Licence No. 16264

ISSUED:
01 Aug 2021

EXPIRY:
31 Jul 2026

ACN:

SOUTHERN REGION WASTE RESOURCE AUTHORITY

Environmental Authorisation under Part 6 of the *Environment Protection Act 1993*

South Australian Environment Protection Authority
GPO Box 2607
Adelaide SA 5001
Tel: 08 8204 2004

Environment Protection Authority

LICENCE NUMBER 16264

LICENSEE DETAILS

Licence Holder: SOUTHERN REGION WASTE RESOURCE AUTHORITY

LICENSED ACTIVITIES

The Licensee is authorised to undertake, at the location(s) shown above, the following prescribed activities of environmental significance under Schedule 1 Part A of the Act, subject to the conditions in this Licence.

3(1)	Waste Recovery Facility
3(2)(e)	Any other waste reprocessing facility
3(3)(a)	Landfill Depot

TERMS OF LICENCE

Commencement Date: 01 Aug 2021

Expiry Date: 31 Jul 2026

Amended Date: 01 Apr 2024

PREMISES ADDRESS

112 Bakewell Road, MCLAREN VALE SA
5171

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Licence Explanatory Notes – Do Not Form Part of the Licence

Compliance with this licence

The EPA seeks to ensure that all reasonable and practicable measures are taken to protect, restore and enhance the quality of the environment according to the principles of ecologically sustainable development. To achieve this objective, the EPA uses a number of regulatory decision making principles and actions outlined in the 'Compliance and enforcement regulatory options and tools' document available on the EPA website.

Notification – serious or material environmental harm caused or threatened

If serious or material environmental harm from pollution is caused or threatened in the course of an activity, the licence holder must, as soon as reasonably practicable after becoming aware of the harm or threatened harm, notify the EPA (preferably on EPA emergency phone number 1800 100 833) of the harm or threatened harm, its nature, the circumstances in which it occurred and the action taken to deal with it in accordance with section 83 of the *Environment Protection Act 1993* (the Act). In the event that the primary emergency phone number is out of order, the licence holder should phone (08) 8204 2004.

Variations, transfers and surrender of a licence

The EPA may impose or vary the conditions of a licence by notice in writing to the licence holder in accordance with sections 45 and 46 of the Act. Public notice may be required where the variation of licence conditions results in a relaxation of the requirements imposed for the protection or restoration of the environment and results in an adverse effect on any adjoining land or its amenity.

If a licence holder wishes to vary the conditions of a licence, transfer a licence to another entity, or surrender a licence, the licence holder must submit an application to the EPA in accordance with the applicable provisions of the Act (sections 45, 49 and 56, respectively). A licence remains in effect and in its original form until such time as any proposed variation, application for surrender, or transfer has been made and approved in writing by the EPA.

Suspension or cancellation of a licence

The EPA may suspend or cancel a licence by notice in writing to the licence holder in accordance with section 55 of the Act if satisfied the licence holder has either obtained the licence improperly, contravened a requirement under the Act or if the holder is a body corporate, a director of the body corporate has been guilty of misconduct of a prescribed kind (whether in this State or elsewhere).

Responsibilities under Environment Protection legislation

In addition to the conditions of any licence, a licence holder must comply with their obligations under all State and Federal legislation (as amended from time to time) including: the *Environment Protection Act 1993;* the *Environment Protection Regulations 2023;* all Environment Protection Policies made under the *Environment Protection Act 1993;* and any National Environment Protection Measures not operating as an Environment Protection Policy under the *Environment Protection Act 1993*

Public Register Information

The EPA maintains and makes available a Public Register of details related to its determinations and other information it considers appropriate (i.e. excluding trade processes or financial information) in accordance with section 109 of the Act. These details include, but are not limited to:

- licensing and beverage container applications and approvals
- enforcement actions
- site contamination
- serious or material environmental harm caused or threatened in the course of an activity
- environment improvement programmes and environment performance agreements
- environment assessment reports; results of testing, monitoring or evaluation required by a licence
- EPA advice or direction regarding development approvals referred to the EPA by a planning authority

Definitions

Unless the contrary intention appears, terms used in this licence that are defined in the Act (including any regulations or environment protection policies made pursuant to the Act) have the respective meanings assigned to those terms by the Act.

THE ACT: The *Environment Protection Act 1993*

PREMISES: The whole of the land comprised in Titles Register - Certificate of Title, Crown Lease and Crown Record.

CT5299/719	CT5299/720
CT5822/967	CT5822/966
CT5822/965	CT6199/628
CT6217/132	/

AS CONSTRUCTED REPORT: "AS CONSTRUCTED REPORT" means a documentation of work performance, Construction Quality Control (CQC) and Construction Quality Assurance (CQA) associated with a construction project.

ASBESTOS: The fibrous form of mineral silicates belonging to the serpentine and amphibole groups of rock-forming minerals, including actinolite, amosite (brown asbestos), anthophyllite, chrysotile (white asbestos), crocidolite (blue asbestos), tremolite, or any mixture containing one or more of the mineral silicates belonging to the serpentine and amphibole groups. Asbestos-containing material is any, material, object, product or debris that contains asbestos. Friable asbestos means (a) non-bonded asbestos fabric, or (b) asbestos-containing material that: (i) is in the form of a powder, or (ii) can be crumbled, pulverised or reduced to powder by hand pressure when dry. Non-friable asbestos means asbestos-containing material in which the asbestos fibres are bonded by cement, vinyl, resin or other similar material, eg asbestos cement. Asbestos Waste means waste asbestos-containing material (ACM) including all removed ACM, as well as disposable items used during asbestos removal work, such as plastic sheeting and disposable coveralls, respirators and cleaning rags. Advice on the requirements for handling and transport of this waste can be found in EPA Guideline, Wastes containing asbestos: removal, transport and disposal (2005). See also Approved Codes of Practice under the OHS&W Act 1986.

AUTHORISATION FEE PAYMENT DATE: means the anniversary of the grant or renewal of this authorisation.

COMMERCIAL AND INDUSTRIAL WASTE (GENERAL): means the solid component of the waste stream arising from commercial, industrial, government, public or domestic premises (not collected as Municipal Solid Waste), but does not contain Listed Waste, Hazardous Waste or Radioactive Waste.

COMPOSTABLE ORGANIC WASTE: The biodegradable component of the waste stream that is of biological origin but does not contain any Listed Waste, Radioactive Waste or Hazardous Waste.

Notes: These organic materials may be processed through composting works to formulate valuable recycled organic products.

Suitability of compostable organic waste as a feedstock is dependent on the location, site design, processes and potential to cause environmental harm.

CONSTRUCTION AND DEMOLITION WASTE (INERT): means the solid inert component of the waste stream arising from the construction, demolition or refurbishment of buildings or infrastructure but does not contain Municipal Solid Waste, Commercial and Industrial Waste (General), Listed Waste, Hazardous Waste or Radioactive Waste. NOTES. C&D waste

(Inert) should be such that the entire composition of the C&D materials is Inert Waste with no contamination by foreign material. As such it is acknowledged that, with the aim of no contamination, there may be some negligible components of foreign material contained in the waste (as a guide, 0 to 5% maximum by volume per load). C&D waste (Inert) includes bricks, concrete, tiles and ceramics, steel and inert soils. Foreign material includes green waste, plastics, electrical wiring, timber, paper, insulation, tins, packaging and other waste associated with construction or demolition of a building or other infrastructure. Foreign material must not be Municipal Solid Waste, Liquid, Listed, Hazardous or Radioactive Waste.

CONSTRUCTION AND DEMOLITION WASTE (MIXED): means the solid component of the waste stream arising from the construction, demolition or refurbishment of buildings or infrastructure which contains some foreign material (as set out below), but does not contain Municipal Solid Waste, Commercial and Industrial Waste (General), Listed Waste, Hazardous Waste or Radioactive Waste. NOTES. C&D Waste is considered C&D (Mixed) waste if it contains significant foreign materials from construction and demolition activities that would render the load of waste no longer inert (as a guide, 5 to 25% maximum by volume per load). Foreign material includes green waste, plastics, electrical wiring, timber, paper, insulation, tins, packaging and other waste associated with construction or demolition of a building or other infrastructure. Foreign material must not be Municipal Solid Waste, Liquid, Listed, Hazardous or Radioactive Waste. Where waste from construction and demolition sites contains predominantly foreign materials or domestic waste, such as waste from household clean ups collected by commercial skip bins, this is Commercial and Industrial Waste (General).

CONTAMINATED STORMWATER: is as defined in the Environment Protection (Water Quality) Policy 2015.

DAILY COVER: means soil, clay, silt, sand, gravel, rock, concrete or brick (or any combination thereof) which does not exceed 200mm in any dimension and does not exceed the chemical criteria for Intermediate Waste Soil.

DOMESTIC WASTE: means the waste produced in the course of a domestic activity.

EMERGENCY SPILL KIT: means a kit containing materials that when used would prevent and/or minimise listed waste from entering the stormwater or groundwater system in the event of a spill.

ENVIRONMENTAL HARM: means the same as is defined in section 5 of the Environment Protection Act 1993.

E-WASTE: means waste electrical and electronic equipment which is dependent on electric currents or electromagnetic fields in order to function (including all components, subassemblies and consumables which are part of the original equipment at the time of discarding).

NOTE. For example e-waste may include:

a. Consumer/entertainment electronics (e.g. televisions, DVD players and tuners),

b. Devices of office-, information- and communications technology (e.g. computers, telephones and mobile phones),

c. Household appliances (e.g. fridges, washing machines and microwaves),

d. Lighting devices (e.g. desk lamps),

e. Power tools (e.g. power drills) with the exclusion of stationary industrial devices,

f. Devices used for sport and leisure including toys (e.g. fitness machines and remote control cars).

GREEN WASTE: means the vegetative portion of the waste stream arising from various sources including waste from domestic and commercial premises and municipal operations.

INERT WASTE: solid waste that has no active chemical or biological properties. These wastes do not undergo environmentally significant physical, chemical or biological transformation and have negligible potential to cause environmental harm.

INTERMEDIATE WASTE: means waste soil or other industrial and commercial waste that meets the chemical criteria specified in the EPA Information Sheet entitled 'Waste disposal - current criteria for the classification of waste - including Industrial and Commercial Waste (Listed) and Waste Soil', issued March 2010.

INTERMEDIATE WASTE SOIL: means waste soil that meets the chemical criteria specified in the attachment titled 'Intermediate Waste Soil', appended to this licence.

LEACHATE: means a liquid that has percolated through and/or been generated by decomposition of waste material. It includes water that comes into contact with waste and is potentially contaminated by nutrients, metals, salts and other soluble or suspended components and/or products of decomposition of the waste.

LIQUID WASTE: means waste classified as liquid waste in accordance with the assessment process set out in the guideline Liquid waste classification test, 2003.

NOTE. Liquid waste that is liquid at 20 degrees Celcius regardless of whether or not it is packaged or otherwise contained, and irrespective of whether or not the packaging or container is to be disposed of together with the liquid that it contains.

MUNICIPAL SOLID WASTE - DOMESTIC SOURCES: The solid component of the waste stream arising from domestic premises that is received directly from the public, it is not received as Municipal Solid Waste - Kerbside bin collection.

MUNICIPAL SOLID WASTE - HARD WASTE: means the solid component of the waste stream arising from domestic premises which is not suitable for collection using a kerbside bin system, but does not contain Commercial and Industrial Waste (General), Listed Waste, Hazardous Waste, Radioactive Waste or waste that is not deemed suitable for collection by local councils.

NOTE: MSW (Hard Waste) is typically collected in campaigns by local councils, which also advise on what wastes are suitable for that collection.

MUNICIPAL SOLID WASTE - KERBSIDE BIN COLLECTION: means the solid component of the waste stream arising from mainly domestic but also commercial, industrial, government and public premises including waste from council operations, services and facilities that is collected by or on behalf of the council by kerbside collection, but does not contain Commercial and Industrial Waste (General), Listed Waste, Hazardous Waste or Radioactive Waste.

NON-FRIABLE ASBESTOS: means asbestos-containing material in which the asbestos fibres are bonded by cement, vinyl, resin or other similar material, for example asbestos cement.

Advice on the requirements for handling and transport of this waste can found in EPA Guideline 414/05 - Wastes containing asbestos - removal, transport and disposal

PUTRESCIBLE WASTE: The component of the waste stream liable to become putrid.

For example: organic matter which has the potential to decompose with the formation of malodorous substances; usually refers to vegetative, food and animal products.

QUARANTINE WASTE: means material or goods of quarantine concern as determined by the Australian Quarantine and Inspection Service (AQIS) and which is subject to and or identified under Commonwealth Legislation (Quarantine Act 1908) and associated regulations and proclamations.

This includes:

a) material used to pack and stabilise imported goods;

b) galley food and other waste from overseas vessels;

c) human, animal or plant waste brought into Australia;

d) refuse or sweepings from a hold of an overseas vessel;

e) any other waste or other material, which comes into contact with Quarantine Waste;

f) contents of AQIS airport amnesty bins; and

g) articles seized by AQIS and/or not collected by clients.

SHREDDED TYRES: means tyre pieces that do not exceed 250 millimetres in any direction.

SITE CONTAMINATION AUDITOR: means a person accredited under Division 4 of 10A of the Environment Protection Act, 1993 as a site contamination auditor.

SITE CONTAMINATION CONSULTANT: means a person other than a site contamination auditor who, for fee or reward, assesses the existence or nature or extent of site contamination.

STORMWATER: is as defined in the Environment Protection (Water Quality) Policy 2015.

SUITABLY QUALIFIED CONSULTANT: means a person who holds relevant qualifications, has demonstrated professional experience and expertise encompassing an appropriate range of competencies, and is either a full member or is eligible for full membership of one of the following or equivalent professional organisations:

1. The Institution of Engineers Australia

2. The Association of Consulting Engineers Australia

3. The Australian Contaminated Land Consultants Association Incorporated.

SURFACE WATERS: is as defined in the Environment Protection (Water Quality) Policy 2015.

TREATED TIMBER: Any timber that has been treated or preserved by chemicals (including chemicals containing copper, chromium, arsenic or creosote).

USED FOUNDRY SAND: means; material recovered from the moulds from iron or aluminium foundries used in the hot casting of metals, comprised predominantly of sand and fine sand rejects recovery system. Used foundry sand does not include other materials from foundries such as baghouse dust, dross and slags.

USED TYRES: means used whole tyres and tyre pieces exceeding 250 millimetres in any dimension.

WASTE: means -

1. As defined under the Environment Protection Act 1993,

1(a) any discarded, dumped, rejected, abandoned, unwanted or surplus matter, whether or not intended for sale or for purification or resource recovery by a separate operation from that which produced the matter; or

1(b) any matter declared by regulation to be waste for the purposes of this Act (following consultation by the Minister on the regulation with prescribed bodies in accordance with the regulations); or

1(c) any matter declared by an environment protection policy to be waste for the purposes of this Act,

whether or not of value.

2. However, waste does not include—

2(a) an approved recovered resource whilst it is being dealt with in accordance with the declaration of that resource—see section 4A; or

2(b) anything declared by regulation or an environment protection policy not to be waste for the purposes of this Act,

even though the resource or the thing so declared might otherwise, but for the declaration, fall within the definition of waste in subsection (1).

WASTE DERIVED FILL: A consistent, homogenous material for the beneficial filling of land that consists of or contains waste or material recovered from waste (including waste soil, industrial residues and recycled waste) which meets an approved specification, is fit for purpose and will not cause harm to the environment or human health when used as fill, such as for development of infrastructure.

WASTE FILL: means waste consisting of clay, concrete, rock, sand, soil or other inert mineralogical matter in pieces not exceeding 100 millimetres in length and containing chemical substances in concentrations (calculated in a manner determined by the EPA) less than the concentrations for those substances set out in Regulation 3 - Interpretation, but does not include waste consisting of or containing asbestos or bitumen.

The Waste Fill concentration criteria as specified in Regulation 3 - Interpretation, contained within the Environment Protection Regulations 2023 - is attached.

WASTE FILL CRITERIA: For the purposes of the SA EPA Standard for the production and use of waste derived Fill (the WDF Standard), the 'waste fill criteria' consists of the chemical and physical criteria listed in Appendix 1 of the WDF Standard.

Acronyms

EPA: means Environment Protection Authority

EIP: means Environment Improvement Programme.

EPA: Means Environment Protection Authority

QA: means Quality Assurance.

QC: means Quality Control.

Conditions of Licence

The Licensee is authorised to conduct the prescribed activities as described in this Licence at the Premises nominated, subject to the following conditions:

1 CONTROL OF EMISSIONS

1.1 CEASE PROCESSING REQUIREMENT (67 - 203)

The Licensee must take all reasonable and practicable measures to minimise dust emissions from its operations, and cease all crushing, screening and other materials processing operations if weather conditions result in dust emissions that are an environmental nuisance (as defined in the Environment Protection Act 1993) beyond the Premises.

1.2 DUST PREVENTION (S - 7)

The Licensee must take all reasonable and practicable measures to prevent dust from leaving the Premises.

1.3 LANDFILL STORMWATER MANAGEMENT (S - 126)

The Licensee must:

1.3.1 take all reasonable and practicable measures to divert stormwater away from active landfill cells; and

1.3.2 take all reasonable and practicable measures to prevent contamination of stormwater at the Premises; and

1.3.3 implement appropriate contingency measures to contain any contaminated stormwater at the Premises unless and until the contaminated stormwater is treated to remove the contamination, or is disposed of at an appropriately licensed facility.

1.4 ODOUR PREVENTION (S - 10)

The Licensee must take all reasonable and practicable measures to prevent odour from leaving the Premises.

1.5 STORMWATER (S - 15)

The Licensee must:

1.5.1 take all reasonable and practicable measures to prevent contamination of stormwater at the Premises; and

1.5.2 implement appropriate contingency measures to contain any contaminated stormwater at the Premises unless and until the contaminated stormwater is treated to remove the contamination, or is disposed of at an appropriately licensed facility.

2 WASTE MANAGEMENT

2.1 LITTER (67 - 688)

The Licensee must:

2.1.1 take all reasonable and practicable measures to prevent the escape of litter from the active disposal area and the Premises; and

2.1.2 collect and dispose of any litter that escapes from the active disposal area and the Premises on or before the close of each day's operations.

3 OPERATIONAL MANAGEMENT

3.1 ASBESTOS MANAGEMENT (U - 1040)

The Licensee must:

3.1.1 only receive:

a non-friable asbestos that has been wrapped and sealed in plastic of no less than 200 micron thick; and

3.1.2 not remove or expose any asbestos that has previously been disposed of at the Premises;

3.1.3 on or before the close of each days operations, cover:

a any non friable asbestos disposed at the Premises with no less than 150 millimetres of Waste Fill or Intermediate Waste Soil; and

3.1.4 not dispose of:

a non friable asbestos within one metre of the Final Surface Level for the cell at the Premises.

3.1.5 display a sign at the designated asbestos disposal areas stating that it is a non-friable asbestos disposal area;

3.1.6 keep records of the location of buried asbestos at the Premises for the term of the Licence;

3.1.7 take all reasonable and practicable measures to prevent the generation of asbestos dust;

3.1.8 not remove asbestos from the container or package in which it is received at the Premises;

3.2 ASBESTOS RECEIVAL AND DISPOSAL (S - 118)

Licensee must:

3.2.1 only receive asbestos that has been wrapped and sealed in thick plastic, or in sealed containers;

3.2.2 only dispose of asbestos in an area:

a designated for the disposal of that waste, and

b that displays a sign clearly stating that it is an asbestos disposal area;

3.2.3 on or before the close of each days operations, cover any disposed asbestos with no less than 150 millimetres of Waste Fill;

3.2.4 not dispose of asbestos within one metre of any final surface level at the Premises; and

3.2.5 take appropriate measures to prevent the generation of asbestos dust.

3.3 BUNDING (T - 1003)

The Licensee must ensure that the following substances:

Waste Oil, Used Lead Acid Batteries, Fuel;

are stored on an appropriately bunded area within an appropriately covered area.

3.3.1 The EPA may, if there is a change to the nature or amount of substances stored or used at the Premises, vary this condition at any time to add to the list of substances that must be stored in a bund.

NOTES

The EPA will assess the appropriateness of any bund against the EPA's 'Bunding and Spill Management Guidelines'

3.4 CAPPING PLAN FOR LANDFILL CELLS (U - 791)

The Licensee must:

3.4.1 no less than six months prior to closing a landfill cell submit to the satisfaction of the EPA a Capping Plan (Plan) for the landfill cell(s);

3.4.2 ensure that the Plan includes, but is not limited to the following:

a design specification and drawings;

b characterisation of capping materials;

c rehabilitation including vegetation works and cap maintenance;

d Construction Quality Assurance Program; and

e timeframes for the implementation of the Plan.

3.4.3 comply with the Plan (or any revised Capping Plan approved in writing by the EPA) upon approval in writing by the EPA.

3.5 COMPLAINTS REGISTER (S - 1)

The Licensee must:

3.5.1 prepare and maintain a register of all complaints concerning environmental issues.

3.5.2 ensure the register includes:

a the date and time that the complaint was made;

b details of the complaint including the likely cause of events giving rise to the complaint;

c the contact details of the complainant (if permitted by the complainant); and

d details of any action taken in response to the complaint by the Licensee.

3.6 COMPLY WITH APPROVED DOCUMENT (T - 1036)

The Licensee must implement and comply with the approved Southern Region Waste Resource Authority document entitled Stockpile Management Plan - Glass, Version 0, November 2021 or any revised Stockpile Management Plan - Glass approved in writing by the EPA.

3.7 COMPLY WITH THE APPROVED QUALITY ASSURANCE AND QUALITY CONTROL PLAN - MULCH (U - 1584)

The Licensee must implement and comply with the approved Southern Region Waste Resource Authority document entitled Quality Assurance and Quality Control Plan - Mulch (QA/QC Plan - Mulch) dated October 2022 or any revised QA/QC Plan - Mulch approved in writing by the EPA.

3.8 DAILY COVER (U - 899)

The Licensee must, before the close of each day's operations cover all exposed waste with no less that 150mm of Daily Cover or an Alternative Daily Cover approved in writing by the EPA.

3.9 DESIGN AND CONSTRUCTION OF NEW CELLS (S - 155)

The Licensee must:

3.9.1 not construct any new landfill cell unless a design specification for that cell has been approved in writing by the EPA;

3.9.2 submit an "As Constructed Report" to the EPA following construction of any new landfill cell; and

3.9.3 not dispose of any waste within a new landfill cell unless an As Constructed Report for that cell has been approved in writing by the EPA.

3.10 EMERGENCY SPILL KIT (S - 22)

The Licensee must ensure that an appropriate emergency spill kit is kept on the Premises at all times in locations where listed wastes are stored, loaded or unloaded and is appropriately used in the event of a spill.

3.11 E-WASTE MANAGEMENT (S - 215)

The Licensee must ensure that e-waste is stored at the Premises in the following manner:

3.11.1 on an impermeable surface; and

3.11.2 undercover to prevent the entry of stormwater into that material.

3.12 FENCING (S - 227)

The Licensee must maintain a fence around the Premises that is suitable for preventing unauthorised access.

3.13 IMPLEMENT ENVIRONMENT IMPROVEMENT PROGRAM (U - 1374)

The Licensee must implement and comply with the approved document entitled 'Environment Improvement Program (EIP) Groundwater Monitoring Plan' or any revised EIP approved in writing by the EPA.

3.13.1 Compliance date: 31 August 2021

Compliance Date: 31-Aug-2021

3.14 IMPLEMENT LEMP (315 - 726)

The Licensee must:

3.14.1 establish, maintain, operate and close the waste depot in accordance with the approved document entitled 'Southern Region Waste Resource Authority, SRWRA Landfill Operation, Landfill Environment Management Plan (REF No. 20091248RA1D)', except where inconsistent with conditions of this licence; and

3.14.2 only implement any amendments to the LEMP once they have been approved in writing by the EPA.

3.15 LEACHATE TO LANDFILL CELLS RESTRICTION (67 - 720)

The Licensee must not re-circulate any leachate within any landfill cell.

3.16 MANAGEMENT OF LANDFILL GAS (67 - 1403)

The Licensee must manage landfill gas at the Premises in accordance with the approved LEMP referred to in condition 315-726 of this licence.

NOTES

The document entitled 'EPA Guidelines - Environmental management of landfill facilities (municipal solid waste and commercial and industrial general waste)' dated January 2007, provides relevant information on landfill gas management (Section 8).

3.17 MANAGEMENT OF THE ANAEROBIC DIGESTION FACILITY (U - 1644)

The Licensee must conduct the operations of the Anaerobic Digester Facility (ADF) in accordance with the LMS Energy documents entitled Environment Management Plan Pilot Anaerobic Digester Facility – SRWRA Landfill (Ref. 50043_ADFS1_EMP, ver. 1.1) dated 5 July 2022 and Environment Management Plan Anaerobic Digester Facility Stage 2 – SRWRA Landfill (Ref. 50043_ADFS2_EMP) dated 11 July 2023.

The Licensee must conduct the operations of the ADF if, and only if, approved by, and on any conditions advised by, the EPA in writing.

In conducting the operations of the ADF, the Licensee must:

3.17.1 ensure that, at all times other than when it is being transported for immediate loading into the ADF, all feedstock intended for use in the production of biogas is stored in an undercover area on an impermeable surface;

3.17.2 ensure that all leachate produced from the digestion process is securely contained to prevent leakage;

3.17.3 implement the sampling and testing methodology on the anaerobic digestion outputs in accordance with Section 3.2.1 of the LMS Energy document entitled Environment Management Plan Pilot Anaerobic Digester Facility – SRWRA Landfill (Ref. 50043_ADFS1_EMP, ver. 1.1) and dated 5 July 2022 to determine the waste classification of each output; and

3.17.4 not dispose of at the Premises the anaerobic digestion outputs unless the results of testing confirm the output to be suitable for disposal in accordance with licence condition entitled Permitted Wastes Disposal.

3.18 PERMITTED WASTES DISPOSAL (U - 875)

The Licensee must only dispose of the following waste streams at the Premises:

3.18.1 Asbestos (Non- friable)

3.18.2 Commercial and Industrial Waste (General)

3.18.3 Compostable Organic Waste

3.18.4 Construction and Demolition Waste (Mixed)

3.18.5 Construction and Demolition Waste (Inert)

3.18.6 Domestic Waste

3.18.7 Green Waste

3.18.8 Inert Waste

3.18.9 Municipal Solid Waste- Domestic Sources

3.18.10 Municipal Solid Waste- Hard Waste

3.18.11 Municipal Solid Waste- Kerbside Bin Collection

3.18.12 Putrescible Waste

3.18.13 Quarantine Waste

3.18.14 Shredded Tyres

3.18.15 Waste Fill

3.18.16 Intermediate Waste Soil

3.18.17 Intermediate Waste

3.18.18 Used Foundry Sand

3.18.19 Grease Trap Waste (solid only)

3.18.20 CCA Timber

3.19 PERMITTED WASTES RECEIPT (U - 874)

The Licensee must only receive the following waste streams at the Premises:

3.19.1 Asbestos (Non-friable)

3.19.2 Commercial and Industrial Waste (General)

3.19.3 Compostable Organic Waste

3.19.4 Construction and Demolition Waste (Mixed)

3.19.5 Construction and Demolition Waste (Inert)

3.19.6 Domestic Waste

3.19.7 Green Waste

3.19.8 Inert Waste

3.19.9 Municipal Solid Waste- Domestic Sources

3.19.10 Municipal Solid Waste- Hard Waste

3.19.11 Municipal Solid Waste- Kerbside Bin Collection

3.19.12 Putrescible Waste

3.19.13 Quarantine Waste

3.19.14 Used Tyres

3.19.15 Waste Fill

3.19.16 Intermediate Waste Soil

3.19.17 Intermediate Waste

3.19.18 Used Foundry Sand

3.19.19 Grease Trap Waste

3.19.20 E waste

3.19.21 Lead Acid Batteries

3.19.22 Liquid Waste

3.19.23 Scrap Metal

3.19.24 CCA Treated Timber

3.19.25 Waste Oil

3.20 PREMISES FIRE MANAGEMENT (S - 130)

The Licensee must:

3.20.1 not cause or permit any waste to be burned at the Premises;

3.20.2 notify the EPA as soon as reasonably practicable after becoming aware of a fire at the Premises; and

3.20.3 within 72 hours of bringing the fire under control, provide a written report to the EPA setting out the following:

a date of the fire;

b approximate time of the fire;

c cause of the fire (if known);

d area of the Premises where the fire occurred;

e measures used to extinguish the fire and to manage any environmental impacts; and

f appropriate measures that will be taken to reduce the risk of further fire at the Premises.

3.21 RECEIPT OF WASTE SOILS - INTERMEDIATE WASTE SOIL (S - 146)

The Licensee must:

3.21.1 ensure that Intermediate Waste Soil received at the Premises is accompanied by written, signed and dated certification from a suitably qualified consultant, site contamination consultant or site contamination auditor, stating that the waste complies with the definition of Intermediate Waste Soil, unless otherwise approved by the EPA in writing; and

3.21.2 keep all certification records for a period of not less than 12 months from the date of receipt.

3.22 RECEIPT OF WASTE SOILS - WASTE FILL (S - 145)

The Licensee must:

3.22.1 ensure that Waste Fill received at the Premises that exceeds 100 tonne from a single source site is accompanied by written, signed and dated certification from a suitably qualified consultant, site contamination consultant or site contamination auditor stating that the waste complies with the definition of Waste Fill unless otherwise approved by the EPA in writing; and

3.22.2 keep all certification records for a period of not less than 12 months from the date of receipt.

3.23 RECOVERED PRODUCTS PLAN (S - 242)

The Licensee must:

3.23.1 develop and submit to the EPA by the compliance date listed below, a Recovered Products Plan (Plan) for the production of Waste Derived Fill to the satisfaction of the EPA;

3.23.2 ensure that the Plan submitted under clause 1 specifies the details required by the South Australian EPA 'Standard for the production and use of Waste Derived Fill' (WDF Standard), including but not limited to the following:

- a the incoming waste streams to be treated in the production of Waste Derived Fill;
- b the treatment methodology of the incoming waste streams;
- c the chemical and physical specifications of the Waste Derived Fill to be produced;
- d the QA/QC procedures to be employed to ensure that the Waste Derived Fill:
  - i meets waste fill criteria (see definition) in Appendix 1 of the WDF Standard or is approved in accordance with the Plan, and
  - ii is fit for purpose; and
- e a contingency plan to manage incoming wastes and treated wastes intended for reuse, removal or disposal that do not meet the specifications in the Plan;

3.23.3 implement and comply with the approved Plan upon notice of approval in writing by the EPA;

3.23.4 not treat (including processing by any means, physical or chemical), reuse, remove or dispose of waste except in accordance with the approved Plan or this Licence;

3.23.5 ensure that any variation to the Plan is approved in writing by the EPA.

NOTES

The EPA will assess the appropriateness of the Recovered Products Plan against the South Australian EPA 'Standard for the production and use of Waste Derived Fill', in particular but not limited to Section 6.1.1. This document is available on the EPA website at http://www.epa.sa.gov.au/environmental_info/waste_management/solid_waste/waste_derived_fill

Compliance Date: 30-Nov-2021

3.24 SECURITY (S - 157)

The Licensee must take all reasonable and practicable measures to prevent unauthorised access to the Premises.

3.25 SIGNAGE (S - 98)

The Licensee must display a sign at the entrance to the Premises clearly stating:

3.25.1 the Licensee's name;

3.25.2 the Licensee's authorisation number;

3.25.3 an emergency contact name and telephone number; and

3.25.4 the type of wastes that can be received subject to this Authorisation.

3.26 TYRE STOCKPILE LIMITS AND DISPOSAL CRITERIA (S - 108)

The licensee must:

3.26.1 not construct tyre stockpiles exceeding 20 metres long, 8 metres wide or 4 metres high;

3.26.2 not locate any tyre stockpiles less than 12 metres from any buildings, structures, or other stockpiles; and

3.26.3 only dispose tyres in pieces not exceeding 250 millimetres in any dimension, with the exception of forklift tyres.

3.27 VERMIN PREVENTION (S - 70)

The Licensee must take all reasonable and practicable measures to prevent the presence of vermin at the Premises.

4 MONITORING AND REPORTING

4.1 ENVIRONMENT IMPROVEMENT PROGRAM (U - 1340)

The Licensee must:

4.1.1 develop and submit to the EPA by the compliance date listed below, an Environment Improvement Program (EIP) Groundwater Monitoring Plan prepared by a suitably qualified consultant to the satisfaction of the EPA.

4.1.2 ensure that the EIP includes but need not be limited to, the following:

a an assessment of the current known physical and hydrological profile of the Premises and its surrounding areas, including any relevant data gaps;

b a updated conceptual site model (CSM), which captures relevant sources, pathways and receptors, and any relevant data gaps;

c assessment of protected environmental values and groundwater uses at the Premises and of the surrounding area, including any relationship between groundwater and surface water bodies (if applicable);

d an assessment of the effectiveness of the groundwater monitoring bore network to achieve the objectives for groundwater monitoring associated with this licence. This assessment must include:

i how any residual uncertainty in the CSM, including the hydrogeology beneath the site and surrounding area, will be addressed;

ii identification of groundwater monitoring bores with standing water levels above the screened interval;

iii actions required to ensure effectiveness of the groundwater monitoring bores identified in the above paragraph to accurately monitor for all analytes associated with the groundwater monitoring program;

e an assessment of the condition of all current groundwater monitoring bores;

f a schedule for maintenance and repair of the groundwater monitoring bore network based on the assessment required by sub condition e above;

g installation and commissioning of new groundwater monitoring bores as required to meet the objectives for groundwater monitoring associated with this licence, and with consideration of any relevant data gaps and residual uncertainty in the conceptual site model;

h methods and procedures to be used in groundwater sampling and testing for;

i pH;

ii Electrical conductivity (EC)

iii alkalinity (as CaCO3);

iv Nitrate, Nitrite, Ammonia;

v Total Kjeldahl Nitrogen (TKN);

vi Total Organic Compounds (TOC);

vii Total Phosphorus;

viii Total Phosphate;

ix Chemical Oxygen Demand (COD);

x Total Recoverable Hydrocarbons (TRH);

xi Organic Nitrogen, Nitrogen (total oxidized);

xii Sulphate;

xiii Ferrous Iron;

xiv Hardness;

xv Alkali Metals

xvi Cadmium, Chromium, Copper, Iron, Aluminum, Arsenic, Boron, Lead, Magnesium, Mercury, Nickel, Zinc;

xvii Polycyclic Aromatic Hydrocarbons (PAHs);

xviii Organochlorine and organophosphate pesticides;

xix Phthalate esters (leachable plasticisers);

xx Phenols;

xxi Volatile organic compounds (VOCs, including BTEXN and chlorinated solvents);

xxii Major ions (anions and cations, including fluoride, bicarbonate and carbonate alkalinity);

xxiii Total Dissolved Solids (TDS);

xxiv Dissolved Oxygen (field); and

xxv Pesticides;

xxvi Barium (Ba)

i the quality analysis and control measures to be employed during the sampling and testing activities;

j the sampling frequency schedule;

k the criteria against which groundwater monitoring results will be assessed to indicate when the landfill operations may have impacted groundwater (trigger values) and when a non-compliance may have occurred (compliance values);

l the actions to be undertaken in the event that trigger values or compliance values are exceeded;

m other site specific data including for example, groundwater flows and other relevant hydrological data and information relevant to this activity;

n the method and frequency of reporting groundwater monitoring results to the EPA

4.1.3 Compliance date: 30 June 2021

NOTES

Re-design of Groundwater monitoring for SRWRA (EPA License 16264) in response to concerns of current monitoring locations

and trigger values to identify potential or actual environment harm is being caused by landfilling activites

Compliance Date: 30-Jun-2021

4.2 SURFACE WATER MONITORING (U - 1378)

The Licensee must:

4.2.1 Undertake sampling of surface water generated at the Premises:

a from the following locations on the Premises:

i Pedler Creek discharge drain entry and exit points

ii Western drain exit point;

iii Eastern Drain exit point and

iv Central Drain exit point;

b for the following analytes:

i Total Suspended Solids (TSS), Turbidity, Total Nitrogen (TN), Total Phosphorus (TP), Barium , Boron, Chromium, Manganese, Magnesium, Nickel, Zinc, Total Petroleum Hydrocarbons (TPH);

4.2.2 Undertake the sampling required by this condition a minimum of twice a month at approximately fortnightly intervals but in any event following rainfall events (should they occur) until 31 August 2021. To avoid doubt, sampling can be undertaken more frequently or at closer intervals if warranted by a significant rainfall event; and

4.2.3 Submit a report prepared by a suitably qualified consultant to the EPA within 14 days of each sampling event (and in relation to each event), which includes but is not limited to:

a results of sampling undertaken at each location

b a calculation of the approximate total volume of surface water generated at the Premises and discharged into Pedler Creek Discharge Drain;

NOTES

surface water monitoring results/data/information to provide direction any potential surface water

management requirements / directions by the EPA to prevent potential contaminates being discharged into Pedlar Creek or any

other surface waters for the short and long term for the site

4.3 SURFACE WATERS & LEACHATE MONITORING PLAN (305 - 724)

The Licensee must:

4.3.1 ensure that groundwater, surface water and leachate monitoring is undertaken in accordance with the Tonkin Consulting document entitled 'Groundwater, Surface water and Leachate Monitoring Plan - SRWRA Landfill Operation (Ref No 201000354RA3)' dated May 2011;

4.3.2 ensure all sampling and assessment of groundwater, surface water and leachate are undertaken by a suitably qualified professional experienced in water monitoring assessment;

4.3.3 ensure that all laboratory results are undertaken by a laboratory accredited by NATA to undertaken the analysis; and

4.3.4 submit the results of the assessment to the EPA by 30 January in each year.

5 ADMINISTRATION

5.1 ANNUAL RETURN AND PAYMENT OF ANNUAL FEES (A - 4)

For the purposes of section 48(2)(a) of the Act, the date in each year for the lodgement of the Annual Return is no later than 90 days before the anniversary of the grant or renewal of the Licence; and

5.1.1 For the purposes of section 48(2)(b) of the Act, the date in each year for the payment of Annual Authorisation Fee is the anniversary of the grant of the Licence.

5.2 APPROVAL OF OPERATING PROCESSES (A - 6)

The Licensee must not undertake changes to operating processes conducted pursuant to the Licence at the Premises without written approval from the EPA, where such changes:

5.2.1 have the potential to increase emissions or alter the nature of pollutants or waste currently generated by, or from the licensed activity; or

5.2.2 have the potential to increase the risk of environmental harm; or

5.2.3 would relocate the point of discharge of pollution or waste at the Premises.

5.3 APPROVAL OF WORKS (A - 5)

The Licensee must not construct or alter a building or structure, or install or alter any plant or equipment, for use of an activity undertaken pursuant to the Licence at the Premises without written approval from the EPA, where such changes:

5.3.1 have the potential to increase the emissions or alter the nature of pollutants or waste currently generated by, or from the licensed activity; or

5.3.2 have the potential to increase the risk of environmental harm; or

5.3.3 would relocate the point of discharge of pollution or waste at the Premises.

5.4 CHANGE OF LICENSEE DETAILS (A - 3)

If the Licensee's name or postal address (or both) changes, the Licensee must inform the EPA within 28 days of the change occurring.

5.5 FINANCIAL ASSURANCE (320 - 33)

The Licensee must:

5.5.1 prepare a comprehensive financial assurance proposal, which addresses remedial action, site rehabilitation and site after-care including, but not limited to, the following aspects:

a the proposed scope of the financial assurance to be accumulated for the purposes of post-closure management;

b the proposed amount of the financial assurance for each of the areas shown on Attachment 1 of this licence for post-closure management; and

c the proposed form of the financial assurance for post-closure management, and the proposed staging of financial assurance through conditions of licence, in order to obtain the proposed total amount of financial assurance; and

5.5.2 submit the revised financial assurance proposal in writing to the Authority for assessment by 30 June 2010.

5.6 LICENCE RENEWAL (A - 2)

For the purposes of section 43(3) of the Act, an application for Renewal of the Licence must be made no later than 90 days before the expiry date of the Licence.

5.7 OBLIGATIONS TO EMPLOYEES, AGENTS AND CONTRACTORS (A - 1)

The Licensee must ensure that every employee, agent or contractor responsible for undertaking any activity regulated by the Licence, is informed as to the conditions of the Licence.

Attachments

INTERMEDIATEWASTESOIL.pdf"

Attachment1LocationMapSitePlan.pdf"

WASTE FILL REGULATION 3 - EP Regs 2023 update.pdf"

Intermediate Waste Soil – Chemical characteristics

CHEMICAL SUBSTANCE	Concentration in mg/kg (dry weight)	MAXIMUM LEACHATE CONCENTRATION - in mg/L
		Method of Analysis - AS 4439.3 – 1997
Aldrin + dieldrin (total)	<2	#
Arsenic	<200	5
Barium		
Benzene	<5	#
Benzo(a)pyrene	<2	#
Beryllium	<40	1
Cadmium	<30	0.5
Cobalt	<170	#
Chlordane	<2	#
Chromium (III)	<12%	#
Chromium (VI)	<200	5
Copper	<2000	10
Cyanides (Total)	<1000	10
DDT	<2	#
Ethylbenzene	<100	#
Heptachlor	<2	#
Lead	<1200	5
Manganese	<6000	50
Methyl mercury	<20	#
Mercury	<30	0.1
Nickel	<600	2
Total Petroleum Hydrocarbons (TPH) C_6-C_9	<100	#
TPH > C_9	<1000	#
Phenolic compounds (total)	<17000	#
Polychorinated biphenyls	<2	#
Polycyclic Aromatic Hydrocarbons (PAH) (Total)	<40	#
Toluene	<50	#
Xylene (total)	<180	#
Zinc	<14000	250

1. The assessment of the chemical analysis carried out on samples of the waste soil in accordance with this condition may include scientifically valid statistical analysis to justify classification of the waste soil in accordance with the values listed in this table. Such statistical analysis may include 95%UCL applied to the total dry weight results to demonstrate compliance criteria are not exceeded. No individual result shall be greater than 2.5 times the stated total dry weight criteria.

2. '#' indicates that leachate testing for that chemical substance is not required provided that the concentration of that chemical substance in mg/kg (dry weight) does not exceed the value specified for that category of waste soil.

3. '<' = 'less than'

ATTACHMENT 1

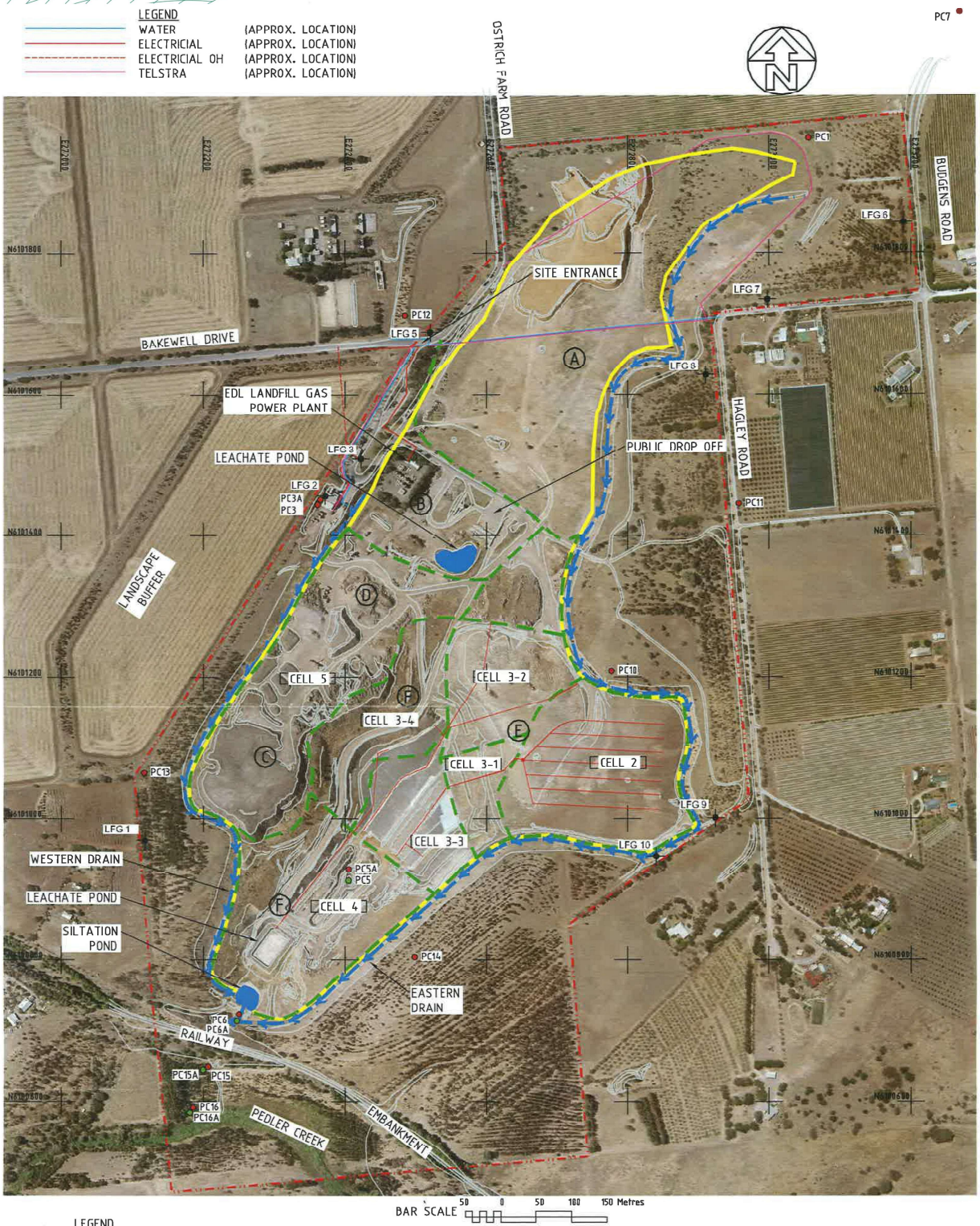

FIGURE 2

Site Layout Plan

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BERRI
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Job No: 2009.1248
Drawing: 20091248_RA1_FIG2.DWG
Drawn: AGM
Date: 09.09.09
Scale: 1:5000

Southern Region Waste Resource Authority
SRWRA Landfill Operation

Waste Fill - Regulation 3

Interpretation - Environment Protection Regulations 2023

The full interpretation of 'WASTE FILL' - as defined in the Environment Protection Regulations 2023, Regulation 3(1) is -

waste fill means waste consisting of clay, concrete, rock, sand, soil or other inert mineralogical matter in pieces not exceeding 100 millimetres in length and containing chemical substances in concentrations (calculated in a manner determined by the EPA) less than the concentrations for those substances set out in Regulation 3 - Interpretation, but does not include waste consisting of or containing asbestos or bitumen.

Chemical substance	**Concentration (milligrams per kilogram of waste fill)**	**Chemical substance**	**Concentration (milligrams per kilogram of waste fill)**
Aldrin/Dieldrin (total)	2	Ethylbenzene	3.1
Arsenic	20	Heptachlor	2
Barium	300	Lead	300
Benzene	1	Manganese	500
Benzo(a)pyrene	1	Mercury	1
Beryllium	20	Nickel	60
Cadmium	3	Petroleum hydrocarbons TPH C6-C9 (total)	65
Chlordane	2	Phenolic compounds (total)	0.5
Chromium (III)	400	Polychlorinated biphenyls (PCBs)	2
Chromium (VI)	1	Polycyclic aromatic hydrocarbons (PAH) (total)	5
Cobalt	170	Petroleum hydrocarbons TPH>C9	1000
Copper	60	Toluene	1.4
Cyanides (total)	500	Xylene (total)	14
DDT	2	Zinc	200