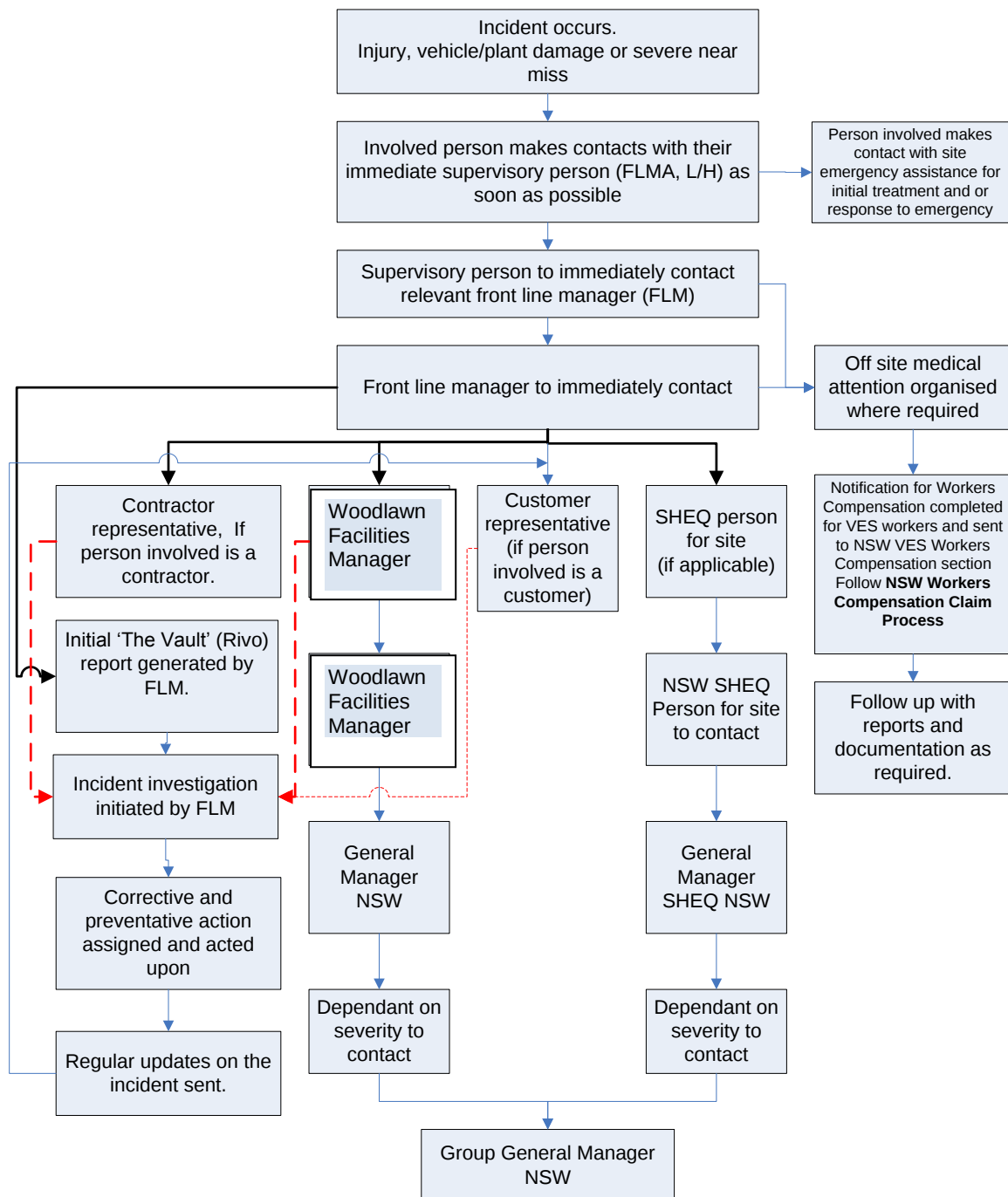


Figure 4.2 Incident Reporting Flow Chart

Incidents are logged in The Vault and managed in the following sequence:

- Log incident;
- Investigate incident;
- Close incident;

If further action is required, this can be logged within Rivo and assigned as an action to a Veolia personnel. Corrective actions will be implemented to prevent recurrence.

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Any exceedance of the limits/performance criteria stipulated in the PA or the occurrence of a notifiable incident, Veolia is to immediately notify DPE and other relevant agencies of the exceedance/incident.

A notifiable environmental incident is a pollution incident where there is a risk of causing or threatening material harm to the environment. A pollution incident includes a leak, spill or escape of a substance or circumstances where this is likely to occur. Material harm includes onsite and offsite actual or potential harm to:

- The health or safety of humans;
- The environment; or
- Property damage resulting in significant costs to remediate

If a notifiable environmental incident occurs, immediately notify any of the following personnel (refer Section 4.4.4.2 Emergency Contacts):

- The Woodlawn Facilities Manager
- NSW Environment Officer
- SHEQ General Manager

It will then be decided who will notify DPE or EPA. Where these regulators are being notified, other regulatory authorities that may require notification under the PIRMP include:

- Local councils (Goulburn Mulwaree Council or Palerang Council) for where the pollution incident has occurred;
- Ministry of Health;
- Fire and Rescue NSW; and
- Any other relevant authorities.

The EPA will also be notified of any incident that represents a threat to the environment due to breaches of EPL conditions, via the EPA's 24-hour Pollution Line (131 555) and a written notice should follow within 7 days. Such incidents include, but are not limited to:

- Fires;
- Identification of any failure of an environmental protection system; and
- Any other incident or observation that could potentially pose an immediate environmental hazard outside normal operating conditions.

4.4.2.2 Emergency Contacts

The following are the internal emergency contacts for the IMF. For a comprehensive list, including regulatory authorities, local community and emergency services, refer to the FEMP.

Position	Name	Phone Number	Mobile Number
General Manager Resource Recovery	Mark Taylor	9841 2912	0418 675 320

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Position	Name	Phone Number	Mobile Number
Woodlawn Facilities Manager	Henry Gundry	8588 1364	0400 233 592
Bio Energy Manager	Amila Wijedasa	4844 6353	0408 442 942
Maintenance Supervisor	Eric Rumsey	4844 6252	-
Environmental Officer	James Easterbrook	8588 1373	0404 742 518
Administration	Alexa Watt	4844 6262	-
NSW Environment Officer	Ramona Bachu	9841 2928	0407 668 199
SHEQ - Central & Southern Region Manager	Robert Petrevski	-	0419 000 242
Woodlawn 24 hour feedback line	-	-	1800 241 750

Section 5 Monitoring and Review of the EMP

5.1 Monitoring and Reporting

5.1.1 Inspections, Testing and Monitoring

Regular environmental inspections are undertaken by IMF personnel to ensure that the environmental controls have been implemented, meet specification, and are being maintained, refer to the NSW Inspecting and Testing Program (PRO-NSW-000-228) for details. In addition, some aspects of environmental monitoring and checks are included in the routine operator duties, as per the NSW Woodlawn Bioreactor Inspection and Testing Register (REG-NSW-218-006) and recorded in appropriate checklists.

At completion of each inspection, any corrective actions required are to be recorded in the Vault and managed in accordance with the NSW Corrective Action procedure (PRO-NSW-000-132) in a timely manner (refer Table 5-1):

Table 5-1

Priority	Action	Timeframe
Low	May not require immediate action. Monitor situation and schedule control action	Action typically required within 15 to 29 days
Medium	Control actions as soon as possible	Action typically required within 7 to 14 days
High	Significant and immediate control	Action typically required within 1-7 days

Compliance with all environmental regulatory criteria is a priority. Specific compliance obligations are detailed in Section 5.4.

Environmental non-compliances will be managed in accordance with the NSW Incident Investigation Procedure (PRO-NSW-000-130) or on a case-by-case basis depending on the severity of the incident as described in the table 5-2 below:

Table 5-2

Incident Classification	Investigation Team or Person	Appointed by	Authorised by	If the incident involves an injury
1. Insignificant 2. Minor 3. Moderate	A suitable competent person from the organisational unit or functional area where the incident occurred.	Woodlawn Facility Manager	Senior SHEQ Manager	An Injury/ Occupational Illness Report form must also be completed by the relevant Line Manager using short investigation form completed in the Vault
4. Major 5. Catastrophic (Crisis)	Appropriately independent qualified person appointee as a single Lead Investigator	Senior SHEQ Manager	Group General Manager (or equivalent)	Long investigation form to be completed in the Vault

PLAN**Operational Environmental Management****5.1.2 Compliance Reporting**

Compliance reporting is required to produce systematic, comprehensive and informative reports on the environmental performance as a result of the operational activities undertaken at the Bioreactor in accordance with legislative requirements. The reports required are summarised in Table 5-3.

The reporting parameters, frequency of reporting, and items to be included in the reports are also provided. For reporting requirements that relate to specific environmental aspects, refer to the relevant supplementary EMP (Appendix D).

Table 5.3 Bioreactor and IMF reporting requirements

Type of Report	Frequency	Distribution	Report Inclusions
Conditions Compliance Report	Every two years (September)	Condition 18 DPE, EPA and Council.	Assessment of compliance with consent conditions
Independent Environmental Audit	Every three years (September)	Condition 19 DPE, EPA, Council and the CLC	Assessment of environmental performance of facility
Annual Return and AEMR	Yearly (5 November)	DPE EPL EPA	Annual Return Form; and An Annual Environmental Management Report (AEMR) including annual monitoring undertaken, summary of complaints, compliance with EPL conditions and overall environmental performance of the Bioreactor

5.1.3 Environmental Audits

Both internal and external audits will be undertaken on a routine basis and will cover both the Bioreactor and IMF to ensure the sites are meeting compliance objectives, as well as to support continuous improvement.

The audits shall verify:

- the effectiveness of the EMP to meet Veolia policies, legislative and industry standards;
- whether the measures and/corrective actions carried out conform to the objectives of the EMP;
- the adequacy of implemented controls to minimise high risk environmental issues or operational activities; and
- identify areas for continuous improvement.

Audit findings are to be reported to the management for inclusion in management review processes or compliance reporting.

Audit reports are to be maintained in the Vault's audit management module to enable non-conformances and opportunities for improvement identified through internal and external audit processes at the IMF to be recorded, reported and responded to.

5.2 Management Review

Management reviews of the EMP and the environmental performance of the IMF will be scheduled annually to assess the continuing suitability, adequacy and effectiveness of the measures implemented.

The inputs to the management review process shall include (but not be limited to):

- internal and external audits findings;
- incidents management and investigation of non-conformance events, incidents, near misses and management of all complaints received;
- implementation of all compliance and legislative changes as identified at a corporate level; and
- trend analysis on operational data.

The output from the Management Review shall include any decisions and actions related to:

- possible changes to the management plans, procedures, practices, objectives and targets associated with the environmental management of the IMF;
- improvement of the effectiveness of the Veolia management system and its processes; and
- resource needs.

In addition to the yearly reviews, periodic meetings will be conducted to review all site specific key performance indicators pertaining to the environment and relevant business systems. The following forums will form part of the management review process at the IMF, conducted periodically by the site management, in conjunction with operators as required:

- Meetings;
- Toolbox talks;
- Hazard review groups;
- Serious incident reviews; and
- Miscellaneous environmental workshops

The following processes will be used for continual improvement:

- root cause identification and correction of incidents, complaints and issues of non-conformance
- root cause identification and prevention of potential incidents and non-conformances
- process/performance review, and

- enhancement of processes and generation of new initiatives.

5.3 Environmental Monitoring Program

5.3.1 General Monitoring

Detailed sampling and analytical methods for the IMF are defined in relevant procedures and work instructions stored on Hippo Station. These have been prepared in-line with relevant requirements, and industry standards.

The implementation of monitoring requirements is the responsibility of the Environmental Officer (Woodlawn).

All sampling strategies and protocols undertaken as part of the monitoring program will be conducted in line with industry best practice. Sampling will be performed by the Environmental Officer (Woodlawn) or contractors in accordance with the requirements set out in this EMP.

All analysis for compliance reporting will be performed in a NATA registered laboratory.

Where monitoring and measuring devices are used to provide evidence of conformity of product to determined requirements, these devices will be calibrated in accordance with the manufacturer's recommendations. Records of calibration will be maintained and the calibration status of the device will be clearly communicated.

Depending on the equipment to be calibrated such as analysers and/or laboratory equipment, the calibration process will be scheduled and performed using a variety of methods as per various work instructions or supplier manuals.

If the results of a calibration are not satisfactory (if the required accuracy is not reached) or if an item of testing equipment is out of service, the equipment shall be removed from use and marked out of calibration / for repairs.

5.3.2 IMF Monitoring

The current environmental monitoring regime at the IMF is considered sufficient to detect potential impacts to surface water and ambient air from the expanded operations. The monitoring regime is detailed in the EPL and is summarised in Table 5-4 below

Table 5-4

Type	Parameter	Monitoring Location(s)	Frequency
Surface Water	Ammonia, BOD, Conductivity, Copper, Flow, Iron, Lead, Oil and Grease, pH, Phosphorus, Sulphate, Total Kjeldahl Nitrogen, Total dissolved solids, Total organic carbon, Total suspended solids, Zinc	Site 110 Site 150 First Flush Outlet	Annual

PLAN**Operational Environmental Management**

Ambient Air Quality – Dust	Particulates – Deposited Matter	Pylara	Monthly
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Monitoring locations at the IMF are shown in Appendix-E.

5.4 Supporting Environmental Management Plans

This section provides the supporting environmental management plans and protocols for the IMF operations. These plans and protocols have been prepared in accordance with the conditions of Development Consent for the PA relating to the IMF.

5.4.1 Rail Transport Code of Conduct

The Rail Transport Code of Conduct (RTCC) details measures and strategies for managing noise and traffic impacts associated with rail operations at the IMF. The RTCC is included as Appendix D1 of the EMP.

5.4.2 IMF Emergency Management Plan

The IMF Emergency Management Plan details emergency response procedures for the IMF and is included as Appendix D2 of the EMP.

Related Documents

- Veolia Environmental Services Environment Assessment: Woodlawn Expansion Project Volume 1 – Main Report, URS Australia Pty Ltd, August 2010
- Veolia Environmental Services Environment Assessment: Woodlawn Expansion Project Volume 2 – Appendices, URS Australia Pty Ltd, August 2010
- Wright Corporate Strategies' Public Review – Landfill Capacity and Demand prepared for NSW Government, Wright Corporate Strategy Pty Ltd, March 2009
- Waste Classification Guidelines Part 1: Classifying Waste, NSW Environment Protection Authority, November 2014;
- Environmental Guidelines: Solid Waste Landfills, NSW Environment Protection Authority, 1996.

APPENDICES

Appendix A- Site Plan



Appendix B - Regulatory and Policy Documents

POLICY

ENVIRONMENT



Veolia Australia and New Zealand (Veolia) is the region's only environmental solutions organisation with specific capabilities across water and wastewater treatment, energy management, waste and resource recovery services, industrial cleaning and facilities maintenance services.

Our goal is to provide comprehensive, high-value-added solutions that balance growth and environmental protection, solutions that manage water sustainably, turn waste into a resource, and develop cleaner, more efficient energy systems.

Veolia's business strategy is guided by five elements: our business, our customers, our people, our environment and our community. These elements shape all aspects of Veolia's future performance, and our corporate policies and practices are linked to delivering excellence in one or many of them.

Veolia is committed to:

- Effectively managing our significant environmental impacts, monitoring progress and reviewing environmental performance against objectives and targets on a regular basis.
- Driving continual improvement, and meeting the requirements of ISO 14001 environmental management systems standard as part of the integrated business management system.
- Complying with applicable environmental legislation, contractual and other necessary requirements related to our activities and assist customers and suppliers to use products and services in an environmentally sensitive way.
- Striving to ensure that our policies, objectives and achievements are communicated to all persons working for and on behalf of the business and to educate and train employees and ensure competence in environmental issues and the environmental effects of their activities.
- Preventing pollution and harm to the natural, heritage and built environments and to reduce the use of all raw materials, energy and supplies.
- Consulting with relevant stakeholders, taking into account local environmental conditions and working with local communities to achieve shared and lasting outcomes.

All managers, employees, contractors and visitors are responsible for being aware of, and complying with this policy.

A handwritten signature in black ink, appearing to read 'Doug Dean', with a horizontal line extending to the right.

16th September 2015

Doug Dean AM
Managing Director/ CEO
Veolia Australia and New Zealand



POLICY

SUSTAINABILITY



Veolia Australia and New Zealand (Veolia) is the region's only environmental solutions organisation with specific capabilities across water and wastewater treatment, energy management, waste and resource recovery services, industrial cleaning and facilities maintenance services.

Our goal is to provide comprehensive, high-value-added solutions that balance growth and environmental protection, solutions that manage water sustainably, turn waste into a resource, and develop cleaner, more efficient energy systems.

Veolia's business strategy is guided by five elements: our business, our customers, our people, our environment and our community. These elements shape all aspects of Veolia's future performance, and our corporate policies and practices are linked to delivering excellence in one or many of them.

Veolia is committed to:

- Being ethically responsible, to create value in what we do, and to use sound risk and hazard management principles in conducting our business. As part of its 'non-negotiables' Veolia will comply with all relevant legislation including pollution prevention and will strive to develop and improve our integrated business management system to support a consistent and disciplined approach to business processes. We will ensure that appropriate resources (both internally and externally) are utilised to assist in achieving our goals.
- Partnering in innovation and to understand and support our customers in achieving their business objectives.
- Attracting and retaining diverse and talented employees. This will include providing development opportunities so our employees are continually learning, communicating, providing workplace consultation, and creating an 'Always Safe' workplace, with an aspiration of no workplace injury or illness for our employees, visitors and contractors.
- Continually designing and implementing sustainable solutions to develop access to resources and to protect and replenish them. Additionally, Veolia is committed to providing environmental leadership in its operations and solutions, which includes the management of its own environmental impacts, improving waste, water, energy and carbon outcomes, as well as protecting and conserving biodiversity and natural capital.
- Working closely with local communities to achieve shared and lasting outcomes. Additionally Veolia will engage with government, policy makers, advocacy groups, industry associations and other stakeholders in the areas which we operate to create better value and outcomes in sustainable practices.

All managers, employees, contractors and visitors are responsible for being aware of, and complying with this policy.

A handwritten signature in black ink, appearing to read 'Doug Dean'.

16th September 2015

Doug Dean AM
Managing Director/ CEO
Veolia Australia and New Zealand



Environment Protection Licence



Licence - 11455

Licence Details

Number:	11455
Anniversary Date:	06-September
Review Due Date:	31-Jan-2011

Licensee

VEOLIA ENVIRONMENTAL SERVICES (AUSTRALIA) PTY LTD
LEVEL 4, 65 PIRRAMA ROAD
PYRMONT NSW 2009

Licence Type

Premises

Premises

CRISPS CREEK INTERMODAL FACILITY
BUNGENDORE ROAD
TARAGO NSW 2580

Scheduled Activity

Waste Facilities - store/transfer/sep

Fee Based Activity

Waste Storage, Transfer, Separating or Processing (84)

Scale

0 - All

Region

South - Queanbeyan
Suite 4, Robert Lowe Building, 30 Lowe Street
QUEANBEYAN NSW 2620
Phone: 02 6122 3100
Fax: 02 6299 3525

PO Box 622 QUEANBEYAN
NSW 2620

Environment Protection Licence

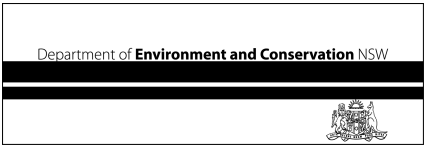


Licence - 11455

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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.

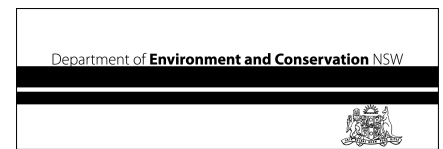
Fees and annual return to be sent to the EPA

For each licence fee period you must pay:

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

The EPA publication "A Guide to Licensing" contains information about how to calculate your licence fees.

Environment Protection Licence



Licence - 11455

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
- 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
LEVEL 4, 65 PIRRAMA ROAD
PYRMONT NSW 2009

subject to the conditions which follow:

1 Administrative conditions

A1 What the licence authorises and regulates

A1.1 Not applicable.

A1.2 This licence authorises the carrying out of the scheduled activities listed below at the premises

Environment Protection Licence



Licence - 11455

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

Waste Facilities - store/transfer/sep

Fee Based Activity

Scale

Waste Storage, Transfer, Separating or Processing
(84)

0 - All

A1.3 Not applicable.

A1.4 The only scheduled activity that may be carried on by the licensee is waste transfer in accordance with the conditions of this licence.

A2 Premises 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 10 IN DP 703260; PART LOT 3 IN DP
754894

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A3 Other activities

A3.1 Not applicable.

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.

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, 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.

Air

EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Description of Location
4	Ambient air pollutant		Nearest sensitive receptor to premises

P1.2 The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.

P1.3 The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.

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Water and land

EPA identification no.	Type of monitoring point	Type of discharge point	Description of location
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
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 Load limits

- L2.1 Not applicable.
- L2.2 Not applicable.

L3 Concentration limits

- L3.1 Not applicable.
- L3.2 Not applicable.
- L3.3 Not applicable.

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L4 Volume and mass limits

L4.1 Not applicable.

L5 Waste

L5.1 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 the licence.

L5.2 This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if those activities require an environment protection licence.

L5.3 Unless expressly approved otherwise by the EPA, only the following types of waste may be received at the premises for transfer to the Woodlawn Bioreactor Facility: Waste, including putrescible waste, that is assessed as inert or solid waste following the technical assessment procedure outlined in Technical Appendix 1 of the Waste Guidelines or that is specified as inert waste or solid waste in Schedule 1 of the Protection of the Environment Operations Act 1997 and 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).

L5.4 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.

L6 Noise Limits

L6.1 Except as provided in condition L6.2, noise from the premises must not exceed an L_{Aeq} (15 minute) noise emission criterion of 35 dB(A) at the most affected residential receiver.

L6.2 Noise emissions from freight trains entering and leaving the premises must not exceed the noise limit of 45 dB(A) L_{Aeq} (15 minutes) prior to 7:00 am and 50 dB(A) L_{Aeq} (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.

L6.3 For the purpose of Conditions L6.1 and L6.2:

(a) The L_{Aeq} 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.



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(c) Measurement locations are:

- for night time (10 pm to 7 am) assessment – 1 metre from the façade of the residence; and
- 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.

L7 Hours of Operation

Operational hours

- L7.1 All operational activities at the premises including road haulage may only be conducted between 7:00 am to 6:00 pm on Mondays to Saturdays other than train operations which may be conducted from 6:00 am to 6:00 pm. There must be no activities on Sundays, Good Friday or Christmas Day.
- L7.2 The hours of operation specified in condition L7.1 may be varied with the written consent of the EPA if the EPA is satisfied that the amenity of the residents in the locality will not be adversely affected.

L8 Offensive Odour

- L8.1 The licensee must not cause or permit the emission of offensive odour beyond the boundary of the premises.

Note: Section 129 of the Protection of the Environment Operations Act 1997, provides that 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

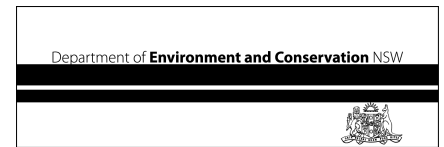
O1 Activities must be carried out in a competent manner

- 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.

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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 Control

- 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 Stormwater and wastewater management – operating phase

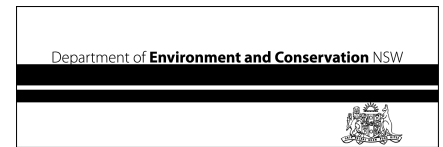
- O4.1 Paved and sealed areas must be provided with a first flush stormwater management system designed to capture the first 15 millimetres of stormwater for each square metre of catchment area. The paved and sealed areas must also extend to include any rail unloading areas.
- O4.2 All areas that involve the handling of containerised waste including container transfer and handling areas, clean container storage areas and internal roadways must be sealed.
- O4.3 Contaminated stormwater and any sludges collected at the premises must be disposed of at the Woodlawn Bioreactor Facility (Environment Protection Licence No. 11436).
- O4.4 There must be no vehicle or container wash down at the premises.
- O4.5 All sewage generated on the premises must be disposed of into the sewerage system at the Woodlawn Bioreactor Facility (Environment Protection Licence No. 11436).
- O4.6 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.

O5 Tracking of mud and waste

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

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O6 Waste transportation

- O6.1 All containers must be designed, constructed and maintained to prevent the emission of offensive odour and be water tight to prevent the leakage of leachate from waste containers during transport and handling activities.
- O6.2 All pressure relief valves on the containers must be fitted with appropriate mechanisms to filter and remove odours.

O7 Fire extinguishment

- O7.1 The licensee must extinguish fires at the premises as soon as possible.

O8 Fire fighting capability

- O8.1 The licensee must have adequate fire prevention measures in place, and ensure that facility personnel are able to access fire-fighting equipment and manage fire outbreaks at any part of the premises.

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

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- 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:

POINTS 1,2,3

Pollutant	Units of measure	Frequency	Sampling Method
Ammonia	mg/L	Special Frequency 1	Grab sample
BOD	mg/L	Special Frequency 1	Grab sample
Conductivity	uS/cm	Special Frequency 1	In situ
Copper	mg/L	Special Frequency 1	Grab sample
Flow	m3/s	Special Frequency 1	Estimate
Iron	mg/L	Special Frequency 1	Grab sample
Lead	mg/L	Special Frequency 1	Grab sample
Oil and Grease	mg/L	Special Frequency 1	Grab sample
Phosphorus	mg/L	Special Frequency 1	Grab sample
Sulfate	mg/L	Special Frequency 1	Grab sample
Total Kjeldahl Nitrogen	mg/L	Special Frequency 1	Grab sample
Total dissolved solids	mg/L	Special Frequency 1	Grab sample
Total organic carbon	mg/L	Special Frequency 1	Grab sample
Total suspended solids	mg/L	Special Frequency 1	Grab sample
Zinc	mg/L	Special Frequency 1	Grab sample
pH	pH	Special Frequency 1	In situ

POINT 4

Pollutant	Units of measure	Frequency	Sampling Method
Particulates - Deposited Matter	g/m2/month	Continuous	AM-19

“Special Frequency 1” in the above table means a monitoring frequency of six times per year, evenly-spaced throughout the year depending on the occurrence of rainfall events of sufficient magnitude to generate flow.

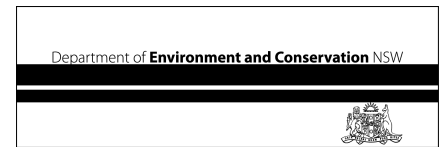
Siting of point 4 must be in accordance with Method AM-1 in the *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.

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

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taking place.

Note: The Protection of the Environment Operations (Clean Air) Regulation 2002 requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".

- 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.

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:
- (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.
- M4.3 The record of a complaint must be kept for at least 4 years after the complaint was made.
- 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 Conditions M5.1 and M5.2 do not apply until 3 months after:
- (a) the date of the issue of this licence or
 - (b) if this licence is a replacement licence within the meaning of the Protection of the Environment Operations (Savings and Transitional) Regulation 1998, the date on which a copy of the licence was served on the licensee under clause 10 of that regulation.



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M6 Requirement to monitor volume or mass

M6.1 Not applicable.

6 Reporting conditions

R1 Annual return documents

What documents must an Annual Return contain?

- 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.
- 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

- R1.2 An Annual Return must be prepared in respect of each reporting period, 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.

- 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.

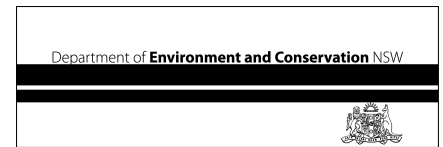
Note: An application to transfer a licence must be made in the approved form for this purpose.

- 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.

Deadline for Annual Return

- R1.5 The Annual Return for the reporting period must be supplied to the EPA by registered post not later

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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').

Notification where actual load can not be calculated

R1.6 Not applicable.

Licensee must retain copy of Annual Return

R1.7 The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.

Certifying of Statement of Compliance and Signing of Monitoring and Complaints Summary

R1.8 Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:

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

R1.9 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.

R2 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.

R2.1 Notifications must be made by telephoning the EPA's Pollution 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.

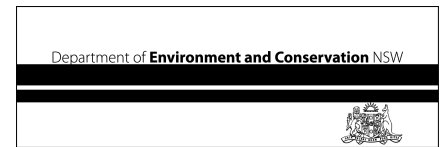
R3 Written report

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.

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- 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 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.
- 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.

General conditions

G1 Copy of licence kept at the premises

- 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.

Pollution studies and reduction programs

Special conditions

Dictionary

General Dictionary

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In this licence, unless the contrary is indicated, the terms below have the following meanings:

3DGM [in relation to a concentration limit]	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
Act	Means the Protection of the Environment Operations Act 1997
activity	Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment Operations Act 1997
actual load	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 1998
AM	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> .
AMG	Australian Map Grid
anniversary date	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.
annual return	Is defined in R1.1
Approved Methods Publication	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 1998
assessable pollutants	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 1998
BOD	Means biochemical oxygen demand
CEM	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> .
COD	Means chemical oxygen demand
composite sample	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.
cond.	Means conductivity
environment	Has the same meaning as in the Protection of the Environment Operations Act 1997
environment protection legislation	Has the same meaning as in the Protection of the Environment Administration Act 1991
EPA	Means Environment Protection Authority of New South Wales.
fee-based activity classification	Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 1998.
flow weighted composite sample	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
grab sample	Means a single sample taken at a point at a single time
hazardous waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
industrial waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997

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inert waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
licensee	Means the licence holder described at the front of this licence
load calculation protocol	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 1998
local authority	Has the same meaning as in the Protection of the Environment Operations Act 1997
material harm	Has the same meaning as in section 147 Protection of the Environment Operations Act 1997
MBAS	Means methylene blue active substances
Minister	Means the Minister administering the Protection of the Environment Operations Act 1997
mobile plant	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
motor vehicle	Has the same meaning as in the Protection of the Environment Operations Act 1997
O&G	Means oil and grease
percentile [in relation to a concentration limit of a sample]	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.
plant	Includes all plant within the meaning of the Protection of the Environment Operations Act 1997 as well as motor vehicles.
pollution of waters [or water pollution]	Has the same meaning as in the Protection of the Environment Operations Act 1997
premises	Means the premises described in condition A2.1
public authority	Has the same meaning as in the Protection of the Environment Operations Act 1997
regional office	Means the relevant EPA office referred to in the Contacting the EPA document accompanying this licence
reporting period	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.
reprocessing of waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
scheduled activity	Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997
solid waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
TM	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> .
treatment of waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
TSP	Means total suspended particles
TSS	Means total suspended solids
Type 1 substance	Means the elements antimony, arsenic, cadmium, lead or mercury or any compound containing one or more of those elements

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Type 2 substance	Means the elements beryllium, chromium, cobalt, manganese, nickel, selenium, tin or vanadium or any compound containing one or more of those elements
utilisation area	Means any area shown as a utilisation area on a map submitted with the application for this licence
waste	Has the same meaning as in the Protection of the Environment Operations Act 1997
waste code	Means the waste codes listed in Appendix 5 of the EPA document A Guide to Licensing Part B.
waste type	Means Group A, Group B, Group C, inert, solid, industrial or hazardous waste

Model licence dictionary

In this licence, unless the contrary is indicated, the terms below have the following meanings:

Recycling of waste

The processing of waste into a similar non-waste product.

Mr William Dove

Environment Protection Authority

(By Delegation)

Date of this edition - 02-Mar-2006

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.

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Appendix C - Operation Condition Compliance Report



Condition Compliance Report

For

Woodlawn Bioreactor

619 Collector Road, Tarago NSW 2580

Crisps Creek Intermodal Facility

Bungendore Road, Tarago NSW 2580

Document Code: PLA-NSW-XXX-XXX-1

Date: 15.04.2016

Veolia Australia and New Zealand
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Condition Compliance Report

QUALITY INFORMATION**Document Revision Register**

Rev	Revision Details	Prepared by	Review By	Date
0	Initial draft for internal review	Amandeep Brar, Environmental Planner	Stephen Bernhart NSW Resource Recovery Project Manager	13 April 2016
1	Final for submission to DPEA	Amandeep Brar, Environmental Planner	Stephen Bernhart NSW Resource Recovery Project Manager	15 April 2016

Condition Compliance Report

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<u>Section 2 Condition of Compliance</u>	<u>5</u>

SECTION 1 INTRODUCTION

Veolia Australia and New Zealand (Veolia) own and operate the Woodlawn Eco Project Site (the Eco Project Site), which is located in the Southern Highlands of NSW, approximately 250 kilometres (km) South West of Sydney

The Eco Project Site consists of two properties on approximately 6,000 hectares (ha) of land, namely Woodlawn and Pylara and includes the area of the Special (Crown & Private Lands) Lease 20 (SML 20), encompassing the Woodlawn Mine, a former lead, copper and zinc mine which ceased mining operations in 1998. The first stage of the Eco Project Site developed by Veolia was the Woodlawn Bioreactor (the Bioreactor), which commenced operations in September 2004 and is located in the void of the former Woodlawn Mine.

The Bioreactor has considerable capacity to receive putrescible waste generated from both Sydney and surrounding areas of regional NSW. On the basis of this, a modification application was sought by Veolia to remove the arbitrary annual waste input limits into the Bioreactor, and in response to the Wright Corporate Strategies' Public Review – Landfill Capacity and Demand (the Wright Review, 2009). The Wright Review was an independent review commissioned by the Minister for Planning to examine critical issues such as the continuing need for putrescible waste landfill capacity, regional disposal capacity and demand.

On 16 March 2012, the Department of Planning and Environment (DPE) granted approval for the Bioreactor to increase its annual maximum input rate from 500,000 tonnes per annum (TPA) to 1,130,000 TPA, referred to hereon as the expanded operations.

This Condition Compliance Report has been prepared to detail compliance with the provisions of the DP&I and Conditions of Consent for the Woodlawn Eco Project Site and the IMF Crisps Creek facility throughout its operation. This report presents each condition in tabular form and identifies where each condition has been addressed in the Landfill Environmental Management Plan (LEMP), its supplementary Environmental Management Plans and IMF Environment Management Plan

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SECTION 2 CONDITIONS OF COMPLIANCE

Table 2.1 - Conditions of Compliance

COC	Requirement	Management Plan Reference
Project Approval 10_0012 Conditions (PA Conditions)		
1	The Applicant 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 development.	Noted
1	OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT 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.	Noted
2	TERMS OF APPROVAL 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.	Noted
4	The Applicant shall comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of: (a) any reports, plans, strategies, programs or correspondence that are submitted in accordance with this Consent; and (b) the implementation of any actions or measures contained in these reports, plans, strategies, programs or correspondence.	Noted
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
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,	Noted

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	programs or correspondence.							
5	LIMITS OF APPROVAL Woodlawn Bioreactor 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.	Noted						
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.	Noted						
7	In any event, no more than 1.13 million tpa of waste shall be accepted at the Landfill.	Noted						
8	Crisps Creek The Proponent shall not exceed the annual throughput rates in Table 2 for the Crisps Creek IMF. <table><tr><td colspan="2">Table-2</td></tr><tr><td>Received by rail from Sydney</td><td>Received by rail from Sydney for processing at the Woodlawn AWT</td></tr><tr><td>900,000 tpa</td><td>280,000 tpa</td></tr></table>	Table-2		Received by rail from Sydney	Received by rail from Sydney for processing at the Woodlawn AWT	900,000 tpa	280,000 tpa	Noted
Table-2								
Received by rail from Sydney	Received by rail from Sydney for processing at the Woodlawn AWT							
900,000 tpa	280,000 tpa							
9	STRUCTURAL ADEQUACY 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	Noted						

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	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.	
10	TRANSITIONAL ARRANGEMENTS 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
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
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.	Noted
13	DEMOLITION 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.	Noted
14	OPERATION OF PLANT AND EQUIPMENT 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.	Noted
15	STAGED SUBMISSION OF PLANS OR PROGRAMS With the approval of the Director-General, the Proponent may submit any plan or program required by this approval on a progressive basis.	Noted
16	COMPLIANCE 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	Noted

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	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	
1	Waste Management Restrictions of the Receipt, Storage, Handling and Disposal of Waste The Proponent shall only receive waste on site that is authorised for receipt by an EPL.	Noted
2	Cover Material 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	Refer to section 3.3.1.2 of the Woodlawn Landfill Environment Management Plan (LEMP)
3	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.	Refer to section 3.3.5.5 of the LEMP
	AIR	
4	Landfill Gas Limits The Proponent shall ensure that landfill gas engine (LGE) emissions at the Bioreactor comply with the requirements of the POEO (Clean Air) Regulation 2010.	Refer to sections 3.1.6, 3.2.4 & 5.1 of Air Quality and Greenhouse Gas Management Plan (AQGGMP)
	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.	Refer to section 4.3 of the AQGGMP
	Odour	
6	Discharge Limits The Proponent shall not cause or permit the emission of offensive odours from the site, as defined under Section 129 of the POEO Act.	Refer to section 3.2.1 & 3.2.2 of the AQGGMP
	Independent Odour Unit	
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	Refer to section 3.1.1 of the AQGGMP

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	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.	Noted
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.	Noted
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).	Refer to section 3.1.1 & 4.1 of the AQGGMP
11	Dust Limits 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	Refer to section 5.2 of the AQGGMP

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	owned land surrounding the site.	
12	Air Quality Monitoring, Management and Validation 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).	Refer to sections of the AQGGMP as outlined 1.4.1 Noted 4.1, 4.2, 4.3 5.1 3.1.1, 3.2.4, 5.1 3.1.1, 4.2 5.3.1
	SOIL AND WATER	
13	Pollution of Waters Except as may be expressly provided in the EPL for the site, the Proponent shall comply with Section 120 of the POEO Act.	Refer to sections 1.3.4, 3 & 4 of Soil and Water Management Plan (SWMP) Refer to the section 1.3.4 of Leachate Management Plan(LMP)
14	Soil The Proponent shall: (a) minimise any soil loss through erosion on site;	Refer to section 4.1.1 of the SWMP

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	(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.	
15	Bunding 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.)	Refer to section 4.2.5 of the SWMP
16	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.	Refer to section 4.1 of the SWMP
17	Soil and Water Management Plan 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.	Refer to sections of the SWMP as outlined below: 1.4 Noted 3.1, 4.1 3.2.6, 3.3.2 5.1 5.2 4

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	This plan must be documented in the Landfill EMP (see condition 3 in schedule 7).	
18	Leachate Management 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 OEHL 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).	Refer to sections of the LMP as outlined below: 1.4.1 Noted 3.1.1 3.1.2 3.1.2, 4.1, 4.2 3.1.3, 4.1.4 4.1.4
19	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.	Refer to section 2.1 of the Noise Monitoring and Management Plan (NMMP)
20	Operating Hours The Proponent shall comply with the operating hours in Table 7 for the site, unless otherwise agreed in writing by the OEHL.	Refer to section 3.1 of the NMMP
21	Monitoring and Management 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: (a) be prepared in consultation with OEHL by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General;	Refer to sections of the NMMP as outlined below: Noted

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	(b) be approved by the Director-General prior to the commencement of expanded operations; (c) include a noise monitoring protocol for evaluating compliance with the noise impact assessment criteria in this approval; (d) details all reasonable and feasible measures to minimise noise at the site; (e) consider road traffic noise management and include a revised road traffic noise protocol; (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. This plan must be documented in the Landfill EMP (see condition 3 in schedule 7).	Noted 5.1 4.1 4.1 & Appendix C 5.3
22	Meteorological Monitoring 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.	Refer to section 3.1.4 of the AQGGMP
23	FLORA AND FAUNA Vegetation Management Plan The Proponent shall prepare and implement a Landscaping and Vegetation Management Plan for the Landfill. This plan must: (a) be prepared in consultation with OEH and NOW by a suitably qualified and experienced expert; (b) be approved by the Director-General prior to the commencement of expanded operations; (c) include measures to minimise such vegetation loss and additional tree planting to offset this loss; (d) detail any landscaping treatments at the Landfill, with particular attention to minimising the visibility of the site/s from residences and public vantage points;	Noted Noted 3.1.5 4.1.1

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	(e) describe the on-going maintenance regime for rehabilitation and vegetation management in the rehabilitation area/s. This plan must be documented in the Landfill EMP (see condition 3 in schedule 7).	4.1.4
24	Pest, Vermin & Noxious Weed Management 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).	Refer to section 3.4.2.5 of the LEMP
25	FIRE AND EMERGENCY MANAGEMENT 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).	Refer to sections of the Emergency Response Plan (ERP) as outlined below Noted Noted 7 7 6

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26	VISUAL AMENITY Lighting 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.	Refer to section 3.4.2.6 of the LEMP
27	SECURITY 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.	Refer to section 3.3.5.1 of the LEMP
28	LANDFILL CLOSURE AND REHABILITATION 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)	Refer to the Landfill Closure and Rehabilitation Plan
SCHEDULE 5 SPECIFIC ENVIRONMENTAL CONDITIONS – CRISPS CREEK IMF SITE		

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1	Waste Management Restrictions of the Receipt, Storage, Handling and Disposal of Waste The Proponent shall only receive waste on site that is authorised for receipt by an EPL.	Noted
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.	Refer to section 3.4.2.3 of the IMF Environment Management Plan (EMP)
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.	Refer to section 3.3.3 of the IMF EMP
4	Waste Transportation 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.	Refer to sections of 3.4.2.1 of the IMF EMP
5	Litter Control The Proponent shall inspect daily and clear the site (and if necessary, surrounding area) of litter on at least a weekly basis.	Refer to section 3.3.4.5 of the IMF EMP
6	Pest, Vermin & Noxious Weed Management 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..	Refer to section 3.4.2.4 of the IMF EMP
7	AIR Greenhouse Gas 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	Refer to section 3.4.2.2 of the IMF EMP
	Odour Discharge Limits	

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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.	Refer to section 3.4.2.1 of the IMF EMP
9	Independent Odour Audit The Proponent shall include consideration of the Crisps Creek IMF site in any Independent Odour Audit required by condition 7 in schedule 4.	Refer to section 3.4.2.1 of the IMF EMP
10	SOIL AND WATER Pollution of Waters .Except as may be expressly provided in the EPL for the site, the Proponent shall comply with Section 120 of the POEO Act.	Refer to section 3.4.2.3 of the IMF EMP
11	Wastewater Management The Proponent shall ensure that there is no vehicle or container wash down at the Crisps Creek IMF. (EPA GTA)	Refer to section 3.4.2.3 of the IMF EMP
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.	Refer to section 3.4.2.5 of the IMF EMP
13	Bunding 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	Refer to section 3.3.4.4 of the IMF EMP
14	Erosion and Sediment Control 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	Noted
15	NOISE Limits 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.	Refer to section 3.4.2.7 of the IMF EMP

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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.	Refer to section 3.4.2.6 of the IMF EMP
17	Operating Hours The Proponent shall comply with the operating hours in Table 9 for the site, unless otherwise agreed in writing by the OEH	Refer to section 3.3 of the IMF EMP
18	VISUAL AMENITY Lighting 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 evaporation of water shall be documented in the LEMP.	Noted Refer to section 3.4.2.8 of the IMF EMP
19	Security 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.	Refer to section 3.3.4.1 of the IMF EMP
20	Rail Traffic 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.	Refer to sections 3.3.1 & 3.4.2.6 of the IMF EMP
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.	Noted
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.	Refer to section 3.4.2.6 of the IMF EMP
SCHEDULE 6 - TRAFFIC AND ROAD UPGRADES		

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1	TRAFFIC AND TRANSPORT Delivery of Waste from the IMF to the Landfill 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.	Refer to section 3.4.2.6 of the IMF EMP
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.	Refer to the section of 3.4.2.6 of the IMF EMP
3	Delivery of Regional Waste by Road 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.	Noted
4	Transport Code of Conduct 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.	Noted
5	ROAD UPGRADES <u>Palerang LGA</u> 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	Noted

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	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.	Noted
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.	Noted

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8	Goulburn Mulwaree LGA 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.	Noted
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.	Noted
10	ROAD MAINTENANCE CONTRIBUTIONS 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).	Noted
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	Noted

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	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	
1	COMMUNITY LIAISON COMMITTEE 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.)	Noted
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.	Noted
3	ENVIRONMENTAL MANAGEMENT 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	Refer to the LEMP Noted Noted 3 2.1 4.1 4.3

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	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.	4.3 5.1
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;	Refer to the IMF EMP Noted Noted 3.4 3.4.2.3 & 5.3.2 3.4.2.7 3.4.2.8 3.4.2.3 3.4.2.9, 3.4.2 & 4.4.2 2.1 4.1.1

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	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.	4.3.2 4.3.4 5.3.2
5	Annual Environmental Management Review 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.	Noted
6	INDEPENDENT ENVIRONMENTAL AUDIT .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;	Noted

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	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.	
7	COMPLAINTS HANDLING PROCEDURE 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.	Noted
8	INCIDENT REPORTING 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.	Noted
9	Revision of Plans & Programs 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.	Noted

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10	ACCESS TO INFORMATION 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.	Noted
	DA No. 31-02-99 Conditions	
1	Adherence to Terms of DA and EIS 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.	Noted
2	Deferred Commencement 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.	Noted
3	Duration of The Consent 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.	Noted
4	Input Rate Variations 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:	Noted

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	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 <table><tr><th>Years from date of operational commencement</th><th>Maximum Input Rate</th></tr><tr><td>0-5</td><td>400,000 tpa</td></tr><tr><td>6-10</td><td>360,000 tpa</td></tr><tr><td>11-15</td><td>325,000 tpa</td></tr><tr><td>16-20</td><td>290,000 tpa</td></tr></table>	Years from date of operational commencement	Maximum Input Rate	0-5	400,000 tpa	6-10	360,000 tpa	11-15	325,000 tpa	16-20	290,000 tpa	
Years from date of operational commencement	Maximum Input Rate											
0-5	400,000 tpa											
6-10	360,000 tpa											
11-15	325,000 tpa											
16-20	290,000 tpa											
5	In any event, no more than 500,000 tonnes shall be landfilled at the site in any one year.	Noted										
6	Compliance with Requirements of the Director-General and Prescribed Conditions 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.	Noted										
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.	Noted										
8	Obligation to Prevent and Minimise Harm to the Environment The Applicant shall: a) take all practicable measures to prevent and minimise harm to the b) environment as a result of the construction, operation, post closure and, where c) relevant, the decommissioning of the development; and d) 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.	Noted										
9	Structural Adequacy Detailed plans and specifications relating to the design and construction of all structural	Noted										

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	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).	
10	Verification of Construction 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.	Noted
11	Dispute Resolution 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.	Noted
	ENVIRONMENTAL MANAGEMENT	
12	Environmental Services 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	Noted

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	b) 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).	
13	Landfill Environmental Management Plan 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)	Noted
14	Licence Applications 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)	Noted
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;	Refer to PA condition 28 & 29 of schedule 4

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	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)	
16	Community Liaison Committee 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.	Noted
17	Annual Environmental Management Report 1. 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.	Noted
18	Conditions Compliance Reports 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	Noted

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	landfilling activity, or within such period as otherwise agreed to by the Director-General.	
19	Independent Environmental Audits 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 b) Monitoring and any specifications of the Director-General; c) be conducted by a suitably qualified independent person approved by the d) Director-General; e) assess compliance with the requirements of this consent; f) assess the implementation of the LEMPs and review the effectiveness of the environmental management of the development; and g) 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.	Noted
	SITE REHABILITATION	
20	Whole of Site Rehabilitation 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.	Refer to PA condition 28 of schedule 4
21	Activities associated with landfilling must not impede or limit the rehabilitation works on any part of the Woodlawn Mine site.	Refer to PA condition 29 of schedule 4
22	Rehabilitation Management Plan 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	Refer to PA condition 29 of schedule 4

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	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 f) areas; g) procedures for the removal of all derelict buildings and infrastructure; h) closure strategies in the event that landfilling activities conclude prior to the i) capacity of the mine void being filled; and j) 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.	Noted
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	Noted
25	EPA Financial Assurance 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	Noted

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	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.	
26	WASTE SOURCES AND TYPES 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.	Noted
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)	Noted
	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)	Refer to PA condition 3 of schedule 5
29	Waste Transportation 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)	Refer to PA condition 4 of schedule 5
30	All pressure relief valves on the containers must be designed to meet the	Refer to section 4.1.2 of the AQGGMP

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	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 d) including cleaning and performance testing; and e) Container cleaning. (EPA GTA)	Refer to section 4.1.2 of the AQGGMP
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. (EPA GTA)	Refer to section 7 of the ERP
33	Control of Incoming Wastes 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)	Noted
34	The Applicant shall use its best endeavours to ensure that all waste received at the intermodal facility is containerised.	Noted
35	OPERATIONAL STAGING AND LANDFILL MANAGEMENT 2. 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.	Noted
36	Cover Material Cover material must be virgin excavated natural material, unless otherwise approved in writing by the EPA. (EPA GTA)	Refer to section 3.1.16 of SWMP
37	Cover material must be of a quality that will not inhibit the biological decomposition of the landfilled waste. (EPA GTA)	Refer to section 3.1.16 of SWMP
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)	Refer to section 3.1.16 of SWMP
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)	Refer to section 3.1.16 of SWMP
40	At least two weeks supply of cover material must be available at the premises under all weather	Refer to section 3.1.16 of SWMP

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	conditions, unless otherwise approved in writing by the EPA. (EPA GTA)	
41	Landfill Gas The Applicant shall ensure to the maximum practical extent the quantity of landfill gas that is collected and treated.	Refer to sections 3.1.7 & 4.1 of the AQGGMP
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)	Refer to section 3.1.6 of the AQGGMP
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)	Refer to sections 3.1.6 & 3.1.7 of the AQGGMP
44	Any landfill gas condensate must be collected and returned to the leachate recycling system. (EPA GTA)	Refer to section 3.1.2 of the LMP
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.	Refer to section 3.1.7 of the AQGGMP
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)	Refer to section 3.1.7 of the AQGGMP
	WATER QUALITY AND MANAGEMENT	
47	Waste Management Facility Site The premises and the activities carried out therein must not pollute surface water or groundwater. (EPA GTA)	Refer to sections 1.3.4, 3, 4, 5 of the SWMP
48	<u>Groundwater and Leachate Management</u> 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)	Refer to sections 3.1.2 & 4.2.3 of the SWMP
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.	Refer to section 4.2.3 of SWMP
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;	Refer to the LMP 3.1.2

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	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)	3.1.2 3.1.4 4.1.2, 4.1.6 3.1.2 3.1.5, 4.1.2, 4.1.6, 4.2.1, 4.2.1, 4.2.2
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)	Refer to PA Condition 18 of Schedule 4
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.	Refer to PA Condition 18 of Schedule 4
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.	Refer to PA Condition 18 of Schedule 4
54	A Construction Quality Assurance Plan (CQAP) for the barrier system shall be prepared and included in the LEMP.	Refer to section 4.1.1 of the LMP
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	Refer to section 4.2 of the LMP

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	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)	Refer to section 3.1.4 of the LMP Refer to section 3.1.9 of the SWMP
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.	Refer to section 3.1.9 of the SWMP
58	<u>Surface Water Management</u> 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)	Refer to section 3.1.7 of the SWMP
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.	Noted
60	The Applicant shall install drainage so that the West Ridge Catchment shall not drain into the mine void.	Refer to section 3.1.6 of the SWMP
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.	Refer to section 4.2.7 of the SWMP
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.	Refer to section 4.2.8 of the SWMP Refer to section 4.2.2 of the LMP
63	ED3 shall not receive water stored in the Waste Rock Dam.	Refer to section 3.1.6 of the SWMP
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)	Refer to section 3.1.6 of the SWMP
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, d) unless otherwise approved in writing by the EPA. (EPA GTA)	Refer to section 3.1.6 of the SWMP
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	Refer to section 3.1.6 of the SWMP

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	documented in the LEMP. (EPA GTA)	
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)	Refer to section 4.1.3 of the SWMP
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 <i>Bunding and Spill Management</i> . (EPA GTA)	Refer to Section 4.2 of the SWMP
70	<u>ED3 – Management</u> 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.	Refer to section 3.1.7 of the SWMP
71	<u>Waste-water Management</u> 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	Refer to section 3.1.8 of the AQGGMP Refer to section 3.1.13 of the SWMP

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	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 d) contaminated by any flows discharged from the waste-water management system including waste-water, rainfall runoff, contaminated subsurface runoff or contaminated groundwater. e) Protection of Groundwaters. Underground water resources must not f) become contaminated by either the waste-water, or any flows discharged from the waste-water management system. g) 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. h) 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. <i>(EPA GTA)</i>	
72	Waste-water must only be applied to utilisation areas in conformance with Condition 71. <i>(EPA GTA)</i>	Refer to section 3.1.11 of the SWMP
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>	Refer to section 3.1.13 of the SWMP
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>	Refer to section 3.1.13 of the SWMP
75	Intermodal Facility Site 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>	Refer to PA condition 4 of schedule 7

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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)	Refer to section 3.4.2.3 of the IMF EMP
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)	Refer to section 3.4.2.3 of the IMF EMP
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)	Refer to the section 3.4.2 of the IMF EMP
79	<u>Waste Water Management</u> Contaminated stormwater and any sludges collected at the Crisps Creek intermodal facility must be disposed of at the landfill site. (EPA GTA)	Refer to PA condition 2 of schedule 5
80	There must be no vehicle or container wash down at the premises. (EPA GTA)	Refer to PA condition 11 of schedule 5
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)	Refer to PA condition 12 of schedule 5
	<i>Rivers and Foreshore Improvement Act 1948 – Part 3A Permit (DLWC GTAs)</i>	
82	<u>General</u> 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.	Noted
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.	Noted
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.	Noted
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.	Noted
86	Any vegetation or other material removed from the area of operations shall be disposed of to an	Noted

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	appropriate site where the debris cannot be swept back into the river during a flood.	
87	<u>Conditions Specific to the DA</u> 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.	Noted
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) <i>Managing Urban Stormwater: Soils and Construction</i> and <i>Managing Urban Stormwater: Treatment Techniques</i> .	Noted
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	Noted
90	No exotic trees are to be planted within the stream or within 40 metres from the top of the bank of the stream.	Noted
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	Noted
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.	Noted
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.	Noted
	NOISE	
94	<i>Hours of Construction and Operation</i> <u>Construction</u> All construction work at the waste management facility and intermodal facility site that creates	Noted

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	audible noise at residential premises must only be conducted between 7:00 am to 6:00 pm on Mondays to Fridays and between the hours of 8:00 am to 1:00 pm on Saturdays. There shall be no construction activities on Sundays or public holidays. <i>(EPA GTA)</i>	
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>	Noted
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>	Noted
97	<u>Operation</u> 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>	Refer to PA Condition 20 of Schedule 4
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>	Refer to PA Condition 20 of Schedule 4
99	Noise Limits <u>Waste Management Facility Site</u> 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. <i>(EPA GTA)</i>	Refer to PA Condition 19 of Schedule 4
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>	Refer to PA Condition 21 of Schedule 4
101	<u>Intermodal Facility Site</u>	Refer to PA Condition 15 of Schedule 5

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	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)	Refer to PA Condition 16 of Schedule 5
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)	Noted
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)	Noted
105	Noise Management The Applicant shall prepare and implement a Road Traffic Noise Management Protocol. The Applicant shall aim to meet the noise criteria set out in the EPA's <i>Environmental Guidelines for Road Traffic Noise</i> . The Protocol shall include, but not necessarily be limited to details about: a) scheduling movements outside critical time periods (for example, 6:00am to 7:00am); b) more stringent limits for noise emission from vehicles (eg. using specially designed "quiet" trucks and/or trucks required to use air bag suspension); c) driver education; d) limiting usage of exhaust brakes; e) type of road surface; f) in consultation with Mulwaree Shire Council exploring opportunities to reduce speed limits for trucks; g) regular maintenance of road surface; h) ongoing community liaison to monitoring complaints; and i) phasing in the increased road use; and j) options for overnight parking of haulage trucks.	Noted
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,	Noted

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	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 g) best practice; h) construction times; i) contingency measures where noise complaints are received; and j) monitoring methods and programs.	Noted
	NOISE IMPACTS	
108	Consultation with Pylara Pty Ltd 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	Noted

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	d) if adverse impacts are identified, modify where practicable road transport operations in order to mitigate such impacts.	
109	Land Acquisition 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.	Noted
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, <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; 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	Noted

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	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 its consideration, following which the independent valuer shall determine a fair and reasonable acquisition price as described in condition 109 and/or the terms upon which Pylara is to be acquired.	
111	The Applicant shall bear the costs of any valuation or survey assessment requested by the independent valuer, panel or the Director-General.	Noted
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.	Noted
	AIR QUALITY	
113	<u>Odour</u> <u>Waste Management Facility Site</u> 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)	Refer to sections 3.2.1 & 3.2.2 of the AQGGMP
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)	Refer to PA Condition 22 of Schedule 4
115	<u>Intermodal Facility Site</u>	Refer to PA Condition 8 of Schedule 5

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	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)	
116	Dust <u>Waste Management Facility Site</u> 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)	Refer to section 4.2 the AQGGMP
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)	Refer to section 4.2 the AQGGMP
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)	Refer to section 4.2 the 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)	Refer to section 4.1 the AQGGMP
120	All internal permanent roadways between the container transfer area and Collector Road must be sealed. (EPA GTA)	Refer to section 4.2 the AQGGMP
121	All sealed surfaces intended to carry vehicular traffic must be managed to minimise the quantity of wind blown dust emissions. (EPA GTA)	Refer to section 4.2 the AQGGMP
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.	Refer to section 4.2 the AQGGMP
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)	Refer to section 4.2.1 the AQGGMP
124	Intermodal Facility Site	Noted

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	<i>Construction and Operational Phases</i> 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)	Refer to PA Condition 4 of Schedule 7
126	Trucks entering and leaving the premises that are carrying excavated dusty Ambient Air Quality Monitoring Plan materials including clays, sands and soils must be covered at all times, except during loading and unloading. (EPA GTA)	Refer to PA Condition 4 of Schedule 7
127	All sealed and unsealed surfaces shall be managed to minimise the quantity of wind blown dust emissions. (EPA GTA)	Refer to PA Condition 4 of Schedule 7
128	ENVIRONMENTAL MONITORING (EPA GTAs) Waste Management Facility Site Odour Monitoring 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	Refer to PA Condition 22 of Schedule 4
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 <i>Approved Methods for the Sampling and Analysis of Air Pollutants</i> NSW December 1999, or other methods stipulated in the	Refer to PA Condition 22 of Schedule 4

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	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	Refer to section 5.1 the AQGGMP
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. 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.	Refer to PA Condition 17 of Schedule 4
132	Surface Water Monitoring 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.	Refer to PA Condition 18 of Schedule 4

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	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.	
133	Leachate Monitoring The Applicant shall prepare and implement a leachate quality and quantity monitoring program. The program must be documented in the LEMP. The program must include details on: (a) monitoring locations; (b) monitoring methodologies and standards to be employed; (c) monitoring frequency (d) the height of the saturation level in the waste; (e) the parameters and substances which are proposed to be monitored (eg redox potential, metals); and	Refer to section 5.1 of the LMP

Condition Compliance Report

	(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.	Refer to section 1.4.1 of the SWMP Refer to section 2.1 & 5.1.1 of the LMP
	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.	Refer to the existing BPMP
136	Noise Monitoring 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;	Refer to PA Condition 21 of Schedule 4

Condition Compliance Report

	(b) location of noise monitoring; and (c) frequency of noise monitoring.	
137	Geo-technical Stability 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. Reporting	Noted
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.	Noted
139	Intermodal Facility Site Water Monitoring Program 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	Refer to section 5.3.2 of the IMF EMP

Condition Compliance Report

	programs in the vicinity. The monitoring program must be documented in the LEMP.	
140	Noise Monitoring 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.	Superseded by PA schedule 4 condition 21 Superseded by PA Schedule 5, Condition 15
141	ROADWORKS 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.	Noted
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.	
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.	Noted
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.	Noted
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:	Noted

Condition Compliance Report

	(a) rehabilitation of the pavement at the intersection of Bungendore and Collector Roads; (b) provision of a right turn bay at the intersection of Bungendore and Collector Roads for south-bound traffic turning into Collector Road; (c) construction of a right turn bay on Bungendore Road for right-turning traffic into the Intermodal Facility. <i>(MSC GTA)</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>	Noted
147	The access point to the Waste Management Facility site at Collector Road shall be constructed to accommodate B-doubles. <i>(MSC GTA)</i>	Noted
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>	Noted
149	LANDSCAPING AND VEGETATION MANAGEMENT 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.	Superseded By PA condition 23 of the Schedule 4

Condition Compliance Report

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.	Noted
151	AGRICULTURAL RISKS 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.	Noted
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)	Superseded By PA condition 24 of the Schedule 4
153	FLORA AND FAUNA Terrestrial Flora and Fauna 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.	Refer to Section 4.1.7 of Landscape and Vegetation Management Plan (LVMP)
154	Aquatic Flora and Fauna 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.	Noted
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.	Noted

Condition Compliance Report

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.	Noted
	HERITAGE AND ARCHAEOLOGY <i>Aboriginal Heritage</i>	
157	<i>Non-Aboriginal Heritage</i> 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.	Refer to section 3.1.7 of the LVMP
158	CONTINGENCY PLANNING <i>Emergency Management Plan</i> 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.	Refer to the ERP
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;	Refer to the ERP

Condition Compliance Report

	(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 30 (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.	
160	COMPLAINTS PROCEDURES 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.	Refer to section 4.3.4 of the LEMP
161	The complaints register shall be available for inspection upon request by the Director-General, EPA, DLWC, and the CLC.	Noted

Appendix D- Supplementary Environmental Management Plans

Appendix D1 Rail Noise Code of Conduct

**Why do we need
this document?**

To effectively manage impacts on the environment from rail operations when operating to and from the Veolia Crisp Creek site

**Who does the
document apply to?**

The document applies to the following people:

- Train Crew
- Service Delivery
- Health, Safety and Environment

**Where does the
document apply?**

All Veolia Rail Operations

Key points

Train operations are to be conducted in accordance with the Pacific National Train Handling Guidelines

All incidents, hazards or near miss events are to be reported immediately

Any faulty or defective equipment is to be reported immediately and tagged out for repair

**What is in the
document?**

1. Rail Operation Management	2
2. Equipment	2
3. Train Operation	3
4. Health, Safety and Environment	3
5. Monitoring	4
6. Key Contacts	4
7. Related documents	5

1. Rail Operation Management

Area of Operation

- 1.1 The Crisps Creek Intermodal site is accessed via the Goulburn to Canberra Country Rail Network (CRN).
- 1.2 Trains with loaded waste containers travel south from Sydney through to Crisps Creek for unloading and transfer to the Woodlawn Bioreactor. Empty waste containers are then reloaded for the northern return to Sydney.

Operating Hours

- 1.3 The CRN is a multi-user network operating twenty-four (24) hours per day, everyday of the year.

Network

- 1.4 The CRN is maintained and operated by John Holland Rail.
- 1.5 The network is regulated under the Rail Safety National Law by the Office of the National Rail Safety Regulator.

2. Equipment

Locomotives and Wagons

- 2.1 Locomotives and Wagons are maintained in accordance with defined maintenance policies and schedules to ensure that the rolling stock is safe and fit for purpose.
- 2.2 Safety checks are performed on the rolling stock prior to departure to ensure the integrity of the train and ensure that loads are secure.
- 2.3 All rolling stock must be registered with the rail network provider over which it operates.
- 2.4 Any defects in rolling stock or track will be reported and managed by the respective infrastructure or asset owner.

3. Train Operation

Train Crew

-
- 3.1 Train crew shall be trained and deemed competent in the operation of the rolling stock by a registered training organisation.
 - 3.2 Train crew shall use best practice train handling techniques as defined within the Pacific National Train Handling Guidelines.
 - 3.3 Train crew shall maintain a high level of professional conduct, and as a minimum:
 - 3.3.1. Be fit for duty
 - 3.3.2. Adhere to posted speed limits
 - 3.3.3. Use horn only as a warning device and as designated by network rules
 - 3.3.4. Manage the train to reduce noise impacts of bunching and stretching
 - 3.3.5. Employ methods to reduce periods of idling in built up areas
 - 3.3.6. Follow instructions given by network control and emergency services
-

Fitness for Duty

- 3.4 The Pacific National Integrated Health, Safety and Environment Management System has embedded systems for managing train crew fitness for duty as required under the Rail Safety Law. These include fatigue management and drug and alcohol management standards and procedures.
-

4. Health, Safety and Environment

Health and Fitness for Duty

-
- 4.1 Train crew shall hold a current Category 1 rail medical classification.
 - 4.2 The Pacific National Integrated Health, Safety and Environment Management System has embedded systems for managing train crew fitness for duty as required under the Rail Safety Law. These include fatigue management and drug and alcohol management standards and procedures.
-

Safety and Environment

- 4.3 Pacific National shall maintain an Integrated Health, Safety and Environment Management System to ensure that everything reasonably practicable is carried out to reduce the potential risk of injury, to employees, contractors and visitors or harm to the environment or community. All employees, contractors and visitors have a duty to act in a responsible manner and to carry out works in such a way as to prevent injury to themselves and others and also to prevent environmental harm.
- 4.4 All incidents, hazards and near miss events are to be reported as soon as reasonably practicable in accordance with the Pacific National Incident Reporting and Management Standard.
-

5. Monitoring

Implementation and monitoring

- 5.1 The Veolia Service Delivery team shall be responsible for the communication and implementation of this code of conduct.
- 5.2 Monitoring of performance will be carried out at regular intervals or in response to direct operational or community concerns.
-

6. Key Contacts

Complaints

- 6.1 Complaints can be made direct via the Asciano Internet page, address: <http://asciano.com.au/contact/complaints>
-

PN Operations

- 6.2 Operations can be contacted via phone: 02 9893 2801
-

John Holland

- 6.3 Network Control can be contacted via phone: 1300 661 390
-

7. Related documents

Our safety standards

- [PN-STD-SAF Shunting Standard](#)
- [04-PN-STD-SAF Incident Reporting & Management Standard](#)

Other PN documents

- ST0007 – Train Operations
 - ST0005 – Train Inspection
 - ST0009 – Shunting
 - RN37 – Goulburn to Canberra Route Knowledge Package
-

PLAN**Operational Environmental Management**

Appendix D2-Emergency Management Plan Crisps Creek Intermodal Facility



EMERGENCY MANAGEMENT PLAN

Crisps Creek Intermodal Facility
Bungendore Road, Tarago NSW 2580





NSW Woodlawn Crisps Creek IMF Emergency Management Plan

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NSW Woodlawn Crisps Creek IMF Emergency Management Plan

REVISION HISTORY

Review	Date	Heading	Details of Change	Reviewer
1	29/07/2013	All sections	New document	H Gundry
2	28/8/2013	All sections	Contacts, foreseeable emergencies	H Gundy

Authorisation: _____

Contact Matrix

CONTACTS

The Rail Infrastructure Manager (RIM) shall maintain a current list of emergency contacts phone numbers for organisations listed in the Schedules below.

REGULATORY AUTHORITIES

Authority	Contact Details
Office of National Rail Safety Regulator	contact@transport.nsw.gov.au (02) 8263 7100
Transport for NSW	(02) 8202 2202
Environment Protection Authority	131 555
WorkCover NSW	131 050

EMERGENCY SERVICES

Authority	Contact Details
All Emergency Services	000
Goulburn- Mulwaree LEMO	(02) 4823 4444



NSW Woodlawn Crisps Creek IMF Emergency Management Plan

SUPPORT SERVICES

Task	Contact Details
Medical Practitioner	02 4821 1188; 02 4822 7788; 02 4823 0200
Crane Operator	Hollingworth Cranes 02 4822 1818
John Holland Rail Main line control.	JHR CRN South West Network Control, Emergencies Phone Contact; 02 4028 9542
Pacific National All Live train operations 24/7 management, incident reporting.	Parramatta District Control Centre (DCC) 02) 9893 2782; (02) 9893 2802; 1800 686 957

INCIDENT MANAGEMENT

Officer	Contact Details
Incident Manager	Crisps Creek Rail Infrastructure Manager who hands responsibility to either Police or emergency service with responsibility
Investigation Coordinator	Rail Infrastructure Manager



NSW Woodlawn Crisps Creek IMF Emergency Management Plan

Crisps Creek Intermodal Facility – Tarago NSW

A. INTRODUCTION

The Crisps Creek Intermodal Facility is operated by Veolia Environmental Services (Australia) Pty Ltd at Tarago in NSW. The function of the IMF is a transfer station for containers of putrescible waste arriving from Sydney by rail and transferred to the Woodlawn bioreactor site by road some 8 kms from the siding.

B. HOW THE SIDING WORKS

Veolia has consent for Pacific National to line haul a maximum of two trains per day Monday to Saturday. Each train carries up to 55 sealed containers of putrescible waste from the Clyde Transfer Terminal in Sydney, to the Crisps Creek Intermodal Terminal.

Waste is transferred in “40 foot” sealed shipping containers on a dedicated train. On arrival at Crisps Creek, the train is secured by the train crew with park brakes and locomotives turned off. Veolia then assumes responsibility for unloading and reloading the train

A mobile container crane transfers full containers from the train to a fleet of road trucks in accordance with Pacific National’s Freight Loading Manual. Loaded trucks travel along Bungendore Road and the Tarago Collector Road to the Woodlawn facility, emptied by a conventional tailgate tipping process and the empty containers returned to Crisps Creek IMF. Empty containers are reloaded onto the train by the mobile container crane. When the whole process is completed, responsibility for the train operation transfers back to Pacific National for the return journey to Clyde.

C. SITE CONSIDERATIONS

- Site access - distance of site from Emergency Services
- Rail siding management in accordance with Pacific National’s SOP.

D. EMERGENCY SERVICES PRIMARY ROLES

- | | |
|----------------------------|--|
| • NSW Police | Incident controller |
| • NSW Fire Brigade | Rescue, structural fires |
| • Rural Fire Service | Fires, support for NSW FB |
| • Ambulance | Injury/death response |
| • State Emergency Services | Natural disaster response, supports other services |

E. EMERGENCY SERVICES CENTRES

- | | |
|----------------------------|------------------------------------|
| • Police | Tarago (8 kms) , Goulburn (45 kms) |
| • NSW Fire Brigade | Goulburn (45 kms) |
| • Rural Fire Service | Tarago (8 kms) |
| • Ambulance | Goulburn (45 kms) |
| • State Emergency Services | Goulburn (45 kms) |
| • Hospital | Goulburn (45 kms) |



NSW Woodlawn Crisps Creek IMF Emergency Management Plan

Foreseeable Emergencies

1. DERAILMENT

1.1 Magnitude and Severity

- Unstable rolling stock, compressed air, moving machinery, manual handling hazards, sharp jagged edges, re-railing equipment, all vehicular traffic attending, potential injury, hazardous materials, breakdown in communications.

1.2 Risk

- Low

1.3 Mitigation

- Pacific National recovery protocol
- Veolia environmental recovery protocol

1.4 Callout Procedure

- Site supervisor to initiate with situation report to Incident Manager (RIM) and emergency services as required

1.5 Initial Response

- Advise Pacific National
- Advise John Holland Rail, particularly if derailment impacts the main line such that Train Control Centre can be advised by JHR/PN.
- Make the area safe
- Establish if medical assistance required
- Account for personnel
- Assess the incident for warrant of emergency services. Notify as required.
- Account for site staff numbers

1.6 Recovery

- Pacific National to arrange recovery and removal of rolling stock
- Veolia to arrange for track inspection and repair as necessary. Arrange for cranes and dogmen if required, rail maintainer to check/repair rail.
- Veolia to arrange for recovery of damaged containers. Cleanup of waste spill in accordance with Environment Protection Authority protocol as set out in Licence.
- Monitor and respond to first flush detention for potential pollution from waste or fuel spill.
- Transport waste to Bioreactor as appropriate



NSW Woodlawn Crisps Creek IMF Emergency Management Plan

1.6 Site Security

- Post observer at main entrance to direct response vehicles to site and restrict unauthorised entry

1.7 Incident Manager's role

- Liaise with emergency services providing them with appropriate information to respond to the incident
- Liaise with Pacific National as required
- Coordinate recovery
- Obtain all details of the incident including preservation of evidence
- Establish communications with emergency services, Pacific National, John Holland Rail, contractors as required
- Be responsible for the welfare and health of staff and contractors impacted by the incident
- Ensure adequate equipment and supplies are available for recovery
- Investigate and report the incident to ONRSR, WorkCover NSW, Office of Environment and Heritage, Veolia General Manager as required

2. CONTAINER UNLOAD/LOAD

2.1 Magnitude and Severity

- Container twist locks not effectively disengaged with potential to lift rolling stock frame off bogie, container drops, overturning loader, unstable rolling stock, moving machinery, manual handling hazards, sharp jagged edges, all vehicular traffic attending, potential injury, hazardous materials, pollution, and breakdown in communications.

2.2 Risk

- Low

2.3 Mitigation

- Safe handling work practice
- Trained lifting machinery operators
- Veolia environmental recovery protocol

2.4 Callout Procedure

- Site supervisor to initiate with situation report to Incident Manager (RIM) and emergency services as required



NSW Woodlawn Crisps Creek IMF Emergency Management Plan

2.5 Initial Response

- Pacific National to assess damage to rolling stock
- Make the area safe
- Establish if medical assistance required
- Account for personnel
- Assess the incident for warrant of emergency services attendance. Notify as required.

2.6 Recovery

- Pacific National to certify rolling stock is operational
- Veolia to arrange to arrange for crane/lifting equipment as required. Veolia to arrange for recovery of damaged containers.
- Cleanup of waste spill in accordance with Environment Protection Authority protocol as set out in Licence.
- Monitor and respond to first flush detention for potential pollution from waste or fuel spill.
- Transport waste to Bioreactor as appropriate

2.7 Site Security

- Post observer at main entrance to direct response vehicles to site and restrict unauthorised entry

2.8 Incident Manager's role

- Liaise with emergency services providing them with appropriate information to respond to the incident
- Liaise with Pacific National as required for inspection of rolling stock if required
- Coordinate recovery
- Obtain all details of the incident including preservation of evidence
- Establish communications with emergency services, Pacific National, contractors as required
- Be responsible for the welfare and health of staff and contractors impacted by the incident
- Ensure adequate equipment and supplies are available for recovery
- Investigate and report the incident to ONRSR, WorkCover NSW, Office of Environment and Heritage, Veolia General Manager as required



NSW Woodlawn Crisps Creek IMF Emergency Management Plan

3. CONTAINER TRUCK ACCIDENT

3.1 Magnitude and Severity

- Container drops, vehicle overturning, moving machinery, manual handling hazards, sharp jagged edges, all vehicular traffic attending, potential injury, hazardous materials, pollution, and breakdown in communications.

3.2 Risk

- Low

3.3 Mitigation

- Safe handling work practice
- Train truck drivers
- Veolia environmental recovery protocol

3.4 Callout Procedure

- Site supervisor to initiate with situation report to Incident Manager (RIM) and emergency services as required

3.5 Initial Response

- Make the area safe
- Establish if medical assistance required
- Account for personnel
- Assess the incident for warrant of emergency services attendance. Notify as required.

3.6 Recovery

- Veolia to arrange for crane/lifting equipment as required
- Veolia to arrange for recovery of damaged container.
- Cleanup of waste spill in accordance with Environment Protection Authority protocol as set out in Licence.
- Monitor and respond to first flush detention for potential pollution from waste or fuel spill.
- Transport waste to Bioreactor as appropriate

3.7 Site Security

- Post observer at main entrance to direct response vehicles to site and restrict unauthorised entry



NSW Woodlawn Crisps Creek IMF Emergency Management Plan

3.8 Incident Manager's role

- Liaise with emergency services providing them with appropriate information to respond to the incident
- Coordinate recovery
- Obtain all details of the incident including preservation of evidence
- Establish communications with emergency services, contractors as required
- Be responsible for the welfare and health of staff and contractors impacted by the incident
- Ensure adequate equipment and supplies are available for recovery
- Investigate and report the incident to ONRSR, WorkCover NSW, Office of Environment and Heritage, Veolia General Manager as required

4. BUSHFIRE THREAT

4.1 Magnitude and Severity

- Smoke hazard, vehicle collision, heat exhaustion, burning equipment

4.2 Risk

- Low

4.3 Mitigation

- Site extinguishes for first response
- Evacuation of personnel

4.4 Callout Procedure

- Site supervisor to initiate with situation report to Incident Manager (RIM) and emergency services as required

4.5 Initial Response

- Make the area safe
- Establish if medical assistance required
- Account for personnel
- Assess the incident for warrant of emergency services attendance. Notify as required.

4.6 Recovery

- Pacific National to arrange recovery of rolling stock
- Veolia to arrange for recovery of damaged container.



NSW Woodlawn Crisps Creek IMF Emergency Management Plan

- Cleanup of waste spill in accordance with Environment Protection Authority protocol as set out in Licence.
- Monitor and respond to first flush detention for potential pollution from waste or fuel spill.
- Transport waste to Bioreactor as appropriate

4.7 Site Security

- Post observer at main entrance to direct response vehicles to site and restrict unauthorised entry

4.8 Incident Manager's role

- Liaise with emergency services providing them with appropriate information to respond to the incident
- Coordinate recovery
- Obtain all details of the incident including preservation of evidence
- Establish communications with emergency services, contractors as required
- Be responsible for the welfare and health of staff and contractors impacted by the incident
- Ensure adequate equipment and supplies are available for recovery
- Investigate and report the incident to ONRSR, WorkCover NSW, Office of Environment and Heritage, Veolia General Manager as required

5. MANAGEMENT OF NOTIFIABLE OCCURANCES

Category A:

- (i) an accident or incident that has caused death, serious injury or significant property damage;
- (ii) a running line derailment;
- (iii) a running line collision between rolling stock;
- (iv) a collision at a road or pedestrian level crossing between rolling stock and either a road vehicle or a person;
- (v) a suspected terrorist attack;
- (vi) an accident or incident involving a significant failure of a safety management system that could have caused death, serious injury or significant property damage;
- (vii) any other accident or incident likely to generate immediate or intense public interest or concern;



NSW Woodlawn Crisps Creek IMF Emergency Management Plan

Initial response:

- The rail safety worker (or non rail safety worker if the RSW is incapable) is to immediately radio VES Woodlawn base that an emergency exists and for Woodlawn to call Emergency 000 for emergency service response.
- The RIM is notified and the Emergency Management Plan is activated
- In accordance with the EMP, the site is secured by VES personnel
- In conjunction with Police, the RIM investigates the incident and prepares a report for the Regulator. Evidence is secured as appropriate
- The RIM reports to the Regulator as required by Sec 57 of the Law

Recovery:

- Physical and environmental remedial work commences
- Safety issues reviewed and any response immediately actioned by the RIM
- Incident reviewed by the VES as the rail transport operator, safety matters identified, prioritised and action to implement changes as appropriate
- Changes notified to rail safety workers emergency services and VES NIMS

Category B:

As outlined in the Rail Safety National Law National Regulations 2012

Initial response:

- The rail safety worker (or non rail safety worker if the RSW is incapable) is to immediately radio VES Woodlawn base that an emergency exists and for Woodlawn to call Emergency 000 for emergency service response if the situation warrants such a response.
- The RIM is notified and the Emergency Management Plan is activated
- In accordance with the EMP, the site is secured by VES personnel
- In conjunction with Police, the RIM investigates the incident and prepares a report for the Regulator. Evidence is secured as appropriate
- The RIM reports to the Regulator as required by Sec 57 of the Law



Step #	Task / Process Steps or Work Area	Hazards	Risk Level - Before Controls L C R	Hazard / Risk List (Existing and New)	Restral Risk Level - After Controls L C R	Signoff/Date
	Check how task / process down into logical steps or describe work / location	Against each step or location list the hazards that may adversely affect people, plant / equipment, or the environment - refer to principles on back page	Unlikely / Consequence = Rare Level	For each hazard / risk list the existing or assumed control measures to be applied - Refer to Hazard Control hierarchy on back page and justify why control measures are selected - If a 'substitution' selected as not possible to eliminate use of substance	Unlikely / Consequence = Risk / Low	Attestatory for Use in MSW
	Traffic management Zones (ref to Map)	- Collision with other vehicles - Collision with Container handler - Collision with personnel - Collision at central entry point	3 40 120	- Traffic management - no traffic cross over - All traffic to operate in the one zone at a time - do not change zones until the current zone is complete. - Container handler operator to change signage and notify all vehicles of zone of operation and the direction of traffic - All traffic on hard stand area to travel in a Westerly direction - All traffic on sealed roads to travel in a Easterly direction - All vehicles to have 2 way radios - All traffic to follow signage - All traffic to follow direction of container handler operator - All personnel to wear high visibility clothing	0.5 40 20	Site Manager

The map illustrates the layout of the Woodlawn Bioreactor Project. It shows the Mulwale River to the west and Crisp's Creek to the east. Two main operational zones are highlighted: the 'EAST ZONE' in green and the 'WEST ZONE' in red. The map includes various roads, paths, and landmarks such as the 'WOODLAWN BIOREACTOR' and 'CRISP'S CREEK'. A north arrow is located in the top right corner. The map also shows the 'MULWALE RIVER' and 'CRISP'S CREEK' with their respective banks and surrounding areas.

SCALE

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410 420 430 440 450 460 470 480 490 500 510 520 530 540 550 560 570 580 590 600 610 620 630 640 650 660 670 680 690 700 710 720 730 740 750 760 770 780 790 800 810 820 830 840 850 860 870 880 890 900 910 920 930 940 950 960 970 980 990 1000

MAUNSELL

WOODLAWN BIOREACTOR PROJECT

CRISP'S CREEK INTERMODAL

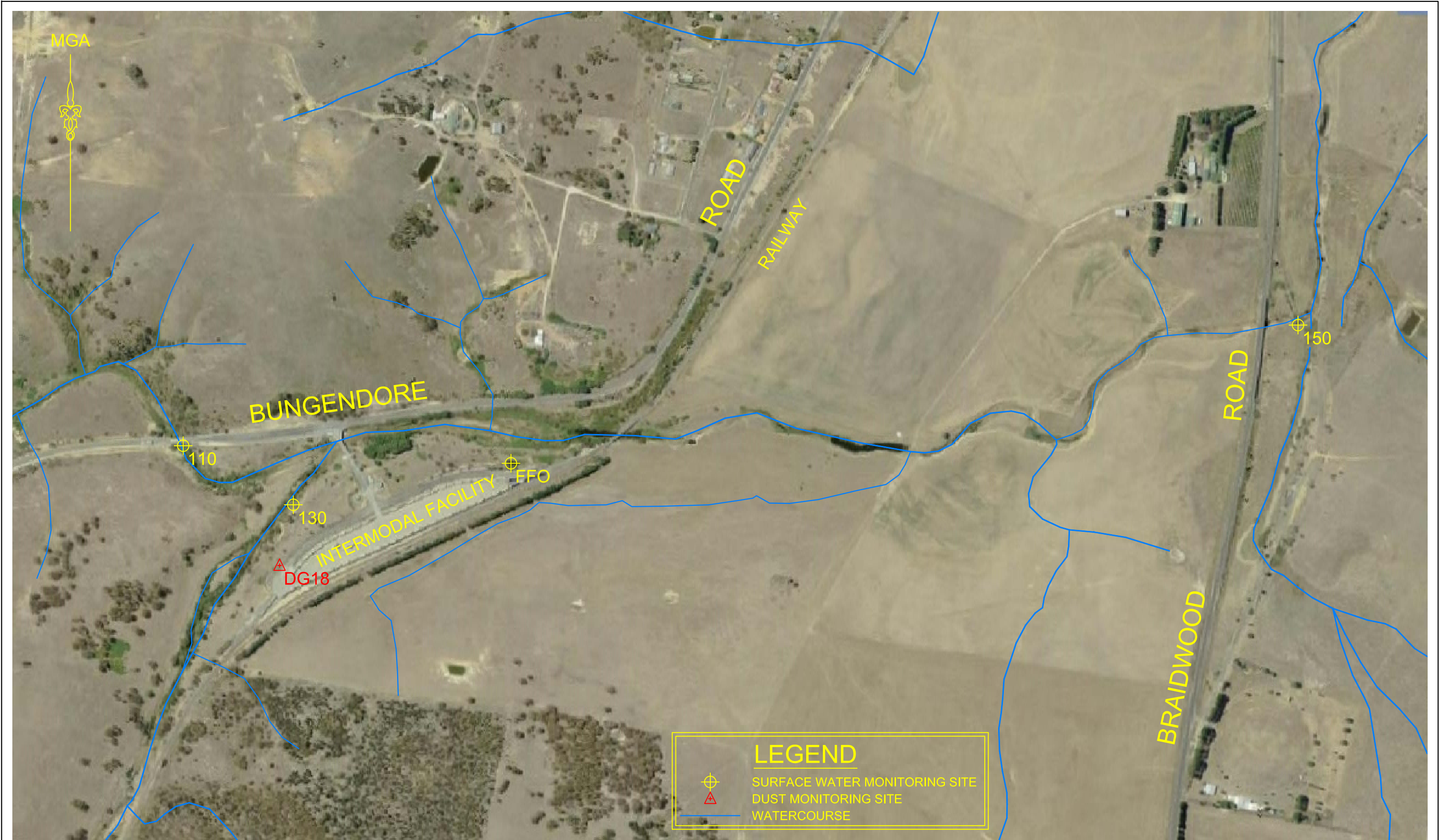
WOODLAWN BIOREACTOR PROJECT

CRISP'S CREEK INTERMODAL

10407001-250

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Document: Appendix D2 Z1 Emergency Management Plan_IMF.doc
Last printed: 9/4/2016 10:05:00 PM Page 13 of 1

Appendix E – IMF Monitoring Locations



File Name: J:\Surveyors\Jobs\Veolia\16735 Comp Model\CAD\16735-15 Intermodal Monitoring Points.dwg

ISSUE	AMENDMENT	DATE	SCALE 1:6000 072144216288360 Metres Liability limited by a scheme approved under Professional Standards Legislation. A3 SHEET	VEOLIA ENVIRONMENTAL SERVICES LandTeam LandTeam Australia Pty Ltd ABN 35 300 283 592 Goulburn Office 36 Montague Street Postal: PO Box 1040 GOULBURN NSW 2580 p: (02) 4821 1033 f: (02) 4821 7238 e: goulburn@landteam.com.au w: www.landteam.com.au Integrated Management System		VEOLIA ENVIRONMENTAL SERVICES		DATE: 13/04/2016	
A	INITIAL ISSUE	13/04/2016				PLAN SHOWING MONITORING SITE LOCATIONS VEOLIA INTERMODAL FACILITY BUNGENDORE ROAD, TARAGO		SURVEYED: N/A	
						DRAWN: MK			
						CHECKED: JK			
						DRAWING No.		16735-15	
					DATUM	N/A	CONTOUR INTERVAL	N/A	

Appendix F – Container Maintenance Program

Container Inspection and Maintenance Actions

Stage	Location	Comp. Condition	Process	Current actions	Improvements	Responsibility	Document
One	CTT	<i>Integrity and performance of rubber seals</i>	Compacting waste in containers	Two operators located in the compaction bay visually inspect the container after the compaction process for any material preventing sealing. The seal is then scraped with a tool and/or sprayed with a pressure cleaner to remove any debris inhibiting a clean seal.	No improvement. Process documented in procedure. Pre-start toolbox meeting to be conducted at CTT to re-confirm cleaning requirement.	CTT Operators	PRO-NSW-219-046-1 Clyde Transfer Terminal Compactor Pit Procedure PRO-NSW-219-028-6 NSW Clyde Transfer Terminal Odour Management
Two	CTT	<i>Container integrity</i> <i>Integrity and performance of rubber seals</i>	Storing and transporting containers to CCIMF	Container Handler observes the quality of the container when placing it within the compaction pit. If a problem is identified, the container number is noted on the Daily Manifest for repair at the WB and a fault report is raised in SAP PM for action. If required, containers can be repaired at CTT.	Process is being undertaken but not documented in procedure. Procedure updated.	CTT Container Handler Operator	PRO-NSW-219-031-4 NSW Clyde Transfer Terminal Operating Terex Container Handler FOR-NSW-218-050-5 NSW Woodlawn Bioreactor Container Maintenance
Three	CCIMF / WB	<i>Container integrity</i> <i>Integrity and performance of rubber seals</i>	Transporting containers to IMF	Inspection of containers during morning rail siding works and notification of container issues with operators.	Substantial improvements have been made to this procedure. Improvements include adhering magnetic markers to containers identified for maintenance works. This enables tracking of the container for lodgement with the SAP PM maintenance program on arrival at the WB.	CCIMF Operator WB Operator WB Leading Hand	WIS-NSW-218-010-3 NSW Woodlawn Crisps Creek / IMF Loading and Unloading Containers Instruction WIS-NSW-218-103-1 NSW Woodlawn Tipping Containers on Columbia Tipper Work Instruction FOR-NSW-218-050-5 NSW Woodlawn Bioreactor Container Maintenance FOR-NSW-218-110-1 NSW

Container Inspection and Maintenance Actions

Stage	Location	Comp. Condition	Process	Current actions	Improvements	Responsibility	Document
							Woodlawn Bioreactor Container Inspection Checklist
Four	WB	<i>Container integrity</i> <i>Integrity and performance of rubber seals</i> <i>Performance of mechanisms to filter and remove odour where required, including cleaning and performance testing</i> <i>Container Cleaning</i>	Repair of containers	Any containers identified for maintenance by this process are removed and managed through Veolia's SAP Plant Maintenance system. Containers are removed from trailers at the WB washbay storage area and a container maintenance checklist is completed.	No improvements required. Procedure in place and repairs documented.	WB Maintenance Manager WB Maintenance Operator	FOR-NSW-218-050-5 NSW Woodlawn Bioreactor Container Maintenance FOR-NSW-218-110-1 NSW Woodlawn Bioreactor Container Inspection Checklist
Five	WB	<i>Container integrity</i> <i>Container Cleaning</i>	Wheel wash	When the container doors are opened on the tipping platform at the WB, liquid from within the waste mass may be present that could drip onto the trailer during the tipping process from time-to-time. Tipper operator notifies truck driver to drive across wheel wash located at the exit of the void. All process water is returned to the Bioreactor.	No improvements required. Procedure in place.	Truck Drivers	PRO-NSW-218-032-2 NSW Woodlawn Bioreactor Wheelwash

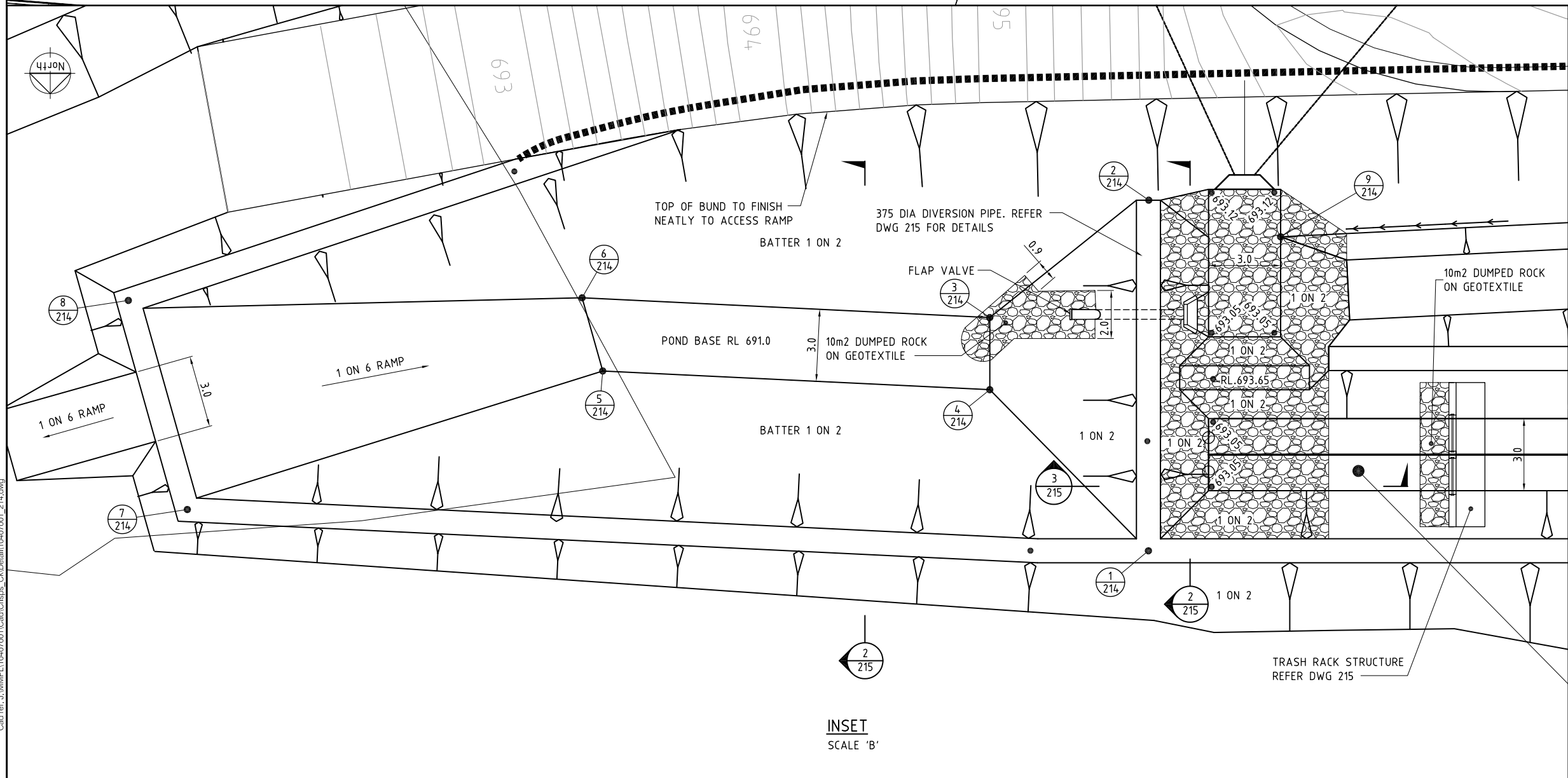
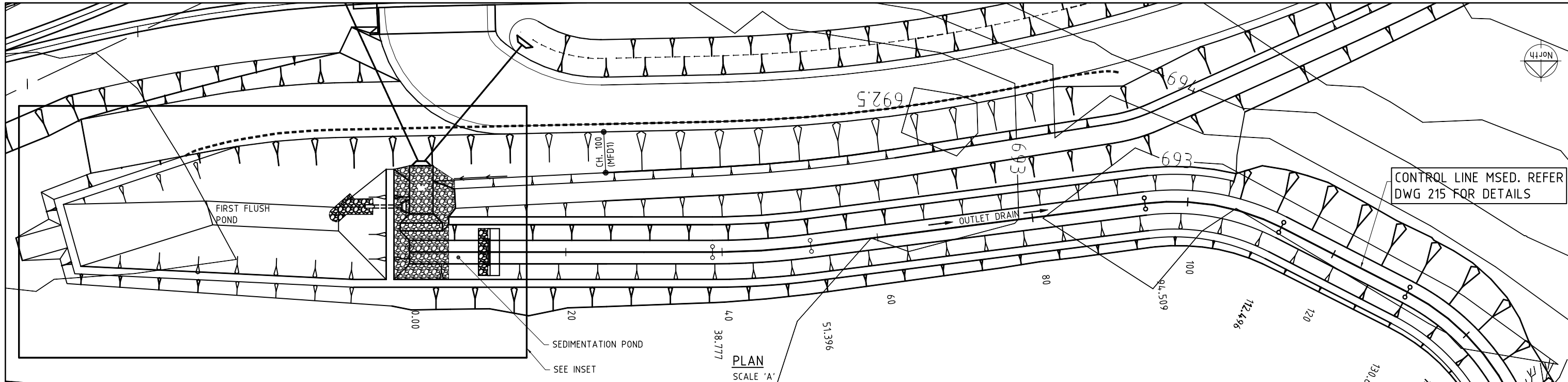
Stage	Location	Comp. Condition	Process	Current actions	Improvements	Responsibility	Document
Health, Safety, Environment & Quality (HSEQ) Compliance Programs							
Ongoing	CTT	Container integrity	HSEQ Inspection	Every week at the CTT the weekly inspection checklist is completed that includes checking containers for seepage and odour around the boundary of the facility.	No improvements required.	CTT HSEQ Officer	FOR-NSW-219-002-20 NSW Clyde Transfer Terminal Weekly Site Inspection Checklist
Ongoing	CCIMF	Container integrity Integrity and performance of rubber seals Performance of mechanisms to filter and remove odour where required, including cleaning and performance testing Container Cleaning	Storing and transporting containers to WB	CC IMF Operator informs truck drivers of containers requiring maintenance as noted on the daily manifest. Drivers tip container and deliver to maintenance team for works to be conducted.	A red magnetic marker is now adhered to the back of the container requiring maintenance. This ensures the container is 'tagged' and removed for maintenance. A new Container Inspection Checklist has been developed for use at the Columbia Tipper to allow Operators to identify containers with maintenance faults and remove them for repair immediately.	WB Maintenance Operator	FOR-NSW-218-050-5 NSW Woodlawn Bioreactor Container Maintenance FOR-NSW-218-110-1 NSW Woodlawn Bioreactor Container Inspection Checklist WIS-NSW-218-103-1 NSW Woodlawn Tipping Containers on Columbia Tipper Work Instruction
Ongoing	WB / CCIMF	Container integrity Integrity and performance of rubber seal	HSEQ Monthly inspection	The WB HSEQ Officer conducts a monthly site inspection that includes checking the containers for leakage and offensive odour emission from the site.	No improvements required. Procedure in place.	WB HSEQ Officer	FOR-NSW-218A-001-11 NSW Woodlawn IMF Monthly Site Inspection Checklist

Stage	Location	Comp. Condition	Process	Current actions	Improvements	Responsibility	Document
Ongoing	CTT / CCIMF & WB	<i>Container integrity</i> <i>Integrity and performance of rubber seals</i> <i>Performance of mechanisms to filter and remove odour where required, including cleaning and performance testing</i> <i>Container Cleaning</i>	Inspections & Testing Register	An inspection and testing register ensures that the abovementioned procedures are carried out at the inspection and testing frequency required.	No improvements required. Procedure in place.	CTT, CCIMF & WB HSEQ Officers	REG-NSW-218-006-13 NSW Woodlawn Bioreactor Inspection and Testing Register (incorporating CCIMF) REG-NSW-219-005-22 NSW Clyde Transfer Terminal Inspection and Testing Schedule
Ongoing	WB	<i>Container integrity</i> <i>Integrity and performance of rubber seals</i> <i>Container Cleaning</i>	Preventative Maintenance schedule	Weekly inspections of containers at the CTT & CCIMF	Increased inspection frequency at the CTT and CCIMF. Formalised procedure and traceable SAP PM tracking system now in place to check and tag out containers between the CTT and WB.	CTT, CCIMF & WB WB Maintenance Manager	FOR-NSW-218-110-1 NSW Woodlawn Bioreactor Container Inspection Checklist FOR-NSW-218-050-5 NSW Woodlawn Bioreactor Container Maintenance
Ongoing	CTT	<i>Performance of mechanisms to filter and remove odour where required, including cleaning and performance testing</i>	Preventative Maintenance schedule	Carbon filter replacement is conducted annually in a 4 day cycle capturing all containers rotated through the facility. Improvements required in documentation and record keeping procedure.	CTT Facility Manager to improve record keeping procedure and develop documented replacement schedule	CTT Facility Manager CTT Maintenance Manager	PRO-NSW-219-012-7 NSW Clyde Transfer Terminal Container Maintenance



Container Inspection and Maintenance Actions

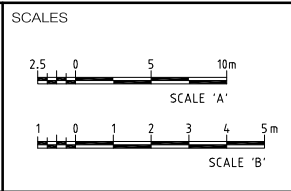
Appendix G – First Flush System Drawings



SETOUT POINT TABLE			
	EASTING	NORTHING	LEVEL
1 214	74 0662.007	114 513.362	694.05
2 214	74 0661.992	114 498.771	694.05
3 214	74 0668.607	114 503.654	691.0
4 214	74 0668.607	114 506.658	691.0
5 214	74 0684.711	114 505.878	691.0
6 214	74 0685.570	114 502.833	691.0
7 214	74 0701.996	114 511.643	694.05
8 214	74 0704.449	114 502.943	694.05
9 214	74 0656.507	114 500.296	693.10

REVISIONS				
No.	BY	DATE	DESCRIPTION	APPD
B	SGG	1.12.03	AS BUILT	
A	RHS	24.05.02	ISSUED FOR CONSTRUCTION	M.D.B.

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DRAFTING	RHS	GBS	Original signed by M.D. BROWN
			DATE 24.05.02

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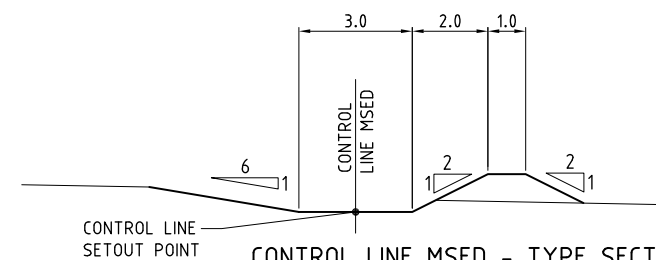


WOODLAWN BIOREACTOR PROJECT CRISP'S CREEK INTERMODAL SEDIMENTATION POND ARRANGEMENT		
10407001-214		B

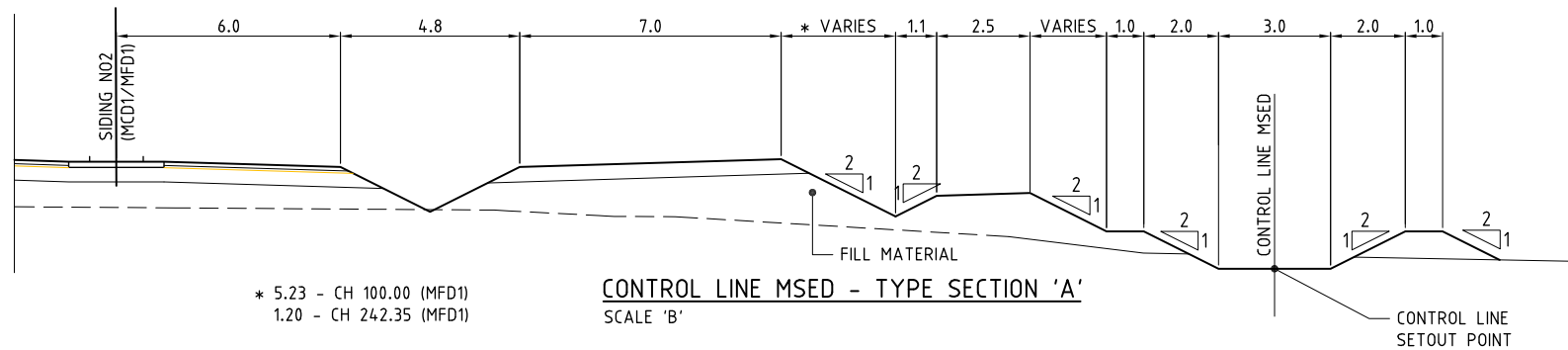
HORIZONTAL SETOUT DETAILS		HORIZONTAL GEOMETRY		VERTICAL GEOMETRY		TYPE SECTION DATUM 690.000		
CHAINAGE	EASTING	NORTHING						
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	740620.730	114509.362	R					
	740608.145	114508.566	D=43.113					
	740565.375	114503.141	R=30.000					
	740547.922	114506.201	D=18.156					
	740531.762	114514.478	R=30.000					
	740515.582	114544.101	D				692.200	
	740516.401	114552.477					692.200	
DESIGN LEVEL MSED	693.050	693.000	692.950	692.900	692.850	692.800	692.750	692.700
EXISTING LEVEL	692.680	692.762	692.773	692.858	692.927	692.961	692.985	692.905
CHAINAGE	0	10	20	30	40	50	60	70

LONGITUDINAL SECTION - CONTROL LINE MSED

HORIZ SCALE 'A'
VERT SCALE 'B'

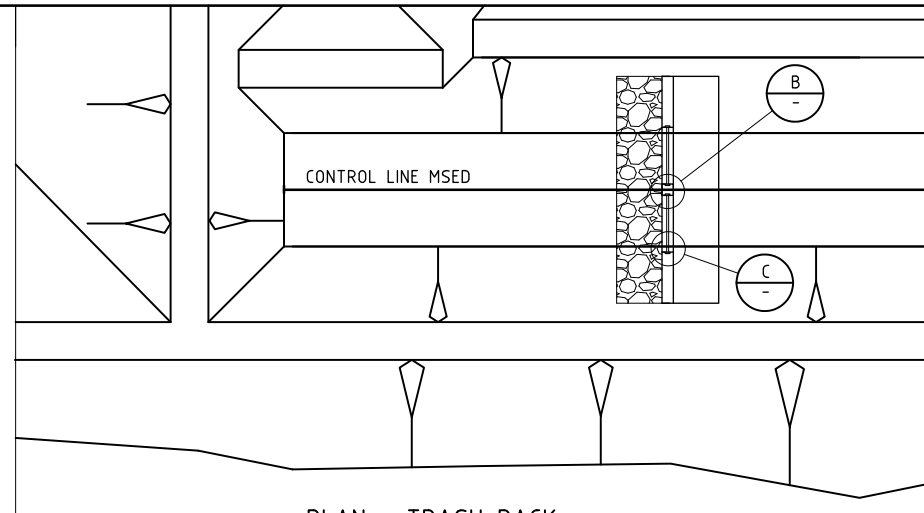


CONTROL LINE MSED - TYPE SECTION 'B'
SCALE 'B'

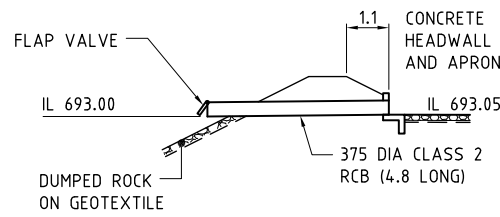
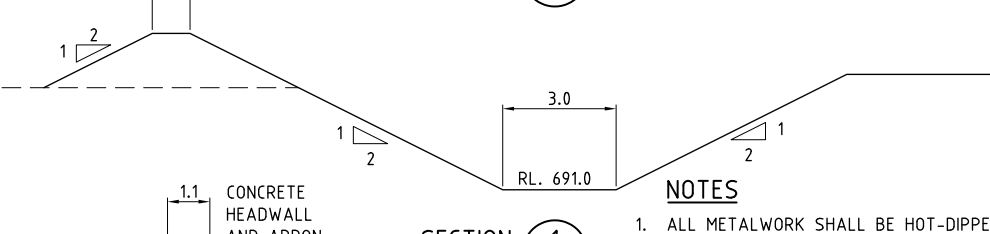
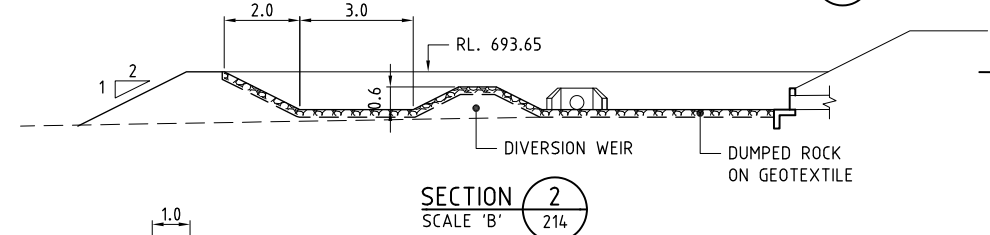
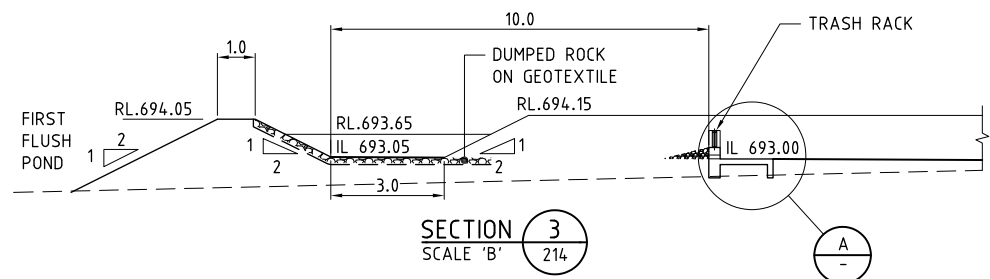


* 5.23 - CH 100.00 (MFD1)
1.20 - CH 242.35 (MFD1)

CONTROL LINE MSED - TYPE SECTION 'A'
SCALE 'B'



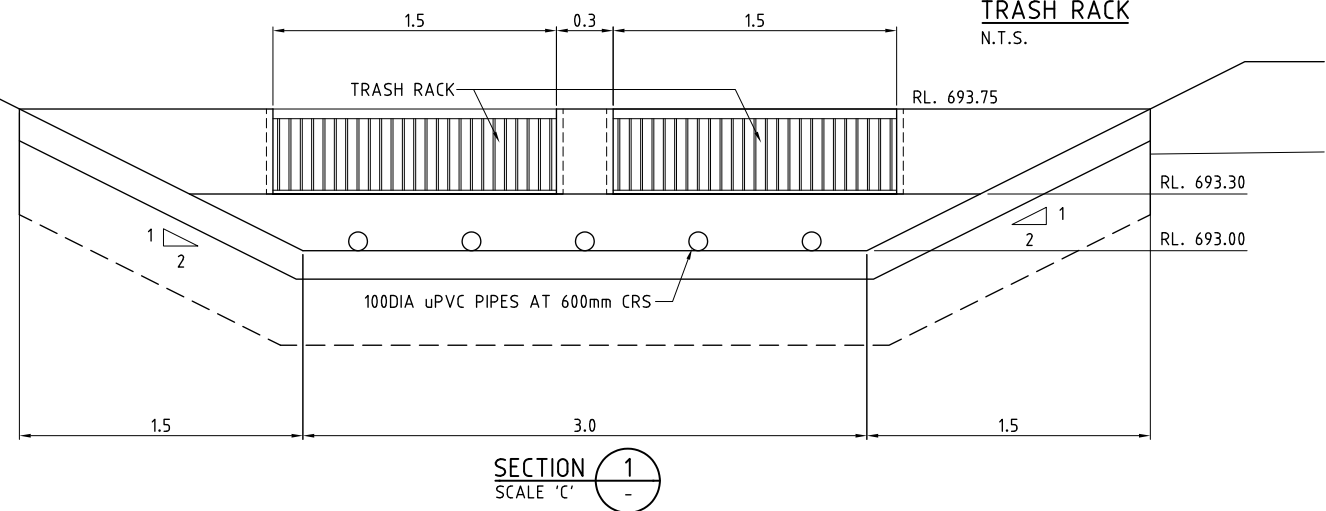
PLAN - TRASH RACK
SCALE 'B'



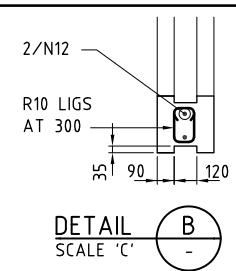
DIVERSION PIPE DETAIL
SCALE 'B'

NOTES

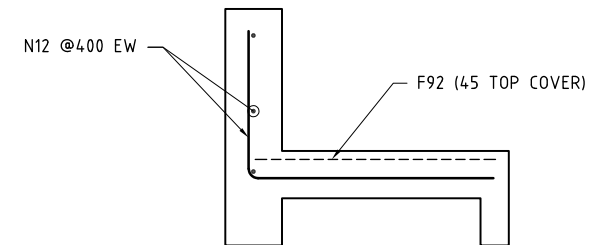
- ALL METALWORK SHALL BE HOT-DIPPED GALVANISED AFTER FABRICATION IN ACCORDANCE WITH AS1650.
- ALL WELDS SHALL BE 6mm CONTINUOUS FILLET OR BUTT WELDS IN ACCORDANCE WITH AS1554.



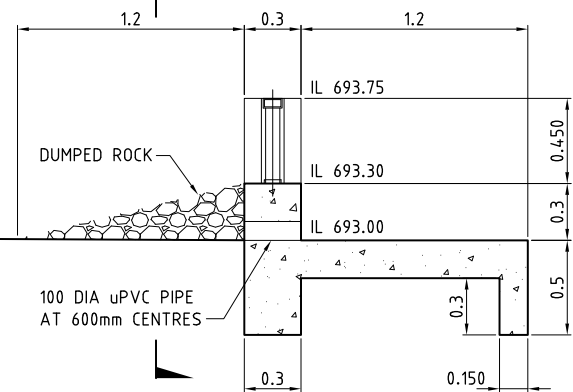
SECTION 1
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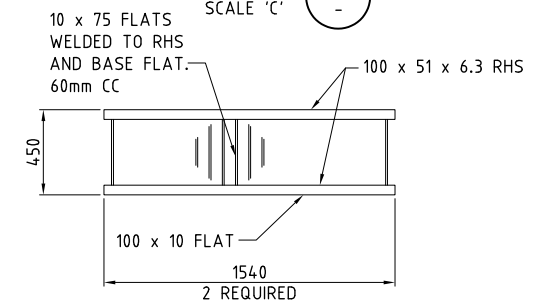
DETAIL B
SCALE 'C'



TRASH RACK REINFORCEMENT
SCALE 'C'



DETAIL B
SCALE 'C'



TRASH RACK
N.T.S.

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Last modified: 02 Dec 03 - 09:13

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DRAFTING	RHS	GBS	Original signed by M.D. BROWN
			DATE 24.05.02

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Consulting Engineers, Planners,
Environmental Scientists & Project Managers

WOODLAWN
BIOREACTOR
ALLIANCE

WOODLAWN BIOREACTOR PROJECT CRISP'S CREEK INTERMODAL SEDIMENTATION POND DETAILS		
	10407001-215	B