Permit

Environmental Protection Act 1994

Environmental authority EPPR00703413

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

Environmental authority number: EPPR00703413

Environmental authority takes effect on the day the authority is issued

The anniversary date of this environmental authority remains 31 January. The payment of the annual fee will be due each year on this day.

Environmental authority holder

Name	Registered address
Lantrak Waste and Recycling Pty Ltd	18 Dansu Court, HALLAM VIC 3803

Environmentally relevant activity and location details

Environmentally relevant activities	Locations
ERA 60 - Waste disposal 1: Operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection (1)(a) (d) more than 200,000t	Memorial Drive SWANBANK QLD 4305 – • Easement A and B in Lot 1 Plan SP225229; • Easement C in Lot 2 Plan SP225229; and • Lot 5 Plan SP225229
ERA 62 - Resource recovery and transfer facility operation 1: Operating a facility for receiving and sorting, dismantling, baling or temporarily storing- (a) scrap metal, non-putrescible waste or green waste only	
ERA 54 - Mechanical waste reprocessing 1: Operating a facility for receiving and mechanically reprocessing, in a year, more than 5,000t of inert, non-putrescible waste or green waste only	Memorial Drive SWANBANK QLD 4305 – Lot 5 on SP225229 Mobile and Temporary within the State of Queensland
ERA 16 - Extraction and Screening 3: Screening, in a year, the following quantity of material (a) 5,000t to 100,000t	Mobile and Temporary within the State of Queensland

Queensland Government

Additional information for applicants

Environmentally relevant activities

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

An EA authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the EA 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 contaminated land give written notice to the administering authority if they become aware of the following:

- the happening of an event involving a hazardous contaminant on the contaminated land (notice must be given within 24 hours); or
- a change in the condition of the contaminated land (notice must be given within 24 hours); or
- a notifiable activity (as defined in Schedule 3) having been carried out, or is being carried out, on the contaminated land (notice must be given within 20 business days);

that is causing, or is reasonably likely to cause, serious or material environmental harm.

For further information, including the form for giving written notice, refer to the Queensland Government website www.qld.gov.au, using the search term 'duty to notify'.

Take effect

Please note that, in accordance with section 200 of the EP Act, an EA has effect:

a) if the authority is for a prescribed ERA and it states that it takes effect on the day nominated by the holder of the authority in a written notice given to the administering authority-on the nominated day; or

b) if the authority states a day or an event for it to take effect-on the stated day or when the stated event happens; or

c) otherwise - on the day the authority is issued.

However, if the EA is authorising an activity that requires an additional authorisation (a relevant tenure for a resource activity, a development permit under the *Planning Act 2016* or an SDA Approval under the *State Development and Public Works Organisation Act 1971*), this EA will not take effect until the additional authorisation has taken effect.

If this EA takes effect when the additional authorisation takes effect, you must provide the administering authority written notice within 5 business days of receiving notification of the related additional authorisation taking effect.

If you have incorrectly claimed that an additional authorisation is not required, carrying out the ERA without the additional authorisation is not legal and could result in your prosecution for providing false or misleading information or operating without a valid environmental authority.

Scott Blanchard
Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

Date issued: 24 May 2021

Enquiries:
Waste and Contaminated Land Assessment
Department of Environment and Science
Phone: 1300 130 372
Email: palm@des.qld.gov.au

Legislative requirements and conditions of environmental authority

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)

Other permits required

This permit only provides an approval under the *Environmental Protection Act 1994*. In order to lawfully operate you may also require permits / approvals from your local government authority, other business units within the department and other State Government agencies prior to commencing any activity.

Requirement to keep work diary

The environmental authority holder is required under section 318X of the *Environmental Protection Act 1994* to maintain a work diary.

1) A registered suitable operator must keep a work diary in the approved form for a mobile and temporary environmentally relevant activity carried out by the operator.
2) The approved form must provide for the inclusion of the following—
    (a) details of each location at which the mobile and temporary environmentally relevant activity is carried out by the registered suitable operator;
    (b) the days on which the activity is carried out by the operator.
3) The registered suitable operator must record the information required under the approved form within 1 day after the day the operator vacates each location at which the mobile and temporary environmentally relevant activity is carried out, unless the operator has a reasonable excuse.
4) The registered suitable operator must keep the work diary for 2 years after the day on which the operator vacates the last location at which the mobile and temporary environmentally relevant activity is carried out, unless the operator has a reasonable excuse.
5) The work diary form is available at www.qld.gov.au using the publication number ESR/2015/1696 as a search term.

Conditions of environmental authority

Part 1 – Common Conditions for ALL activities

Environmentally Relevant Activities	Locations
ERA 62 - Resource recovery and transfer facility operation 1: Operating a facility for receiving and sorting, dismantling, baling or temporarily storing- (a) scrap metal, non-putrescible waste or green waste only ERA 60 - Waste disposal 1: Operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection (1)(a) (d) more than 200,000t	Memorial Drive SWANBANK QLD 4305 – Easement A and B in Lot 1 Plan SP225229, Easement C in Lot 2 Plan SP225229 and Lot 5 Plan SP225229
ERA 54 - Mechanical waste reprocessing 1: Operating a facility for receiving and mechanically reprocessing, in a year, more than 5,000t of inert, non-putrescible waste or green waste only	Memorial Drive SWANBANK QLD 4305 – Lot 5 on SP225229 Mobile and Temporary within the State of Queensland
ERA 16 - Extraction and Screening 3: Screening, in a year, the following quantity of material (a) 5,000t to 100,000t	Mobile and temporary within the State of Queensland

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

Agency interest: General	
Condition number	**Condition**
P1-G1	All reasonable and practicable **measures** must be taken to minimise the likelihood of environmental harm being caused.
P1-G2	As soon as practicable after becoming aware of any emergency or incident that results in the release of contaminants not in accordance, or reasonably expected to be not in accordance with the conditions of this environmental authority, **you** must notify the **administering authority** of the release by telephone or e-mail.

P1-G3	The notification of emergencies or incidents as required by condition P1-G2 must include but not be limited to the following: a) the holder of the environmental authority; b) the location of the emergency or incident; c) the number of the environmental authority; d) the name and telephone number of the designated contact person; e) the time of the release; f) the time the holder of the environmental authority became aware of the release; g) the suspected cause of the release; h) the environmental harm caused, threatened, or suspected to be caused by the release; and i) actions taken to prevent further any release and mitigate any environmental harm caused by the release
P1-G4	Not more than 14 days following the initial notification of an emergency or incident, the holder of the environmental authority must provide written advice of the information supplied in accordance with condition P1-G3 in addition to: a) proposed actions to prevent a recurrence of the emergency or incident; and b) outcomes of actions taken at the time to prevent or minimise environmental harm.
P1-G5	As soon as practicable, but not more than six weeks following the conduct of any environmental monitoring performed in relation to the emergency or incident, that results in the release of contaminants not in accordance, or reasonably expected to be not in accordance with the conditions of this environmental authority, the holder of the environmental authority must provide written advice of the results of any such monitoring performed to the **administering authority**.
P1-G6	The holder of the environmental authority must notify the **administering authority** in writing of any monitoring result that indicates an exceedance of or non-compliance with any condition of this environmental authority's release limit within 28 days of completion of analysis.
P1-G7	The written notification required by condition P1-G6 above must include: a) the full analysis results; and b) details of investigation or corrective actions taken; and c) any subsequent analysis.
P1-G8	A record must be maintained of at least the following events: a) the time, date and duration of equipment malfunctions where the failure of the equipment resulted in the release of contaminants reasonably likely to cause environmental harm; b) any uncontrolled release of contaminants reasonably likely to cause environmental harm; and c) any emergency involving the release of contaminants reasonably likely to cause material or serious environmental harm requiring the use of firefighting equipment.
P1-G9	The holder of this environmental authority must: a) install all **measures**, plant and equipment necessary to ensure compliance with the conditions of this environmental authority; and b) maintain such **measures**, plant and equipment in a proper and efficient condition; and c) operate such **measures**, plant and equipment in a proper and efficient manner.

P1-G10	From commencement of an ERA to which this approval relates, a Site Based Management Plan (SBMP) must be implemented. The SBMP must identify all sources of environmental harm, including but not limited to the actual and potential release of all contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused. The SBMP must also provide for the review and 'continual improvement' in the overall environmental performance of all ERAs that are carried out. The SBMP must address the following matters: a) Environmental commitments - a commitment by senior management to achieve specified and relevant environmental goals. b) Identification of environmental issues and potential impacts. c) Control measures for routine operations to minimise likelihood of environmental harm. d) Contingency plans and emergency procedures for non-routine situations. e) Organisational structure and responsibility. f) Effective communication. g) Monitoring of contaminant releases. h) Conducting environmental impact assessments. i) Staff training. j) Record keeping, k) Periodic review of environmental performance and continual improvement. l) Control measures and operational procedures to minimise the potential for spontaneous combustions; and m) A contingency plan detailing appropriate management measures in the event of a spontaneous combustion instance.
P1-G11	The SBMP must not be implemented or amended in a way that contravenes any condition of this environmental authority.
P1-G12	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.
P1-G13	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.
P1-G14	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.
P1-G15	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.
P1-G16	All reasonable and practicable **measures** must be taken to contain litter within the **waste operations area**, and retrieve litter released.

P1-G17	All reasonable and practicable **measures** must be taken to exclude vectors and pest species to the extent necessary to prevent: a) nuisance to occupiers of neighbouring premises b) any danger or risk to the health of any persons.
P1-G18	All batteries, **liquid** chemicals, fuels, and other **liquid** substances with potential to cause environmental harm must be stored within a secondary containment system that is impervious to the materials stored within it, and must be managed to prevent the release of contaminants to **waters** or land.
P1-G19	The operator must provide a financial assurance to the **administering authority**: a) Prior to the commencement of an ERA to which this environmental authority relates, the operator must provide and maintain a financial assurance security in the form of an unconditional and irrevocable bank guarantee in favour of the **administering authority** for the amount of seven hundred and fifty thousand dollars ($750,000), and lodge it with the **administering authority**. b) The financial assurance security must be maintained until the **administering authority** is satisfied that no claim is likely to be made on the assurance and in excess of any claims made in respect of such financial assurance under the provisions of the *Environmental Protection Act 1994.* c) Prior to the commencement of an ERA to which this environmental authority relates, a certificate or certificates of insurance covering third party liability and for sudden and accidental events that result in environmental harm or nuisance must be maintained and provided to the **administering authority**. The sum or sums so insured must equal or exceed five million dollars ($5,000,000).
Agency interest: Air	
Condition number	**Condition**
P1-A1	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**.
P1-A2	Dust and particulate matter emissions must not exceed the following concentrations at any **sensitive place** or **commercial place**: a) dust deposition of 120 milligrams per square metre per day, when monitored in accordance with Australian Standard AS 3580.10.1 (or more recent editions), or b) a concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM_{10}) suspended in the atmosphere of 100 micrograms per cubic metre over a 24 hour averaging time, when monitored in accordance with Australian Standard AS 3580.9.3 (or more recent editions) or any other method approved by the **administering authority**. c) A concentration of respirable crystalline silica (as $PM_{2.5}$) of 3 micrograms per cubic metre over a 1 year averaging time, when monitored in accordance with Australian Standards AS 3580.9.10 (or more recent editions) or any other method approved by the **administering authority**.

Agency interest: Water	
Condition number	**Condition**
P1-WT1	Contaminants must not be released to any **waters**.
Agency interest: Noise	
Condition number	**Condition**
P1-N1	Other than as permitted within this environmental authority, noise generated by the **activity** must not cause **environmental nuisance** to any **sensitive place** or **commercial place.**
Agency interest: Waste	
Condition number	**Condition**
P1-W1	All waste removed from the site must be lawfully reused, recycled or removed to a facility that can lawfully accept the waste.
P1-W2	Waste must not be burnt.
P1-W3	**Incompatible wastes** must not be mixed in the same container or waste storage area.

PART 2 – Conditions for activities carried out on Memorial Drive, SWANBANK QLD 4305

Environmentally Relevant Activities	Locations
ERA 60 - Waste disposal 1: Operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection (1)(a) (d) more than 200,000t ERA 62 - Resource recovery and transfer facility operation 1: Operating a facility for receiving and sorting, dismantling, baling or temporarily storing- (a) scrap metal, non-putrescible waste or green waste only	Memorial Drive SWANBANK QLD 4305 – • Easement A and B in Lot 1 Plan SP225229; • Easement C in Lot 2 Plan SP225229; and • Lot 5 Plan SP225229
ERA 54 - Mechanical waste reprocessing 1: Operating a facility for receiving and mechanically reprocessing, in a year, more than 5,000t of inert, non-putrescible waste or green waste only	Memorial Drive SWANBANK QLD 4305 – Lot 5 on SP225229

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

Agency interest: General	
Condition number	**Condition**
P2-G1	Activities under this environmental authority must be conducted in accordance with the following limitations: a) mechanical waste processing must only be undertaken within the area shown in Schedule 3 Figure 1 of this environmental authority.
Agency interest: Air	
Condition number	**Condition**
P2-A1	The following materials must not be used for dust suppression purposes: a) **leachate** or landfill gas condensate b) waste oil or other hydrocarbons.
Agency interest: Water	
Condition number	**Condition**
P2-WT1	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 5 years** must be retained on site or managed to remove contaminants before release.

P2-WT2	The controlled release of treated/settled stormwater must be conducted in a way and at a rate that does not cause: a) re-suspension of particles; or b) erosion of bed or banks of receiving waters; or c) landscape damage; or d) ponding of the water; or e) vegetation damage.
P2-WT3	At least two months prior to the commencement of construction of landfill cells, the holder of this environmental authority must: a) submit to the **administering authority** documentation detailing: i. the practices and procedures implemented or proposed to be implemented that will ensure compliance with the conditions of this environmental authority in so far as they relate to release of leachate to groundwater and surface waters at the premises to which this environmental authority relates to; ii. the data/information relied upon to demonstrate the likelihood of compliance with the requirements mentioned in subclause (i) of this condition; and iii. applicable design plans for any liner system and leachate management system that is proposed to be installed at the premises to which this environmental authority relates to; b) have due regard to any comments made by the **administering authority** on that documentation in implementing appropriate and effective practices and procedures to ensure such compliance.
P2-WT4	Before the commencement of the deposition of waste in any **landfill unit**, the base of the unit must be graded to avoid rainwater ponding and to facilitate collection of **leachate** in the **leachate** storage structure(s). The base of the construction and demolition waste disposal units must be constructed of a one (1) metre thick layer of compacted non-combustible material.
P2-WT5	Construction and demolition waste processing and storage operations must be carried out on hardstand pad(s) that are: (a) constructed of a low permeable material to minimise soil infiltration; (b) bunded to divert external stormwater runoff away from the pad(s) and to contain waste materials and the resulting **leachate** and contaminated stormwater within the pad(s); and (c) graded to avoid rainwater ponding and to facilitate collection of **leachate** and contaminated stormwater in the **leachate** storage structure(s) or sedimentation pond(s). Note: To remove any doubt, the sedimentation pond(s) may serve uncontaminated areas of the hardstand pad(s) such as trafficable areas, areas where waste materials are stored in sealed containers or stockpile areas of completely inert and uncontaminated waste materials.
P2-WT6	A **leachate** collection system must be designed by an **appropriately qualified person** and installed and maintained to: a) collect **leachate** generated in the **landfill unit**; b) convey the collected **leachate** out of the **landfill unit** to an appropriate **leachate** storage facility; and c) minimise the height of the **leachate** above the liner system.

<table>
<tr><td>P2-WT7</td><td>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:
a) treated in the leachate treatment plant and discharged to sewer in accordance with the requirements of the relevant water utility; or
b) recirculated through waste disposed in the landfill unit; or
c) treated by alternative technologies agreed by the administering authority for offsite disposal, discharge, or on-site reuse; or
d) disposed of at a facility that is approved to receive such waste.</td></tr>
<tr><td>P2-WT8</td><td>All ponds used for the storage or treatment of contaminated stormwater or leachate must be constructed, installed and maintained:
(a) so as to minimise the likelihood of any release of the stored contaminated stormwater or leachate through the bed or banks of the pond to any waters (including groundwater);
(b) so that a freeboard of not less than 0.5 metres is maintained at all times, except in emergencies; and
(c) so as to ensure the stability of the ponds' construction.</td></tr>
<tr><td>P2-WT9</td><td>The holder of the environmental authority must monitor and record quality of leachate or stormwater runoff which has been in contact with waste materials at the sampling and in situ monitoring point(s) located within leachate storage structure(s) serving the areas and for the water quality characteristics and frequencies specified in Table 1 – Leachate monitoring.

Table 1 – Leachate monitoring
<table>
<tr><th>AREA</th><th>WATER QUALITY CHARACTERISTIC</th><th>FREQUENCY</th></tr>
<tr><td rowspan="14">1. Landfill Unit(s)
2. Construction and demolition processing including mechanical processing and Storage Area(s)</td><td>1. Ammonia (as N)</td><td rowspan="14">At least annually (unless that leachate pond(s) remains dry for that annual reporting period)</td></tr>
<tr><td>2. Bicarbonate (HCO_3)</td></tr>
<tr><td>3. Calcium</td></tr>
<tr><td>4. Chlorine</td></tr>
<tr><td>5. Iron (total)</td></tr>
<tr><td>6. Lead</td></tr>
<tr><td>7. Nitrate (as N)</td></tr>
<tr><td>8. pH</td></tr>
<tr><td>9. Potassium</td></tr>
<tr><td>10. Sodium</td></tr>
<tr><td>11. Sulphate</td></tr>
<tr><td>12. Specific Conductance</td></tr>
<tr><td>13. Total Organic Carbon (TOC)</td></tr>
<tr><td>14. Zinc</td></tr>
</table>
Associated requirements
1. Monitoring must be performed by an appropriately qualified person(s).
2. All monitoring devices must be correctly calibrated and maintained
3. Water quality monitoring must be in accordance with the methods prescribed in the current edition of the administering authority's Monitoring and Sampling Manual.
4. Samples taken for monitoring purposes must be representative of the leachate contained in the storage structures.</td></tr>
</table>

<table>
<tr><td>P2-WT10</td><td>The holder of the environmental authority must submit results of the leachate monitoring program to the administering authority upon request.</td></tr>
<tr><td>P2-WT11</td><td>The release of contaminants to groundwaters is not considered to cause environmental harm if groundwater monitoring shows that the release does not result in any statistically significant adverse change of these contaminants over background values at locations hydraulically down gradient of the landfill unit.</td></tr>
<tr><td>P2-WT12</td><td>A groundwater monitoring system must be installed for each landfill unit. The system must be:
a) installed and maintained by a person possessing appropriate qualifications and experience in the fields of hydrogeology and groundwater monitoring program design to be able to competently make recommendations about these matters; and
b) include a sufficient number of compliance bores that are located not more than 150 metres from the landfill unit or the boundary of the landfill facility whichever is the closer, and provides the following:
i. representative groundwater samples from the uppermost aquifer;
ii. background groundwater quality in hydraulically up-gradient or background bore(s) that have not been affected by any release of contaminants to groundwaters; and
iii. the quality of groundwater down gradient of any release of contaminants to groundwater including groundwater passing the relevant compliance bores.</td></tr>
<tr><td>P2-WT13</td><td>The locations of wells and groundwater monitoring facilities that comprise the groundwater monitoring system must be given with reference to horizontal coordinates of such facilities accurate to 1.0 metre.</td></tr>
<tr><td>P2-WT14</td><td>Except as otherwise provided, the holder of the environmental authority must monitor and record quality of groundwater to detect any possible release(s) of contaminants in accordance with the Detection Groundwater Monitoring Program. The Detection Groundwater Monitoring Program must be undertaken for, at least, the water quality characteristics in Table 2 - Quality characteristics of groundwater monitoring.

Table 2 – Quality characteristics of groundwater monitoring
<table><tr><th colspan="2">GROUNDWATER QUALITY CHARACTERISTICS</th></tr><tr><td>1. Ammonia (as N)</td><td>9. Sodium</td></tr><tr><td>2. Calcium</td><td>10. Potassium</td></tr><tr><td>3. Copper</td><td>11. Sulphate</td></tr><tr><td>4. Iron (total)</td><td>12. Specific conductance</td></tr><tr><td>5. Lead</td><td>13. Total organic carbon (TOC)</td></tr><tr><td>6. Nitrate (as N)</td><td>14. Zinc</td></tr><tr><td>7. Bicarbonate (HCO3)</td><td>15. Chloride</td></tr><tr><td>8. pH</td><td></td></tr></table></td></tr>
</table>

P2-WT15	**You** must determine whether or not there has been any statistically significant increase over background values at locations hydraulically down-gradient of the landfill unit for any water quality characteristic required to be monitored under the Detection Groundwater Monitoring Program referred to in condition P2-WT14.
P2-WT16	On any occasion that samples are obtained, **you** must measure and record the standing groundwater levels in metres, accurate to 0.01 metres. 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 0.005 metres.
P2-WT17	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.
P2-WT18	Any monitoring facility must be maintained in an operative condition and be reasonably accessible at all times to any authorised person.
P2-WT19	Each groundwater monitoring bore must be fitted with a locked cap at all times other than at the time of sampling.
P2-WT20	The holder of the environmental authority must monitor and record groundwater quality as often as is necessary to check compliance with the conditions of this environmental authority but not less frequently than every 6 months.
P2-WT21	Conduct monitoring and keep records of contaminant releases to groundwaters. All determinations of contaminant releases must be: (a) made in accordance with methods prescribed in the latest edition of the **administering authority's** Monitoring and Sampling Manual; (b) conducted at least at the frequency every three (3) months, locations determined by the groundwater monitoring network and for, water quality characteristics in *Table 2 - Quality characteristics of groundwater monitoring*; (c) undertaken before, during, after deposition of waste in the landfill unit; (d) followed by assessment whether or not there has been any statistically significant adverse change compared to background values at locations hydraulically down gradient of the landfill unit for each quality characteristic in *Table 2 - Quality characteristics of groundwater monitoring*.

<table>
<tr><th colspan="2">Agency interest: Noise</th></tr>
<tr><th>Condition number</th><th>Condition</th></tr>
<tr><td>P2-N1</td><td>Noise from the activity must not exceed the levels identified in Table 3—Noise limits when measured in accordance with the associated monitoring requirements.

Table 3 – Noise Limits
<table>
<tr><th rowspan="2">Noise level dB(A) measured as</th><th colspan="3">Monday to Saturday</th><th colspan="3">Sundays and public holidays</th></tr>
<tr><th>7am – 6pm</th><th>6pm – 10pm</th><th>10pm - 7am</th><th>9am – 6pm</th><th>6pm – 10pm</th><th>10pm – 9am</th></tr>
<tr><td colspan="7">Noise measured at a ‘Noise sensitive place’</td></tr>
<tr><td>$L_{A10, adj, 10 mins}$</td><td>Bkg + 5</td><td>Bkg + 5</td><td>Bkg + 0</td><td>Bkg + 5</td><td>Bkg + 5</td><td>Bkg + 0</td></tr>
<tr><td>$L_{A1, adj, 10 mins}$</td><td>Bkg + 10</td><td>Bkg + 10</td><td>Bkg + 5</td><td>Bkg + 10</td><td>Bkg + 10</td><td>Bkg + 5</td></tr>
<tr><td colspan="7">Noise measured at a ‘Commercial place’</td></tr>
<tr><td>$L_{A10, adj, 10 mins}$</td><td>Bkg + 10</td><td>Bkg + 10</td><td>Bkg + 5</td><td>Bkg + 10</td><td>Bkg + 10</td><td>Bkg + 5</td></tr>
<tr><td>$L_{A1, adj, 10 mins}$</td><td>Bkg + 15</td><td>Bkg + 15</td><td>Bkg + 10</td><td>Bkg + 15</td><td>Bkg + 15</td><td>Bkg + 10</td></tr>
</table>
Associated monitoring requirements
1. All monitoring devices must be correctly calibrated and maintained.
2. Any monitoring must be in accordance with the most recent version of the administering authority’s Noise Measurement Manual.
3. Any monitoring of noise emissions from the activity must be undertaken when the activity is in operation.
Monitoring must be performed by an appropriately qualified person(s).</td></tr>
<tr><td>P2-N2</td><td>When required by the administering authority, noise monitoring must be undertaken, in accordance with the associated monitoring requirements of Table 3—Noise limits, and the results notified within 14 days to the administering authority. Monitoring must include:
a) $L_{Aeq, adj, T}$
b) Background noise (Background) as $L_{A 90, adj, T}$
c) $MaxL_{pA,T}$
d) the level and frequency of occurrence of any impulsive or tonal noise
e) atmospheric conditions including wind speed and direction
f) effects due to extraneous factors such as traffic noise
location, date and time of recording.</td></tr>
<tr><th colspan="2">Agency interest: Land</th></tr>
<tr><th>Condition number</th><th>Condition</th></tr>
<tr><td>P2-L1</td><td>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:
a) infiltration of water into the landfill unit and water ponding on the surface; and
b) the likelihood of any erosion occurring to either the final capping system or the landfilled materials.

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.</td></tr>
</table>

P2-L2	Land that has been disturbed for activities conducted under this environmental authority must be rehabilitated in a manner such that: a) suitable species of vegetation for the location are established and sustained for earthen surfaces b) potential for erosion is minimised c) the quality of **water**, including seepage, released from the site does not cause environmental harm d) potential for **environmental nuisance** caused by dust is minimised e) the water quality of any residual water body does not have potential to cause environmental harm f) the final landform is stable and protects public safety g) 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 2013'.
P2-L3	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.
P2-L4	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: a) maintain the structural integrity and effectiveness of the final capping system; b) maintain and operate the **leachate** collection system; and c) maintain the **groundwater monitoring system** and monitor quality of **groundwater** at a frequency sufficient to detect any release of contaminants to **groundwater**.
P2-L5	A site management plan pursuant to Chapter 7, Part 8, Division 5 of the *Environmental Protection Act 1994* must be developed and provided to the **administering authority** at least 12 months before the expected final receipt of waste in the **landfill unit**. The site management plan must include, but is not to be limited to, the future land use and actions intended to be taken for compliance with the closure and post-closure care requirements of this approval.
P2-L6	Treatment and management of acid sulfate soils must comply with the latest edition of the *Queensland Acid Sulfate Soil Technical Manual.*

Agency interest: Waste	
Condition number	**Condition**
P2-W1	The only waste that may be received at the site is construction and demolition waste, asbestos, and contaminated soil excluding the following waste: a) any liquescent waste; b) any **regulated waste** other than asbestos; c) any putrescible waste, except for minor amounts from industrial and commercial premises in quantities of no more than 5% by mass in any one load. d) chemically impregnated timber with the exception of minor amounts of chemically impregnated timber commingled with other waste; e) metals with the exception of minor amounts of metals incidental to or commingled with other waste; f) garden and/or green waste with the exception of minor amounts of garden and/or green waste incidental to or commingled with other waste; g) plastic products with the exception of minor amounts of plastics incidental to or commingled with other waste; h) material that is smouldering or aflame.
P2-W2	Contaminated soil disposed of at the premises to which this environmental authority relates must be accepted subject to effectively implementing risk assessment practices and procedures for contaminant testing that ensure that the material accepted complies with the maximum contaminant levels and the allowable leaching contaminant levels prescribed in Schedule 1—Contaminated soil limits: *Table 4 – Maximum contaminant levels for contaminated soils* and *Table 5 – Allowable leaching contaminant levels for contaminated soils* respectively.
P2-W3	All acid sulphate soils accepted for disposal must be effectively treated so that the pH of the material disposed of is between 6.5 and 8.5.

P2-W4	All chemical forms of asbestos waste must be: (a) Either: i. disposed to a designated asbestos **landfill unit** that is separate to other waste disposal units; and 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**; and 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; and ii. contained within a final designated asbestos **landfill unit** at a minimum distance of 2m from the surface and flanks of the **landfill unit**, with the exception of the flanks of the **landfill unit** abutting the overburden of the void where asbestos related waste may be placed within 1m of the permitted flanks of the **landfill unit** as depicted in Schedule 2—Asbestos landfilling areas: *Figure 1*, excluding any final cover system required as a condition of this environmental authority (where final designated asbestos **landfill unit** means that deposition to the **landfill unit** has ceased); (b) Or otherwise: i. asbestos waste must be placed at the bottom of the working face in the **landfill unit** and immediately covered with a minimum of 200mm of consolidated earth or equivalent cover material; and ii. asbestos wastes must be contained within the **landfill unit** at a minimum distance of 2m from the surface and flanks of any **landfill unit**, with the exception of the flanks of the **landfill unit** abutting the overburden of the void where asbestos related waste may be placed within 1m of the permitted flanks of the **landfill unit** as depicted in Schedule 2—Asbestos landfilling areas: *Figure 1*, excluding any final cover system required as a condition of this environmental authority.
P2-W5	Records required to be kept in relation to the deposition of asbestos waste at the premises to which this environmental authority relates must be kept for the post closure care period.
P2-W6	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.

P2-W7

If contaminated soil is used as coverage material, contaminant levels must not exceed the maximum concentration limits in *Table 6 – Maximum total contaminant levels in soils used as cover material*, must not cause contaminated stormwater release and must not include any soil that is contaminated due to the concentration of asbestos, monocyclic aromatic hydrocarbons, polycyclic aromatic hydrocarbons, chlorinated hydrocarbons, pesticides, or petroleum hydrocarbons.

Table 6 – Maximum total contaminant levels in soils used as cover material

Contaminant	**Maximum total contaminant levels in soils used as cover material (mg/kg)**
Arsenic (total)	200
Beryllium	40
Cadmium	40
Chromium (iii)	240,000
Chromium (iv)	200
Copper	2,000
Lead	600
Manganese	3,000
Mercury (inorganic)	30
Methyl Mercury	20
Nickel	600
Zinc	14,000

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 Science 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 environmental authority requirement and can give authoritative assessment, advice and analysis in relation to the environmental authority requirement using the relevant protocols, standards, methods or literature.

Background means noise, measured in the absence of the noise under investigation, as $L_{A90,T}$ being the A-weighted sound pressure level exceeded for 90% of the time period of not less than 15 minutes, using Fast response.

Background bore means **groundwater** monitoring bore used to sample **groundwater** from an aquifer the water quality of which may be potentially affected by the **activity**. This may be an **up-gradient bore, down-gradient bore** or bore in the same aquifer in a nearby location unaffected by the **activity**.

Boundary means within 1m of the cadastral boundary of the site.

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.

Compliance bore means a bore used to monitor compliance with the **groundwater** quality limits.

Down-gradient bore means a **background bore** in a location hydraulically down gradient of those aspects of the **activity** that may affect **groundwater** quality

Environmental Nuisance as defined in Chapter 1 of the *Environmental Protection Act 1994*.

Freeboard means the distance between the water surface and overflow point.

Groundwater means water that occurs naturally in, or is introduced artificially into, an aquifer.

Groundwater monitoring system means a system of **groundwater** monitoring devices, such as monitoring bores, used to provide data in respect to the level and quality of **groundwater** in the uppermost aquifer where the location of the **groundwater** monitoring devices is such that comparisons of **groundwater** quality and **groundwater** level can be made between **groundwater** flowing from beneath the site (down-gradient flow) of the **activity** and **groundwater** flowing towards the site of the **activity** (up-gradient flow).

Incompatible waste means waste that may chemically react when:

1. placed in proximity to other wastes; and/or
2. mixed with other wastes.

$L_{Aeq\ adj,T}$ means the adjusted A weighted equivalent continuous sound pressure level measures on fast response, adjusted for tonality and impulsiveness, during the time period T, where T is measured for a period no less than 15 minutes when the **activity** is causing a steady state noise, and no shorter than one hour when the approved **activity** is causing an intermittent noise.

Land does not include **waters**.

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

Landfill facility means land and structures at the site approved used for the disposal of 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.

Liquid means any substance that:

1. has an angle of repose of less than five degrees; or
2. becomes free flowing at or below 60 degrees Celsius or when it is transported; or
3. is not generally capable of being picked up by a spade or shovel.

Max$_{LpA,T}$ means the maximum A-weighted sound pressure level measured over a time period T of not less than 15 minutes, using Fast response.

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.

Receiving environment monitoring program means a monitoring program designed to monitor and assess the potential impacts of controlled and/or uncontrolled releases of contaminants to the environment from the activity.

Records include breach notifications, written procedures, analysis results, monitoring reports and monitoring programs required under a condition of this authority.

Regulated waste means non-domestic waste mentioned in Schedule 9 of the Environmental Protection Regulation 2019 (whether or not it has been treated or immobilised), and includes -

- for an element - any chemical compound containing the element; and
- anything that has contained the waste.

Secondary containment system means a system designed, installed and operated to prevent any release of contaminants from the system, or containers within the system, to land, groundwater, or surface waters.

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 kindergarten, 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 park or garden; or
7. for noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise) Policy 2019.

Up-gradient bore means a **background bore**, in a location hydraulically up gradient of all potential influences of the **activity** that may affect groundwater quality.

Waste operations area means the following areas:

1. waste receiving
2. sorting
3. treating
4. recycling
5. disposal
6. reprocessing.

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.

24 hour storm event with an average recurrence interval of 1 in 5 years means the maximum rainfall depth from a 24 hour duration precipitation event with an average recurrence interval of once in 5 years. *For example, an Intensity-Frequency-Duration table for a 24 hour duration event with an average recurrence interval of 1 in 5 years, identifies a rainfall intensity of 7.09mm/hour. The rainfall depth for this event is therefore 24 hour x 7.09mm/hour = 170.16mm.*

Schedule 1—Contaminated soil limits

Table 4 – Maximum contaminant levels for contaminated soils

Contaminant Analysis	Maximum Contaminant Levels (mg/kg)
Monocyclic Aromatic Hydrocarbons (MAH)	
Benzene	10
Ethyl Benzene	500
Toluene	300
Xylene	250
Total MAH	500
Polycyclic Aromatic Hydrocarbons (PAH)	
Total PAH	500
Phenolic Contaminants	
Non halogenated compounds	
Phenol	100
m-cresol	250
o-cresol	250
p-cresol	250
Total non-halogenated phenol	250
Halogenated phenol	
Cholorophenol	1
Tricholorophenol	5
Pentachlorophenol	5
Total Halogenated phenol	5
Chlorinated Hydrocarbons	
Chlorinated Aliphatic Compounds:	
Carbon Tetrachloride	5
1, 2 Dichloroethane	10
1, 1 Dichloroethane	1
Tetrachloroethane	10
Trichloroethane	25
Total chlorinated aliphatic compounds	50
Chlorinated Aromatic Compounds:	
Chlorobenzene	100

Contaminant Analysis	Maximum Contaminant Levels (mg/kg)
Hexachlorobenzene	1
Total Chlorinated Aromatic compounds	100
Pesticides	
Total organochlorine	5
Total herbicides	25
Total carbamates	25
Total organophosphorus	10
Petroleum Hydrocarbons	
Total petroleum hydrocarbons(C_6-C_9)	500
Total petroleum hydrocarbons(C_{10}-C_{14})	6 000
Total petroleum hydrocarbons(C_{15}-C_{28})	10 000
Total petroleum hydrocarbons(C_{28}-C_{36})	10 000
Fluorinated Organic Compounds	
PFOS + PFHxS	0.01
PFOA	0.1

Table 5 – Allowable leaching contaminant levels for contaminated soils

Contaminant Analysis	Allowable Leaching Contaminant Levels (mg/L)
Non Specific Contaminants	
Biochemical Oxygen Demand	20 000
Total Organic Carbon	10 000
Petroleum Hydrocarbons	25
Microtox LC50	**No levels set at this time*
Metals/Non-Metals	
Antimony	0.5
Arsenic	0.5
Barium	10.0
Cadmium	0.05
Chromium	0.5
Cobalt	0.5
Copper	10.0

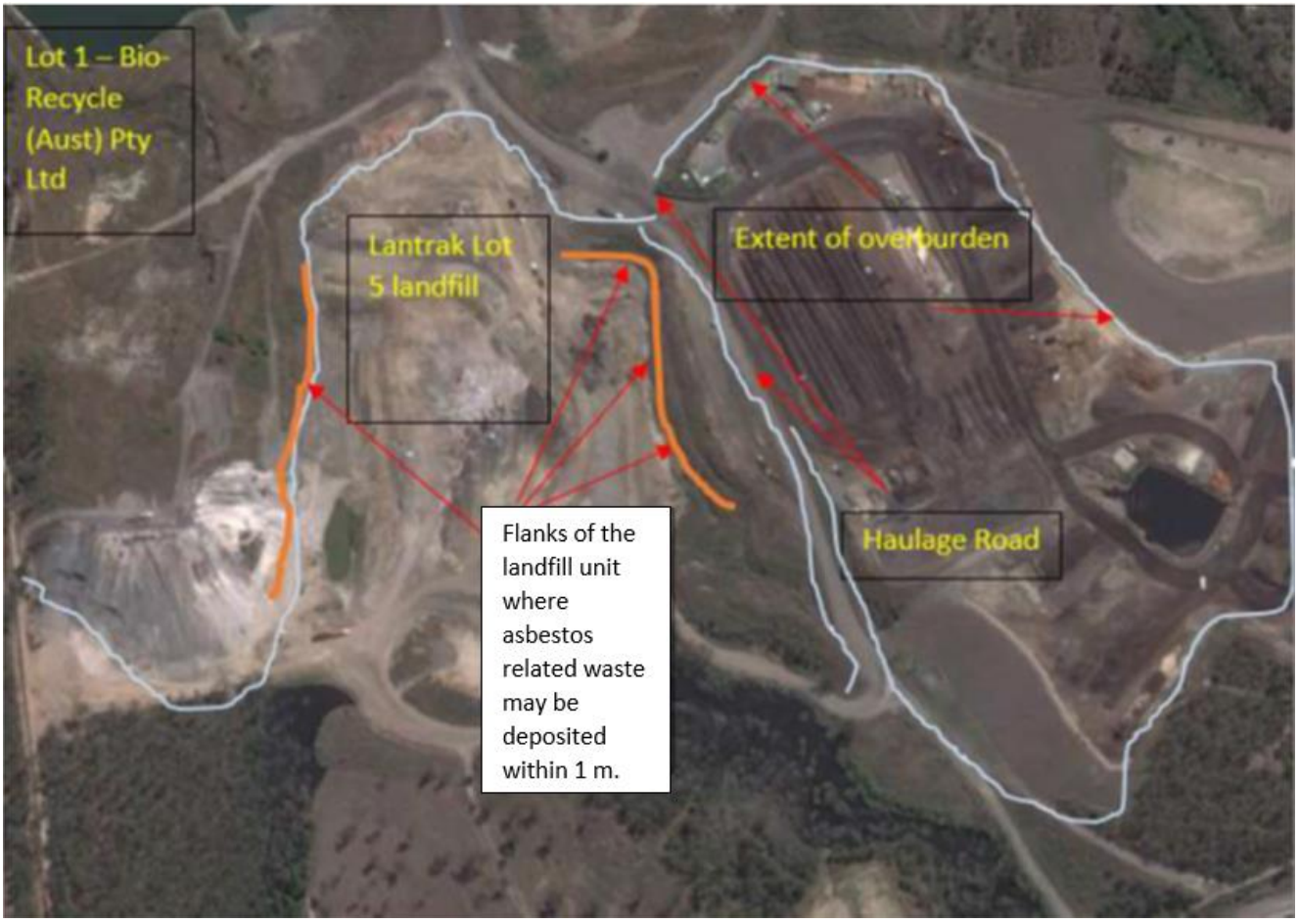
Contaminant Analysis	Allowable Leaching Contaminant Levels (mg/L)
Lead	0.5
Mercury	0.01
Molybdenum	0.1
Nickel	0.5
Selenium	0.1
Silver	0.5
Thallium	0.1
Tin	0.3
Vanadium	0.5
Zinc	50.0
Inorganic Anions	
Bromide	5.0
Chloride	6 000
Cyanide (total)	1.0
Fluoride	15.0
Sulphate	2 500
Nitrate	100.0
Monocyclic Aromatic Hydrocarbons (MAHs)	
Benzene	0.1
Ethyl benzene	5.0
Toluene	3.0
Xylene	2.0
Total MAH	5.0
Polycyclic Aromatic Hydrocarbons (PAHs)	
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	0.10

Contaminant Analysis	Allowable Leaching Contaminant Levels (mg/L)
Dibenz (a,h) anthracene	0.002
Dibenz (a,h) pyrene	0.01
Dimethylbenz (a) anthracene	0.005
Flouranthene	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	
Non-halogenated compounds	
Phenol	1.0
m-Cresol	2.0
o-Cresol	2.0
p-Cresol	2.0
Halogenated phenols:	
Chlorophenol	0.01
Trichlorophenol	0.1
Pentachlorophenol	0.1
Chlorinated Hydrocarbons	
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)	1.0
Hexachlorobenzene	0.002
Pesticides	
Organochlorine:	

Contaminant Analysis	Allowable Leaching Contaminant Levels (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:	
Diazinon	0.01
Parathion	0.03
Methyl Parathion	0.006
Triazines:	
Atrazine	0.01
Simazine	0.01
Fluorinated Organic Compounds	
PFOS + PFHxS	0.0007
PFOA	0.0056
Total Fluorinated Organic Compounds	0.0056

Schedule 2—Asbestos landfilling areas

Figure 1. Areas of the landfill where asbestos related waste may be placed 1m from the flanks of the **landfill unit** (orange coloured lines)



Schedule 3—Location of ERA 54(1)



Figure 1. Location of ERA 54(1) and ERA 62.

END OF PERMIT