



Department of
**Environment and
Heritage Protection**

To: Banana Shire Council
PO Box 412
BILOELA QLD 4715

Email: enquiries@banana.qld.gov.au

Your reference: EPPR00818213
Our reference: 221071

Application details

Land description: Cracow Landfill 24 Nathan Gorge Road CRACOW QLD 4719 - Lot 4 Plan SP165440 and Lot 3 Plan SP165440; Biloela Sewage Treatment Plant Quarrie Road BILOELA QLD 4715 - Lot 3 Plan SP137058; Moura Sewage Treatment Plant 121 Davey Street MOURA QLD 4718 - Lot 91 Plan FN493; Theodore Sewage Treatment Plant Leichhardt Highway THEODORE QLD 4719 - Lot 232 Plan DW346; Banana Landfill 11 Moriarty Street BANANA QLD 4702 - Lot 2 Plan SP183258, Lot 1 Plan SP183258, Lot 4 Plan SP183258, Lot 3 Plan SP183258; Jambin Landfill Duaringa Road JAMBIN QLD 4702 - Lot 192 Plan RN1606; Wowan Landfill Wowan Bore Road WOWAN QLD 4702 - Lot 231 Plan RN412; Kokotungo Landfill 166 Baralaba Rannes Road KOKOTUNGO QLD 4702 - Lot 43 Plan FN546; Baralaba Landfill Woolers Road BARALABA QLD 4702 - Lot 146 Plan FN324; Theodore Landfill 232 Goolara Heinekes Road THEODORE QLD 4719 - Lot 1 Plan RP619696; Trap Gully Landfill 16 Forestry Road BILOELA QLD 4715 - Lot 30 Plan RP899131; Moura Landfill 18776 Dawson Highway MOURA QLD 4718 - Lot 7 Plan SP200916; Goovigen Landfill Lake Pleasant Road GOOVIGEN QLD 4702 - Lot 156 Plan RN536; Biloela Landfill 359 Cavale Road BILOELA QLD 4715 - Lot 359 Plan RN1456.

Decision



Your application has been approved and your environmental authority (reference EPPR00818213) is attached.

Additional comments or advice

Should you have any further enquiries, please contact Dot Rosiak on telephone 1300 130 372.

Yours sincerely

Dot Rosiak
Heritage, Utilities and Government
Organisations Assessment
Department of Environment and
Heritage Protection
GPO Box 2454
BRISBANE QLD 4001
Phone: 1300 130 372
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Email: dorota.rosiak@ehp.qld.gov.au
Website www.ehp.qld.gov.au
ABN 46 640 294 485

	
Signature	Date

Amanda Gray
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

Enclosed

Permit - environmental authority (reference EPPR00818213)

Department of Environment and Heritage Protection

Permit¹

Environmental Protection Act 1994

Environmental authority

This environmental authority is issued by the administering authority under Chapter 5 of the Environmental Protection Act 1994.

Permit¹ number: EPPR00818213

Environmental authority takes effect on the day it is signed by the delegate.

The anniversary date of this environmental authority remains as 14 August. An annual return and the payment of the annual fee will be due each year on this day.

Environmental authority holder

Name	Principal address
Banana Shire Council	62 Valentine Plains Road BILOELA QLD 4715

Environmentally relevant activity and location details

Environmentally relevant activities	Locations
57-(2a) Regulated waste transport 1 to 5 vehicles	Mobile and temporary
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Banana Landfill – 11 Moriarty Street BANANA QLD 4702 Lot 2 Plan SP183258 and Lot 1 Plan SP183258 and Lot 4 Plan SP183258 and Lot 3 Plan SP183258
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Baralaba Landfill Woolers Road BARALABA QLD 4702 - Lot 146 Plan FN324
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Biloela Landfill 359 Cavale Road BILOELA QLD 4715 - Lot 359 Plan RN1456
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Cracow Landfill 24 Nathan Gorge Road CRACOW QLD 4719 - Lot 4 Plan SP165440 and Lot 3 Plan SP165440
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Goovigen Landfill Lake Pleasant Road GOOVIGEN QLD 4702 - Lot 156 Plan RN536
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Jambin Landfill Biloela – Duaringa Road JAMBIN QLD 4702 - Lot 192 Plan RN1606
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Kokotungo Landfill 166 Baralaba Rannes Road KOKOTUNGO QLD 4702 - Lot 43 Plan FN546
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Moura Landfill 18776 Dawson Highway MOURA QLD 4718 - Lot 7 Plan SP200916

¹ Permit includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation



60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Theodore Landfill 232 Goolara Heinekes Road THEODORE QLD 4719 - Lot 1 Plan RP619696
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Wowan Landfill Wowan Bore Road WOWAN QLD 4702 - Lot 231 Plan RN412
60-(2d) Waste disposal >10000t but <20000t yr (1)(b)	Trap Gully Landfill 16 Forestry Road BILOELA QLD 4715 - Lot 30 Plan RP899131
63-(1d) Sewage treatment >4000 to 10000EP	Biloela Sewage Treatment Plant Quarrie Road BILOELA QLD 4715 - Lot 3 Plan SP137058
63-(1c) Sewage treatment >1500 to 4000EP	Moura Sewage Treatment Plant 121 Davey Street MOURA QLD 4718 - Lot 91 Plan FN493
63-(1b)(i) Sewage treatment >100 to 1500EP - IT or IR	Theodore Sewage Treatment Plant Leichhardt Highway THEODORE QLD 4719 - Lot 232 Plan DW346

Additional information for applicants

Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an environmental authority is issued is a restatement of the ERA as defined by legislation at the time the approval is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an environmental authority as to the scale, intensity or manner of carrying out an ERA, then the conditions prevail to the extent of the inconsistency.

An environmental authority authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the authority specifically authorises environmental harm.


A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994* (EP Act).

Contaminated land

It is a requirement of the EP Act that an owner or occupier of land give written notice to the chief executive if they become aware of the following:

- a notifiable activity (as defined in Schedule 3) that is being, or has been, carried out on the land (notice must be given within 20 business days)
- an event involving a hazardous contaminant on the land, or a change in the condition of the contaminated land, that is causing, or is reasonably likely to cause, serious or material environmental harm (notice must be given within 24 hours).

For further information, including the form for giving written notice, refer to the Queensland Government website <http://www.qld.gov.au/> (using the search term 'managing contaminated land').



Signature



Date

Amanda Gray
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Department of Environment and Heritage
Protection
GPO Box 2454
BRISBANE QLD 4001
Phone: 1300 130 372
Fax: 07 3330 6037
Email: palm@ehp.qld.gov.au

Obligations under the *Environmental Protection Act 1994*

In addition to the requirements found in the conditions of this environmental authority, the holder must also meet their obligations under the EP Act, and the regulations made under the EP Act. For example, the holder must comply with the following provisions of the Act:

- general environmental duty (section 319)
- duty to notify environmental harm (section 320-320G)
- offence of causing serious or material environmental harm (sections 437-439)
- offence of causing environmental nuisance (section 440)
- offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- offence to place contaminant where environmental harm or nuisance may be caused (section 443)

Conditions of environmental authority

Part 1: Code of Environmental Compliance

Environmentally relevant activity	Location
57-(2a) Regulated waste transport 1 to 5 vehicles	Mobile and temporary

With the exception of any variations, the conditions of approval for this environmental authority include standard conditions contained within the attached document entitled:

- Code of environmental compliance for certain aspects of regulated waste transport (ERA 57) Version 4

Part 2: General Conditions

Environmentally relevant activities	Locations
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Banana Landfill – 11 Moriarty Street BANANA QLD 4702 Lot 2 Plan SP183258 and Lot 1 Plan SP183258 and Lot 4 Plan SP183258 and Lot 3 Plan SP183258
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Baralaba Landfill Woolers Road BARALABA QLD 4702 - Lot 146 Plan FN324
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Biloela Landfill 359 Cavale Road BILOELA QLD 4715 - Lot 359 Plan RN1456
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Cracow Landfill 24 Nathan Gorge Road CRACOW QLD 4719 - Lot 4 Plan SP165440 and Lot 3 Plan SP165440
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Goovigen Landfill Lake Pleasant Road GOOVIGEN QLD 4702 - Lot 156 Plan RN536
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Jambin Landfill Biloela – Duinga Road JAMBIN QLD 4702 - Lot 192 Plan RN1606
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Kokotungo Landfill 166 Baralaba Rannes Road KOKOTUNGO QLD 4702 - Lot 43 Plan FN546
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Moura Landfill 18776 Dawson Highway MOURA QLD 4718 - Lot 7 Plan SP200916
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Theodore Landfill 232 Goolara Heinekes Road THEODORE QLD 4719 - Lot 1 Plan RP619696
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Wowan Landfill Wowan Bore Road WOWAN QLD 4702 - Lot 231 Plan RN412

Permit
Environmental authority EPPR00818213

60-(2d) Waste disposal >10000t but <20000t yr (1)(b)	Trap Gully Landfill 16 Forestry Road BILOELA QLD 4715 - Lot 30 Plan RP899131
63-(1d) Sewage treatment >4000 to 10000EP	Biloela Sewage Treatment Plant Quarrie Road BILOELA QLD 4715 - Lot 3 Plan SP137058
63-(1c) Sewage treatment >1500 to 4000EP	Moura Sewage Treatment Plant 121 Davey Street MOURA QLD 4718 - Lot 91 Plan FN493
63-(1b)(i) Sewage treatment >100 to 1500EP - IT or IR	Theodore Sewage Treatment Plant Leichhardt Highway THEODORE QLD 4719 - Lot 232 Plan DW346

The environmentally relevant activities conducted at the locations described above must be conducted in accordance with the following general conditions of approval

Agency interest: General	
Condition number	Condition
G2.1	All reasonable and practicable measures must be taken to minimise the likelihood of environmental harm being caused.
G2.2	Any breach of a condition of this environmental authority must be reported to the administering authority as soon as practicable, or at most, within 24 hours of you becoming aware of the breach. Records must be kept including full details of the breach and any subsequent actions undertaken.
G2.3	Other than as permitted by this environmental authority, the release of a contaminant into the environment must not occur.
G2.4	All information and records that are required by the conditions of this environmental authority must be kept for a minimum of five (5) years. Environmental monitoring results must be kept until surrender of this environmental authority. All information and records required by the conditions of this environmental authority must be provided to the administering authority upon request.
G2.5	An appropriately qualified person(s) must monitor, record and interpret all parameters that are required to be monitored by this environmental authority and in the manner specified by this environmental authority.
G2.6	All analyses required under this environmental authority must be carried out by a laboratory that has NATA certification, or an equivalent certification, for such analyses.
G2.7	When required by the administering authority , monitoring must be undertaken in the manner prescribed by the administering authority , to investigate a complaint that is not considered by the administering authority to be frivolous or vexatious, of environmental nuisance arising from the activity . The monitoring results must be provided to the administering authority upon request.
G2.8	The activity must be undertaken in accordance with written procedures that: <ol style="list-style-type: none"> 1. identify potential risks to the environment from the activity during routine operations, closure and an emergency 2. establish and maintain control measures that minimise the potential for environmental harm 3. ensure plant, equipment and measures are maintained in a proper and effective condition 4. ensure plant, equipment and measures are operated in a proper and effective manner 5. ensure that staff are trained and aware of their obligations under the <i>Environmental Protection Act 1994</i> 6. ensure that reviews of environmental performance are undertaken at least annually.
G2.9	You must record the following details for all environmental complaints received: <ol style="list-style-type: none"> a) date and time complaint was received b) name and contact details of the complainant

	c) nature of the complaint d) investigations undertaken e) conclusions formed f) actions taken.
G2.10	Chemicals and fuels in containers of greater than 15 litres must be stored within a secondary containment system .
Agency interest: Air	
Condition number	Condition
A2.1	Odours or airborne contaminants which are noxious or offensive or otherwise unreasonably disruptive to public amenity or safety must not cause nuisance to any sensitive place or commercial place .
Agency interest: Noise	
Condition number	Condition
N2.1	Noise generated by the activity must not cause environmental nuisance to any sensitive place or commercial place .

Part 3: Site Specific Conditions – Waste Disposal

Environmentally relevant activities	Locations
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Banana Landfill – 11 Moriarty Street BANANA QLD 4702 Lot 2 Plan SP183258 and Lot 1 Plan SP183258 and Lot 4 Plan SP183258 and Lot 3 Plan SP183258
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Baralaba Landfill Woolers Road BARALABA QLD 4702 - Lot 146 Plan FN324
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Biloela Landfill 359 Cavale Road BILOELA QLD 4715 - Lot 359 Plan RN1456
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Cracow Landfill 24 Nathan Gorge Road CRACOW QLD 4719 - Lot 4 Plan SP165440 and Lot 3 Plan SP165440
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Goovigen Landfill Lake Pleasant Road GOOVIGEN QLD 4702 - Lot 156 Plan RN536
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Jambin Landfill Biloela – Duaringa Road JAMBIN QLD 4702 - Lot 192 Plan RN1606
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Kokotungo Landfill 166 Baralaba Rannes Road KOKOTUNGO QLD 4702 - Lot 43 Plan FN546
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Moura Landfill 18776 Dawson Highway MOURA QLD 4718 - Lot 7 Plan SP200916
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Theodore Landfill 232 Goolara Heinekes Road THEODORE QLD 4719 - Lot 1 Plan RP619696
60-(2a) Waste disposal >50t but <2000t yr (1)(b) 62 Waste Transfer Station	Wowan Landfill Wowan Bore Road WOWAN QLD 4702 - Lot 231 Plan RN412

The environmentally relevant activities conducted at the locations described above must be conducted in accordance with the following site specific conditions of approval

Agency interest: General	
Condition number	Condition
G3.1	All reasonable and practicable measures must be taken to exclude vectors and pest species to the extent necessary to prevent: <ol style="list-style-type: none"> 1. nuisance to occupiers of neighbouring premises 2. any danger or risk to the health of any persons.
G3.2	All reasonable and practicable measures must be taken to contain litter within the waste operations area , and retrieve litter released.
Agency interest: Water	
Condition number	Condition
WT3.1	Leachate and stormwater runoff which has been in contact with waste materials in the landfill unit , must be collected in the leachate storage facility and be: <ol style="list-style-type: none"> 1. treated in the leachate treatment plant and discharged to sewer in accordance with the requirements of the relevant water utility; or 2. recirculated through waste disposed in the landfill unit; or 3. treated by alternative technologies agreed by the administering authority for offsite disposal, discharge, or on-site reuse; or 4. disposed of at a facility that is approved to receive such waste.
Agency interest: Land	
Condition number	Condition
L3.1	Land that has been disturbed for activities conducted under this environmental authority must be rehabilitated in a manner such that: <ol style="list-style-type: none"> 1. suitable species of vegetation for the location are established and sustained for earthen surfaces 2. potential for erosion is minimised 3. the quality of water, including seepage, released from the site does not cause environmental harm 4. potential for environmental nuisance caused by dust is minimised 5. the water quality of any residual water body does not have potential to cause environmental harm 6. the final landform is stable and protects public safety 7. the contaminant concentrations within the final capping layer are appropriate for the final land use and in accordance with the 'National Environmental Protection (Assessment of Soil Contamination) Measure 1999.'
L3.2	Following cessation of deposition of waste in the landfill unit , post-closure care of the landfill unit must be conducted for a period of 30 years or until the administering authority determines, on the basis of correct information, that the landfill unit and surrounding site are stable and that no release of waste materials, leachate , landfill gas or other contaminants that may cause environmental harm is likely.

L3.3	The program of post-closure care implemented must be effective in preventing and/or minimising the likelihood of environmental harm being caused. The program must include measures to: 1. maintain the structural integrity and effectiveness of the final capping system; 2. maintain and operate the leachate collection system; 3. maintain the groundwater monitoring system and monitor quality of groundwater at a frequency sufficient to detect any release of contaminants to groundwater.
Agency interest: Waste	
Condition number	Condition
W3.1	Deposited waste must be covered as soon as practicable to limit stormwater infiltration, prevent exposure of waste and prevent issues arising from vectors and pest species.
W3.2	Excepting combustion of landfill gas, waste must not be burnt.

Part 4: Site Specific Conditions – Waste Disposal

Environmentally relevant activities	Locations
60-(2d) Waste disposal >10000t but <20000t yr (1)(b)	Trap Gully Landfill 16 Forestry Road BILOELA QLD 4715 - Lot 30 Plan RP899131

The environmentally relevant activities conducted at the locations described above must be conducted in accordance with the following site specific conditions of approval

Agency interest: General	
Condition number	Condition
G4.1	The registered operator must: (a) Ensure that a compliance audit concerning ERA compliance with the conditions of this approval is carried out, and a report prepared, by appropriately qualified person within six months of commencement of an ERA, and at least every three years thereafter and immediately prior to any transfer of operational responsibility at the authorised place ; (b) Ensure that appropriately qualified person is nominated by the registered operator and accepted by the administering authority ; (c) Submit the compliance audit report to the administering authority within 10 business days of having received the audit report. The report must be accompanied by a statutory declaration stating that the report accurately represents the findings of the auditor; (d) Be responsible for the financial cost of the compliance audit.
G4.2	All reasonable and practicable measures must be taken to exclude vectors and pest species to the extent necessary to prevent: 1. nuisance to occupiers of neighbouring premises 2. any danger or risk to the health of any persons.
G4.3	All reasonable and practicable measures must be taken to contain litter within the waste operations area, and retrieve litter released.
G4.4	An annual report must be prepared each year and summary details must be submitted to the administering authority with each annual return. The summary details must include but not be limited to:

	<p>(a) Summary details of the monitoring and analysis undertaken, including details of the sampling framework applied and quality assurance and quality control measures applied;</p> <p>(b) Summary of the monitoring interpretation presented in numerical and graphical form, showing relevant limits and a comparison made with at least the previous twelve (12) months monitoring data;</p> <p>(c) A summary of any quantities of contaminants or releases as required to be kept under this approval;</p> <p>(d) A summary of the type of each waste stream, and tonnage or quantity of waste accepted for recycling, reuse or disposal at the authorised place;</p> <p>(e) A summary of any equipment failures or events that caused or had the potential to cause environment harm;</p>
Agency interest: Air	
Condition number	Condition
A4.1	<p>Release of dust or particulates exceeding the following levels, when measured at any nuisance sensitive place, is considered as an environmental nuisance:</p> <p>a) Dust deposition of 120 milligrams per square metre per day, when measured in accordance with Australian Standard AS 3580.10:2003 <i>Methods of sampling and analysis of ambient air – Determination of particulate matter – Deposited matter – gravimetric method</i> (or more recent edition); or</p> <p>b) A concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM10) suspended in the atmosphere of 50 micrograms per cubic metre over a 24 hour averaging period at a nuisance sensitive place downwind of the site when monitored in accordance with:</p> <p>i. Australian Standard AS 3580.9.6 <i>Ambient Air – Particulate Matter – Determination of suspended particulate PM10 high-volumes sampler with size – selective inlet – gravimetric method</i>; or</p> <p>ii. Any alternative method of monitoring PM10 that may be permitted by the Air Quality Sampling Manual as published from time to time by the administering authority.</p>
A4.2	<p>The following materials must not be used for dust suppression purposes:</p> <ol style="list-style-type: none"> 1. leachate or landfill gas condensate 2. waste oil or other hydrocarbons.
A4.3	All reasonable and practicable measures must be undertaken to reduce greenhouse gas emissions of the authorised place .
A4.4	<p>Landfill gas must not exceed the following limits:</p> <ol style="list-style-type: none"> 1. 500 parts per million at a height of 50mm above the final and intermediate cover surface including the batter slopes of the landfill unit 2. 25% of the lower explosive limit of the landfill site boundary when measured in facility structures (but excluding facility structures used for landfill gas control and recovery, and leachate collection system components) 3. the lower explosive limit in subsurface geology at or beyond the landfill site boundary 4. landfill gas collected is reused or efficiently flared in a manner that avoids environmental harm 5. 25% of the lower explosive limit within service pits, service trenches, stormwater drains or other structures beyond the landfill site boundary.
A4.5	A landfill gas monitoring network must be installed for each landfill unit to measure methane levels in facility structures and at the landfill site boundary, as prescribed by condition A4.4. The network must consist of gas monitoring devices, such as monitoring bores and be developed by an appropriately qualified person in the fields of hydrogeology and landfill gas monitoring program design to be able to competently make recommendations about these matters.

A4.6	If methane gas levels exceeding methane standards referred to in condition A4.4 are detected, all necessary steps must immediately be taken to ensure protection of human health.																																													
Agency interest: Water																																														
Condition number	Condition																																													
WT4.1	<p>The only contaminants to be released to surface waters are settled treated stormwater runoff waters from areas of the site not likely to be contaminated with waste materials in accordance with Table WT4.1—<i>Surface water release limits</i> and the associated monitoring requirements.</p> <p style="text-align: center;">Table WT4.1—Surface water release limits</p> <table><tr><th>Quality characteristic</th><th>Limit (units)</th><th>Limit Type</th><th>Release Point(s) and Receiving Water Reference Points</th><th>Monitoring frequency</th></tr><tr><td>pH</td><td>6.5 - 9</td><td>Range</td><td>Primary indicator parameter Release point to waters</td><td>Quarterly – if and when a release occurs</td></tr><tr><td>Specific Conductance</td><td>1500 µS/cm</td><td>Maximum</td><td>Primary indicator parameter Release point to waters</td><td>Quarterly – if and when a release occurs</td></tr><tr><td>Dissolved Oxygen</td><td>6 mg/L (80% saturation)</td><td>Minimum</td><td>Primary indicator parameter Release point to waters</td><td>Quarterly – if and when a release occurs</td></tr><tr><td>Total Organic Carbon</td><td>20 mg/L</td><td>Maximum</td><td>Primary indicator parameter Release point to waters</td><td>Quarterly – if and when a release occurs</td></tr><tr><td>Suspended Solids (1)</td><td>80 mg/L</td><td>Maximum</td><td>Primary indicator parameter Release point to waters</td><td>Quarterly – if and when a release occurs</td></tr><tr><td>Suspended Solids (2)</td><td>not greater than 10 % more of the concentration of suspended solids in the receiving waters at an up-current point</td><td></td><td>Primary indicator parameter For the purposes of this condition an up-current point is a sampling point in the receiving waters that is situated between 20 and 40 meters upstream from the discharge drainage</td><td>Suspended solids (2) can be carried out instead of Suspended solids (1) Quarterly – if and when a release occurs</td></tr><tr><td colspan="3">Ammonia (as N) Nitrate (as N) Bicarbonate (HCO₃) Calcium Chloride Iron (total) Lead Manganese (dissolved) Potassium Sodium Sulphate Zinc Chemical Oxygen Demand Biological Oxygen Demand Redox potential Temperature Total Dissolved Solids Total Organic Halogen</td><td>Release point to water</td><td>a) Monitor annually if and when a release occurs; or b) Monitor if an exceedance of the release limits for primary indicator parameters above is detected.</td></tr><tr><td colspan="3">Or elsewhere if no release occurs – for all the above parameters</td><td>Representative sample from sedimentation pond</td><td>Monitor annually – in the event of no release (unless that sedimentation pond remains dry for that reporting period).</td></tr></table> <p>Associated monitoring requirements</p> <p>1. Monitoring must be in accordance with the methods prescribed in the current edition of the Department of Environment and Heritage Protection <i>Water Quality Sampling Manual</i>.</p>	Quality characteristic	Limit (units)	Limit Type	Release Point(s) and Receiving Water Reference Points	Monitoring frequency	pH	6.5 - 9	Range	Primary indicator parameter Release point to waters	Quarterly – if and when a release occurs	Specific Conductance	1500 µS/cm	Maximum	Primary indicator parameter Release point to waters	Quarterly – if and when a release occurs	Dissolved Oxygen	6 mg/L (80% saturation)	Minimum	Primary indicator parameter Release point to waters	Quarterly – if and when a release occurs	Total Organic Carbon	20 mg/L	Maximum	Primary indicator parameter Release point to waters	Quarterly – if and when a release occurs	Suspended Solids (1)	80 mg/L	Maximum	Primary indicator parameter Release point to waters	Quarterly – if and when a release occurs	Suspended Solids (2)	not greater than 10 % more of the concentration of suspended solids in the receiving waters at an up-current point		Primary indicator parameter For the purposes of this condition an up-current point is a sampling point in the receiving waters that is situated between 20 and 40 meters upstream from the discharge drainage	Suspended solids (2) can be carried out instead of Suspended solids (1) Quarterly – if and when a release occurs	Ammonia (as N) Nitrate (as N) Bicarbonate (HCO ₃) Calcium Chloride Iron (total) Lead Manganese (dissolved) Potassium Sodium Sulphate Zinc Chemical Oxygen Demand Biological Oxygen Demand Redox potential Temperature Total Dissolved Solids Total Organic Halogen			Release point to water	a) Monitor annually if and when a release occurs; or b) Monitor if an exceedance of the release limits for primary indicator parameters above is detected.	Or elsewhere if no release occurs – for all the above parameters			Representative sample from sedimentation pond	Monitor annually – in the event of no release (unless that sedimentation pond remains dry for that reporting period).
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WT4.2	Monitoring of contaminant releases to waters must be undertaken in accordance with condition WT4.1 and records of the results must be kept.																																													
WT4.3	In addition to WT4.2, the release to waters must not: 1. have any other properties at a concentration that is capable of causing environmental harm																																													

	2. produce any slick or other visible evidence of oil or grease, nor contain visible floating oil, grease, scum, litter or other visually objectionable matter.
WT4.4	The stormwater runoff from disturbed areas, generated by (up to and including) a 24 hour storm event with an average recurrence interval of 1 in 10 years must be retained on site or managed to remove contaminants before release.
WT4.5	A liner system must be installed and maintained to: <ol style="list-style-type: none"> 1. prevent release of contaminants, including leachate, to land and waters; and 2. prevent subsurface migration of landfill gas from the landfill unit.
WT4.6	A leachate collection system must be designed by an appropriately qualified person and installed and maintained to: <ol style="list-style-type: none"> 1. collect leachate generated in the landfill unit; 2. convey the collected leachate out of the landfill unit to an appropriate leachate storage facility; and 3. restrict the height of the leachate above the liner system to a maximum level of 500mm.
WT4.7	Leachate and stormwater runoff which has been in contact with waste materials in the landfill unit , must be collected in the leachate storage facility and be: <ol style="list-style-type: none"> 1. treated in the leachate treatment plant and discharged to sewer in accordance with the requirements of the relevant water utility; or 2. recirculated through waste disposed in the landfill unit; or 3. treated by alternative technologies agreed by the administering authority for offsite disposal, discharge, or on-site reuse; or 4. disposed of at a facility that is approved to receive such waste.
WT4.8	The registered operator must: <ol style="list-style-type: none"> (a) Implement a groundwater management system for the authorised place that includes but is not limited to groundwater monitoring, analysis, assessment, remediation (if required) and reporting; (b) Install a groundwater management system to ensure that groundwater resources adjacent to the authorised place are protected in accordance with the relevant ANZECC ecosystem protection standards if it is established that site groundwater contributes to adjacent surface water resources.
WT4.9	The registered operator must: <ol style="list-style-type: none"> (a) Install a groundwater monitoring system to detect potential contamination of groundwater resources within the boundaries of the authorised place; (b) Establish the groundwater monitoring system with a sufficient number of bores constructed at locations and depths to yield representative groundwater samples from at least the uppermost aquifer; (c) Establish and monitor: <ol style="list-style-type: none"> i. Background groundwater quality in hydraulically up-gradient (background bore(s)) that have not been affected by any potential leakage of contaminants to groundwater from the ERA(s) or in the event that background bore(s) cannot be established then; ii. Establish and monitor the quality of groundwater down-gradient of any potential leakage of contaminants from the authorised place and including at the down-gradient boundary of the authorised place; (d) Ensure that each groundwater monitoring bore is fitted with a locked cap at all times other than at the time of sampling; (e) Measure and record standing groundwater levels in metres, accurate to 0.01 metre. The elevation of the reference point, relative to Australian Height Datum, for use in any groundwater level measurement must be determined to an accuracy of 0.01 metre; (f) Measurement of groundwater levels must be undertaken prior to any disturbance by sampling, and must be reported as the depth in metres from the established reference point to the water surface within the bore; (g) Ensure that locations referred to in this schedule for groundwater monitoring bores are

	<p>recorded with reference to horizontal coordinates of such bores accurate to 1.0 metre;</p> <p>(h) Monitor and record groundwater quality to detect any contamination through analysis and interpretation of at least the water monitoring parameters specified in Table WT4.9 – <i>Groundwater Monitoring Parameters</i></p> <p style="text-align: center;">Table WT4.9 – Groundwater Monitoring Parameters</p> <table><tr><th colspan="3">Parameters</th><th>Frequency</th></tr><tr><td>Standing groundwater level</td><td>Volatile organic compounds screen</td><td></td><td>At least annually</td></tr><tr><td>pH</td><td>Sodium</td><td>Cadmium</td><td rowspan="10">At least annually</td></tr><tr><td>Electrical Conductivity</td><td>Calcium</td><td>Chromium</td></tr><tr><td>Oxidation/Reduction Potential</td><td>Magnesium</td><td>Copper</td></tr><tr><td>Total Nitrogen</td><td>Potassium</td><td>Nickel</td></tr><tr><td>Ammonia (as Nitrogen)</td><td>Chloride</td><td>Lead</td></tr><tr><td>Nitrate (as Nitrogen)</td><td>Alkalinity</td><td>Zinc</td></tr><tr><td>Organic Nitrogen</td><td>Sulphate</td><td>Vanadium</td></tr><tr><td>BTEX compounds</td><td>Iron</td><td>Total organic carbon</td></tr><tr><td>Total petroleum hydrocarbons</td><td>Manganese</td><td>BOD (5 day inhibited)</td></tr></table>	Parameters			Frequency	Standing groundwater level	Volatile organic compounds screen		At least annually	pH	Sodium	Cadmium	At least annually	Electrical Conductivity	Calcium	Chromium	Oxidation/Reduction Potential	Magnesium	Copper	Total Nitrogen	Potassium	Nickel	Ammonia (as Nitrogen)	Chloride	Lead	Nitrate (as Nitrogen)	Alkalinity	Zinc	Organic Nitrogen	Sulphate	Vanadium	BTEX compounds	Iron	Total organic carbon	Total petroleum hydrocarbons	Manganese	BOD (5 day inhibited)
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WT4.10	<p>The registered operator must:</p> <p>(a) Carry out groundwater contamination assessment including to identify potential groundwater contamination sourced from the ERA;</p> <p>(b) If groundwater contamination from the ERA is detected then carry out further groundwater contamination investigations including but not limited to:</p> <p>i. the location, nature (confined or unconfined) and quality of each potentially contaminated aquifer, define groundwater contours, indicate direction of flow and assess the nature and the likely extent of any environmental harm;</p> <p>ii. assess temporal changes in groundwater parameters and key trends in these;</p> <p>iii. assess the potential an likelihood of any contaminated groundwater to be transported beyond the boundaries of the authorised place.</p>																																				
WT4.11	<p>The registered operator must, if groundwater contamination from the authorised place is detected:</p> <p>(a) Identify the extent of any groundwater contamination by assessing statistical differences in temporal groundwater quality data and comparison with published Australian Standards relevant to the protection of the beneficial uses of the groundwater;</p> <p>(b) In the event of groundwater contamination being identified, develop and implement a groundwater remediation program to include, but not be limited to:</p> <p>i. Minimisation of the offsite migration of impacted groundwater at such contaminant concentrations as would impair the beneficial uses of the groundwater;</p> <p>ii. Segregation of contaminated groundwater from stormwater management release pathways;</p> <p>iii. Undertaking necessary measures and treatment to decrease contamination and minimise any aquifer transport of contaminated groundwater;</p> <p>iv. Implementing procedures and practices during the life of the ERA(s) to manage and decrease the extent of any groundwater contamination to a satisfactory state.</p>																																				
Agency interest: Land																																					
Condition number	Condition																																				
L4.1	Any visible light released from the ERA(S) must not, in the opinion of an authorised person, cause an environmental nuisance beyond the boundary of the authorise place.																																				
L4.2	Reasonable measures must be assessed, and undertaken if practicable, to screen ERA operations from neighbours and maintain visual amenity, for example, provision of a vegetative buffer zone (or equivalent) sufficient to screen ongoing operations from adjacent roads.																																				
L4.3	A buffer distance of at least 10 metres must be provided between any cadastral boundary and any adjacent landfill footprint boundary constructed under this approval.																																				

L4.4	<p>When the deposition of waste to the landfill unit ceases, a final capping system to the landfill unit must be designed by an appropriately qualified person and installed to minimise:</p> <ol style="list-style-type: none"> 1. infiltration of water into the landfill unit and water ponding on the surface; and 2. the likelihood of any erosion occurring to either the final capping system or the landfilled materials. <p>A final capping system is not required where the deposition of waste to a landfill unit ceases temporarily for the purpose of using an alternative working face.</p>
L4.5	<p>Land that has been disturbed for activities conducted under this environmental authority must be rehabilitated in a manner such that:</p> <ol style="list-style-type: none"> 1. suitable species of vegetation for the location are established and sustained for earthen surfaces 2. potential for erosion is minimised 3. the quality of water, including seepage, released from the site does not cause environmental harm 4. potential for environmental nuisance caused by dust is minimised 5. the water quality of any residual water body does not have potential to cause environmental harm 6. the final landform is stable and protects public safety 7. the contaminant concentrations within the final capping layer are appropriate for the final land use and in accordance with the <i>'National Environmental Protection (Assessment of Soil Contamination) Measure 1999.'</i>
L4.6	<p>Following cessation of deposition of waste in the landfill unit, post-closure care of the landfill unit must be conducted for a period of 30 years or until the administering authority determines, on the basis of correct information, that the landfill unit and surrounding site are stable and that no release of waste materials, leachate, landfill gas or other contaminants that may cause environmental harm is likely.</p>
L4.7	<p>The program of post-closure care implemented must be effective in preventing and/or minimising the likelihood of environmental harm being caused. The program must include measures to:</p> <ol style="list-style-type: none"> 1. maintain the structural integrity and effectiveness of the final capping system; 2. maintain and operate the leachate collection system; 3. maintain the groundwater monitoring system and monitor quality of groundwater at a frequency sufficient to detect any release of contaminants to groundwater; 4. maintain and operate the landfill gas monitoring system; and 5. maintain and operate the landfill gas collection system.
Agency interest: Waste	
Condition number	Condition
W4.1	<p>The registered operator must not allow waste to burn or be burnt at or on a place to which this approval relates.</p>
W4.2	<p>Waste streams accepted for temporary storage (including batteries, oils and other general waste streams) must be stored:</p> <ol style="list-style-type: none"> (a) In a bunded impervious area and enclosed under roof to minimise leachate generation, odours, leaks and spills, environmental hazards; or (b) In an enclosed container of a suitable design to minimise spills and leaks.
W4.3	<p>If the registered operator becomes aware that regulated waste other than the regulated waste listed in Table W4.5 has been received at the site, the registered operator must take all reasonable and practicable measures to:</p> <ol style="list-style-type: none"> (a) Identify the source of the waste and notify the person that unauthorised wastes have been received;

	<p>(b) As soon as practicable make arrangements for the waste to be remove from the site and transported to a facility that can lawfully accept such waste;</p> <p>(c) Store the waste in an area specifically designate for the temporary storage of unauthorised waste; and</p> <p>(d) Keep and maintain records of unauthorised waste.</p>										
W4.4	<p>In the event of the registered operator of this approval becoming aware of prohibited waste being commingled in any waste stream the registered operator of this approval must:</p> <p>(a) Cease the depositing of such waste;</p> <p>(b) Remove the prohibited waste and store in a proper and efficient manner;</p> <p>(c) Notify the person who sent the prohibited waste to the approved place of the detection of prohibited waste in the waste received</p> <p>(d) As soon as practicable arrange for a person who can lawfully transport such waste to collect such waste;</p> <p>(e) Arrange for the person transporting the prohibited waste to transport such waste to a facility that can lawfully accept such waste;</p> <p>(f) Produce the following records:</p> <ol style="list-style-type: none"> Type of prohibited waste; Quantity of prohibited waste; Date of disposal; Name and address of the person(s) transporting the prohibited waste to the facility; Name and address of the person(s) who generated the prohibited waste (if such person(s) can be reasonably identified). <p>For the purpose of this condition, "prohibited waste" means a waste that is not permitted to be accepted at that authorised place by condition of this approval.</p>										
W4.5	<p>No regulated waste streams must be accepted at the authorised place which exhibits any of the hazard characteristics listed in Table W4.5</p> <p style="text-align: center;">Table W4.5</p> <table border="1"> <thead> <tr> <th>Hazard Characteristic</th><th>Description of the Hazard Characteristic</th></tr> </thead> <tbody> <tr> <td>Ignitability</td><td>Regulated wastes that are capable of causing a fire when ignited through friction, absorption of moisture, or spontaneous chemical changes under standard temperature and pressure</td></tr> <tr> <td>Corrosivity</td><td>Regulated wastes which on dissolution exhibit a pH of 2 or less or 12.5 or greater</td></tr> <tr> <td>Reactivity</td><td> <p>Regulate wastes if they have any of the following properties:</p> <ul style="list-style-type: none"> React violently with water; and/or Form potentially explosive mixtures with water and other substances likely to be disposed of in the authorised place; and /or Generate toxic gases, vapours, or fumes dangerous to human health or the environment when mixed with water and other substances likely to be disposed of in the authorised place; and/or Contain substances which generate toxic gases, vapours or fumes when exposed to pH conditions between 2 and 12.5; and /or Are capable of detonation or explosive reaction when subjected to a strong initiating source or if heated under confinement; and /or <p>Are readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure.</p> </td></tr> <tr> <td>Toxicity</td><td> <p>Regulated wastes if they have:</p> <ul style="list-style-type: none"> Contaminant concentrations in the waste exceeding the allowable levels in Table W4.7a; or Leaching contaminant levels in the waste when measured in accordance with Toxicity Characteristic Leaching Procedure (TCLP) exceeding the concentrations prescribed in Table W4.7b. For any soil contaminate by radioactive material; The gross alpha and gross beta activity concentration in the Toxicity Characteristic Leaching Procedure (TCLP) extracts from the material are no more than one hundred (100) times the concentrations specified in the NHMRC/ARMCANZ Australian Drinking Water Guidelines, 1996. </td></tr> </tbody> </table> <p>In addition to other waste acceptance requirements the following waste streams must be excluded from disposal at the landfill:</p> <p>(a) Liquescent waste streams or any waste capable of yielding free liquids that is not authorised in this approval except leachate and/or landfill gas condensate arising from gas collection generated within the authorised place;</p> <p>(b) Infectious waste streams which have not been subjected to a proper and efficient treatment process to render them non-infectious;</p> <p>(c) Material or equipment contaminated with infectious substances which have not been</p>	Hazard Characteristic	Description of the Hazard Characteristic	Ignitability	Regulated wastes that are capable of causing a fire when ignited through friction, absorption of moisture, or spontaneous chemical changes under standard temperature and pressure	Corrosivity	Regulated wastes which on dissolution exhibit a pH of 2 or less or 12.5 or greater	Reactivity	<p>Regulate wastes if they have any of the following properties:</p> <ul style="list-style-type: none"> React violently with water; and/or Form potentially explosive mixtures with water and other substances likely to be disposed of in the authorised place; and /or Generate toxic gases, vapours, or fumes dangerous to human health or the environment when mixed with water and other substances likely to be disposed of in the authorised place; and/or Contain substances which generate toxic gases, vapours or fumes when exposed to pH conditions between 2 and 12.5; and /or Are capable of detonation or explosive reaction when subjected to a strong initiating source or if heated under confinement; and /or <p>Are readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure.</p>	Toxicity	<p>Regulated wastes if they have:</p> <ul style="list-style-type: none"> Contaminant concentrations in the waste exceeding the allowable levels in Table W4.7a; or Leaching contaminant levels in the waste when measured in accordance with Toxicity Characteristic Leaching Procedure (TCLP) exceeding the concentrations prescribed in Table W4.7b. For any soil contaminate by radioactive material; The gross alpha and gross beta activity concentration in the Toxicity Characteristic Leaching Procedure (TCLP) extracts from the material are no more than one hundred (100) times the concentrations specified in the NHMRC/ARMCANZ Australian Drinking Water Guidelines, 1996.
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	<p>subjected to a proper and effective treatment process to render them non-infectious;</p> <p>(d) Cytotoxic wastes;</p> <p>(e) Substances listed under the <i>Health (Drugs and Poisons) Regulation 1996</i>;</p> <p>(f) Soils or substances contaminated by radioactive material, unless it meets the requirements specified in the current <i>Radiation Safety Act 1999</i> and <i>Radiation Safety Regulation 2010</i>;</p> <p>(g) Pyrophoric wastes, where co-disposed with other potentially combustible materials;</p> <p>(h) Explosives and ammunition (excepting spent ammunition cartridges which no longer contain explosives, pyrotechnics, or propellants, apart from trace residues which are no longer capable of supporting combustion or an explosive reaction);</p> <p>(i) Any regulated waste or sludges (other than a regulated waste or sludge that may be disposed at this licensed place as permitted by this approval);</p> <p>(j) Paper product sludges except those with a moisture content of less than 30%;</p> <p>(k) Metals with the exception of minor amounts of metal incidental to or commingled with other waste;</p> <p>(l) Tyres;</p> <p>(m) Garden and /or green waste with the exception of minor amounts of garden and/or green waste incidental to comingled with other waste.</p>																																		
W4.6	<p>Subject to such waste or contaminated soils not exhibiting characteristics described in approval conditions, the following general waste, limited regulated waste or contaminated soils are permitted to be disposed of at the authorised place:</p> <p>(a) Residual municipal, commercial and industrial, construction and demolition waste streams that cannot be practicably recycled or reused ;</p> <p>(b) Other limited regulated waste streams including:</p> <ol style="list-style-type: none"> Asbestos; Fish processing wastes (dewatered solids only); Food processing wastes (dewatered solids only); Poultry processing wastes (dewatered solids only); Abattoir waste (dewatered solids only); Grease Interceptor trap effluent and residues; Dewatered bacterial sludge (water treatment plant, septic tank and sewage treatment plant); <p>(c) Shredded tyres;</p> <p>(d) Low level contaminated soil.</p>																																		
W4.7	<p>The quality of any low level contaminated soil, treated waste or reprocessed waste streams used as a daily cover or interim capping material at the waste disposal facilities must comply with the soil quality characteristics specified in Table W4.7a and allowable leaching contaminant levels when measured in accordance with Toxicity Characteristics Leaching Procedures (TCLP) in Table W4.7b.</p> <p style="text-align: center;">Table W4.7a – Maximum Contaminants Level in Soils</p> <table border="1"> <thead> <tr> <th>Substance</th><th>mg/kg</th></tr> </thead> <tbody> <tr><td>Arsenic (total)</td><td>200</td></tr> <tr><td>Beryllium</td><td>40</td></tr> <tr><td>Cadmium</td><td>40</td></tr> <tr><td>Chromium (III)</td><td>240,000</td></tr> <tr><td>Chromium (VI)</td><td>200</td></tr> <tr><td>Copper</td><td>2,000</td></tr> <tr><td>Lead</td><td>600</td></tr> <tr><td>Manganese</td><td>3,000</td></tr> <tr><td>Methyl Mercury</td><td>20</td></tr> <tr><td>Mercury (inorganic)</td><td>30</td></tr> <tr><td>Nickel</td><td>600</td></tr> <tr><td>Zinc</td><td>14,000</td></tr> <tr> <td colspan="2">CONTAMINANT ANALYSIS</td></tr> <tr> <td>Monocyclic Aromatic Hydrocarbons (MAH)</td><td>mg/kg</td></tr> <tr> <td>Benzene</td><td>10</td></tr> <tr> <td>Ethyl Benzene</td><td>500</td></tr> </tbody> </table>	Substance	mg/kg	Arsenic (total)	200	Beryllium	40	Cadmium	40	Chromium (III)	240,000	Chromium (VI)	200	Copper	2,000	Lead	600	Manganese	3,000	Methyl Mercury	20	Mercury (inorganic)	30	Nickel	600	Zinc	14,000	CONTAMINANT ANALYSIS		Monocyclic Aromatic Hydrocarbons (MAH)	mg/kg	Benzene	10	Ethyl Benzene	500
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Toluene	300
Total MAH	500
Polycyclic Aromatic Hydrocarbons (PAH)	mg/kg
Total PAH	500
Phenolic Contaminants	mg/kg
Non halogenated compounds	
Phenol	100
m-cresol	250
o-cresol	250
p-cresol	250
Total non-halogenated phenol	250
Halogenated compounds	
Chlorophenol	1
Trichlorophenol	5
Pentachlorophenol	5
Total halogenated phenol	5
Chlorinated Hydrocarbons	mg/kg
Polychlorinated Biphenyl	2
Chlorinated Aliphatic Compounds	
Carbon tetrachloride	5
1,2 Dichloroethane	10
1,1 Dichloroethene	1
Tetrachloroethene	10
Trichloroethene	25
Total Chlorinated Aliphatic Compounds	50
Chlorinated Aromatic Compounds	
Chlorobenzene	100
Hexachlorobenzene	1
Total Chlorinated Aromatic Compounds	100
Pesticides	mg/kg
Total organochlorine	5
Total herbicides	25
Total carbamates	25
Total organophosphorus	10
Petroleum Hydrocarbons	mg/kg
Total petroleum hydrocarbons(C6-C9)	500
Total petroleum hydrocarbons(C10-C14)	5,000
Total petroleum hydrocarbons(C15-C28)	10,000
Total petroleum hydrocarbons(C29-C36)	10,000

Table W4.7b – Allowable Leaching Contaminant Levels

Contaminant Analysis	mg/L
Non-specific Contaminants	mg/L
Biochemical Oxygen Demand	20,000
Total Organic Carbon	10,000
Petroleum Hydrocarbons	25
Microtox LC50	*No levels set at this time
Metals/Non-metals	mg/L
Antimony	0.5
Arsenic	0.5
Barium	10
Cadmium	0.05
Chromium	0.5
Cobalt	0.5
Copper	10
Lead	0.5
Mercury	0.01
Molybdenum	0.1
Nickel	0.5
Selenium	0.1
Silver	0.5
Thallium	0.1
Tin	0.3
Vanadium	0.5
Zinc	50
Inorganic Anions	mg/L
Bromide	5

Chloride	6,000
Cyanide (total)	1
Fluoride	15
Sulphate	2,500
Nitrate	100
Monocyclic Aromatic Hydrocarbon (MAH)	
	mg/L
Benzene	0.1
Ethyl benzene	5
Toluene	3
Xylene	2
Total MAH	5
Polycyclic Aromatic Hydrocarbon (PAH)	
	mg/L
Anthracene	0.07
Benz (a) anthracene	0.005
Benz (c) phenanthrene	0.005
Benzo (a) pyrene	0.002
Benzo (b) fluoranthene	0.005
Benzo (k) fluoranthene	0.005
Chrysene	0.1
Dibenz (a,h) anthracene	0.002
Dibenz (a,h) pyrene	0.01
Dimethylbenz (a) anthracene	0.005
Fluoranthene	0.02
Indeno (1,2,3-cd) pyrene	0.01
Naphthalene	0.07
Phenanthrene	0.01
Pyrene	0.07
Total PAH	0.1
Phenolic Contaminants	
	mg/L
Non-halogenated compounds	
Phenol	1
m-cresol	2
o-cresol	2
p-cresol	2
Halogenated phenols	
Chlorophenol	0.01
Trichlorophenol	0.1
Pentachlorophenol	0.1
Chlorinated Hydrocarbons	
	mg/L
Chlorinated Aliphatic Compounds	
Carbon tetrachloride	0.03
1,2 Dichloroethane	0.1
1,1 Dichloroethene	0.003
Tetrachloroethene	0.1
Trichloroethene	0.3
Chlorinated Aromatic Compounds	
Chlorobenzene (total)	1
Hexachlorobenzene	0.002
Pesticides	
	mg/L
Aldrin	0.001
Chlordane	0.006
Chlorpyrifos	0.01
Dieldrin	0.001
DDT	0.003
Endrin	0.001
Heptachlor	0.003
Lindane	0.1
Methoxychlor	0.1
Toxaphene	0.005
Herbicides	
2,4-D	0.1
2,4-DB	0.2
MCPA	0.2
2,4,6-T	0.002
Carbamates	
Carbaryl	0.06
Carbofuran	0.03
Organophosphorus	

	<table> <tr> <td>Diazinon</td><td>0.01</td></tr> <tr> <td>Parathion</td><td>0.03</td></tr> <tr> <td>Methyl Parathion</td><td>0.006</td></tr> <tr> <td>Triazines</td><td></td></tr> <tr> <td>Alrazine</td><td>0.01</td></tr> <tr> <td>Simazine</td><td>0.01</td></tr> </table>	Diazinon	0.01	Parathion	0.03	Methyl Parathion	0.006	Triazines		Alrazine	0.01	Simazine	0.01
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W4.8	<p>The following waste must be handled and disposed of as a special burial of waste:</p> <ul style="list-style-type: none"> (a) Infectious substances properly and effectively treated to render them non-infectious; (b) Material or equipment contaminated with infectious substances properly and effectively treated to render them non-infectious; (c) Grease interceptor trap effluent and residues; (d) Waste, which if not buried as soon as practicable, would be likely to cause environmental harm when placed in an exposed position (for example, odorous putrescible waste, quarantine waste, chemically fixed waste streams excluding alkaline stabilised sewage sludge). 												
W4.9	Any soil contaminated by radioactive material must be contained within the landfill unit at a minimum distance of two (2) metres from the surface and flanks of the landfill unit , excluding any final cover system required as a condition of this approval.												
W4.10	<p>All chemical forms of asbestos waste must be:</p> <ul style="list-style-type: none"> (a) Disposed to a designated asbestos landfill unit that is separate to other waste disposal units; (b) Confined to a designated asbestos landfill unit where no excavation takes place following the initial disposal of asbestos waste within that designated asbestos landfill unit; (c) Placed at the bottom of the working face in the designated asbestos landfill unit and immediately covered with a minimum of 200mm of consolidated earth or equivalent cover material; (d) Contained within a final designated asbestos landfill unit at a minimum distance of 2 metres from the surface and flanks of the landfill unit, excluding any final cover system required as a condition of this approval (where final designated asbestos landfill unit means that deposition to the landfill unit as ceased); and (e) Managed so that in relation to the deposition of asbestos waste, the registered operator of the approval records the accurate location (accuracy not less than 0.5 metre for depth and area coordinates) of the designated asbestos landfill unit(s). 												
W4.11	Deposited waste must be covered as soon as practicable to limit stormwater infiltration, prevent exposure of waste and prevent issues arising from vectors and pest species.												

Part 5: Site Specific Conditions – Sewage Treatment

Environmentally relevant activities	Locations
63-(1d) Sewage treatment >4000 to 10000EP	Biloela Sewage Treatment Plant Quarrie Road BILOELA QLD 4715 - Lot 3 Plan SP137058
63-(1c) Sewage treatment >1500 to 4000EP	Moura Sewage Treatment Plant 121 Davey Street MOURA QLD 4718 - Lot 91 Plan FN493
63-(1b)(i) Sewage treatment >100 to 1500EP - IT or IR	Theodore Sewage Treatment Plant Leichhardt Highway THEODORE QLD 4719 - Lot 232 Plan DW346

The environmentally relevant activities conducted at the locations described above must be conducted in accordance with the following site specific conditions of approval

Agency interest: General	
Condition number	Condition
G5.1	Smaller volumes of chemicals (individual containers less than 210L) must be placed in roofed and bunded areas.
Agency interest: Water	
Condition number	Condition
WT5.1	Contaminants must not be released to any water's either directly or indirectly or the bed and banks of any waters except as permitted in this approval.
Agency interest: Land	
Condition number	Condition
L5.1	Treated effluent released to land must be done in accordance with documentation that ensures: a) drainage to groundwater and subsurface flows of contaminants to surface waters are prevented b) surface pondage and run-off of effluent is prevented c) degradation of soil structure is minimised d) soil sodicity and the build-up of nutrients and heavy metals in the soil and subsoil are minimised e) spray drift or overspray does not carry beyond effluent disposal areas f) effluent disposal areas are maintained with an appropriate crop in a viable state for transpiration and nutrient uptake g) sufficient buffer zones are maintained between irrigation sites and sensitive environmental receptors.
L5.2	Effluent pits will not be placed within 100 metres from a permanent watercourse or 50 metres from an ephemeral watercourse.
L5.3	When weather conditions or soil conditions preclude the release of treated sewage effluent to land, effluent must not be irrigated to land.
Agency interest: Waste	
Condition number	Condition
W5.1	All waste generated in carrying out the activity must be lawfully reused, recycled or removed to a facility that can lawfully accept the waste.

Definitions

Key terms and/or phrases used in this document are defined in this section and **bolded** throughout this document. Applicants should note that where a term is not defined, the definition in the *Environmental Protection Act 1994*, its regulations or environmental protection policies must be used. If a word remains undefined it has its ordinary meaning.

Activity means the environmentally relevant activities, whether resource activities or prescribed activities, to which the environmental authority relates.

Administering authority means the Department of Environment and Heritage Protection or its successor or predecessors.

Appropriately qualified person(s) means a person or persons who has professional qualifications, training, skills or experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis to performance relative to the subject matter using the relevant protocols, standards, methods or literature.

Authorise place means the place authorised under this approval for the carrying out of the specified environmentally relevant activities and includes all contiguous land and structures, other appurtenances, and improvements on the land.

Commercial place means a place used as a workplace, an office or for business or commercial purposes and includes a place within the curtilage of such a place reasonably used by persons at that place.

Contaminant means (Section 11 of the EP Act)

- a) a gas, liquid or solid; or
- b) an odour; or
- c) an organism (whether alive or dead), including a virus; or
- d) energy, including noise, heat, radioactivity and electromagnetic radiation; or
- e) a combination of contaminants.

General waste means waste other than regulated waste.

Landfill unit means a discrete area of land or an excavation that receives solid waste.

Leachate means a **liquid** that has passed through or emerged from, or is likely to have passed through or emerged from, a material stored, processed or disposed of at the site that contains soluble, suspended or miscible contaminants likely to have been derived from the said material.

Maximum means that the measured value of the quality characteristic or contaminant must not be greater than the release limit stated.

Minimum means that the measured value of the quality characteristic or contaminant must not be less than the release limit stated.

Measures has the broadest interpretation and includes plant, equipment, physical objects, bunding, containment systems, monitoring, procedures, actions, directions and competency.

NATA means National Association of Testing Authorities.

Noxious means harmful or injurious to health or physical well-being.

Offensive means causing offence or displeasure; is unreasonably disagreeable to the sense; disgusting, nauseous or repulsive.

Putrescible waste means waste food or waste animal matter (including dead animals and animal parts), or unstable or untreated bacterial (sewage) sludge, and includes any mixtures of such wastes.

Recycling means the activity of recovering materials (recyclable materials) from recyclable waste streams.

Release of a contaminant into the environment means to:

1. deposit, discharge, emit or disturb the contaminant; and
2. cause or allow the contaminant to be deposited, discharged, emitted or disturbed; and

3. fail to prevent the contaminant from being deposited, discharged emitted or disturbed; and
4. allow the contaminant to escape; and
5. fail to prevent the contaminant from escaping.

Sensitive place includes the following and includes a place within the curtilage of such a place reasonably used by persons at that place:

1. a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
2. a motel, hotel or hostel; or
3. a kindergarden, school, university or other educational institution; or
4. a medical centre or hospital; or
5. a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 2004* or a World Heritage Area; or
6. a public thoroughfare, park or gardens; or
7. for noise, a place defined as a sensitive receptor for the purposes of the *Environmental Protection (Noise) Policy 2008*.

TCLP means a toxicity characteristic leaching procedure.

24 hour storm event with an average recurrence interval of 1 in 10 years means the maximum rainfall depth from a 24 hour duration precipitation event with an average recurrence interval of once in 10 years. *For example, an Intensity-Frequency-Duration table for a 24 hour duration event with an average recurrence interval of 1 in 10 years, identifies a rainfall intensity of 8.2mm/hour. The rainfall depth for this event is therefore 24 hour x 8.2mm/hour = 196.8mm.*

Waters includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water, natural or artificial watercourse, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and groundwater and any part thereof.

You means the holder of the environmental authority.

END OF PERMIT