



Department of
**Environment and
Heritage Protection**

To: Torres Shire Council
68 Douglas Street
THURSDAY ISLAND QLD 4875

Email: william.cuthbertson@torres.qld.gov.au

Attention: Mr William Cuthbertson

Your reference: EPPR00186913

Application details

I refer to the application that was received by the administering authority on 26-OCT-2016 to convert DA IPCE00606007 into an Environmental Authority (EA). All conditions of DA IPCE00606007 have been converted into your existing EA EPPR00186913.

Land description:

Horn Island STP – Air Port Road HORN ISLAND - Lot 81 Plan SP181523 and Lot 8 Plan SP181523 and Lot 82 Plan SP181523

Decision

Your conversion DA/EA application has been approved and your amended environmental authority (reference EPPR00176913) is attached.

Should you have any further enquiries, please contact Amanda Gray on telephone 1300 130 372.

Yours sincerely


Signature


Date

Chris Mooney
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

Enclosed

Permit - environmental authority (reference EPPR00874613)

Department of Environment and Heritage Protection

Permit¹

Environmental Protection Act 1994

EPPR00186913

Environmental authority

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

Permit¹ number: EPPR00186913

Environmental authority takes effect upon signing by the delegate

The anniversary date of this environmental authority is 24 January each year. An annual return and the payment of the annual fee will be due each year on this day.

Environmental authority holder(s)

Name	Principal address
Torres Shire Council	68 Douglas Street THURSDAY ISLAND QLD 4875

Environmentally relevant activity and location details

Environmentally relevant activity(ies)	Location(s)
63-(1d) Sewage treatment >4000 to 10000EP	Thursday Island STP - Lot 142 Plan TS148
60-(2c) Waste disposal >5000t but <10000t yr (1)(b) 60-(1a) Waste disposal <50000t yr (1)(a)	Thursday Island Waste Disposal - Lot 142 Plan TS148
63-(1c) Sewage treatment >1500 to 4000EP	Horn Island STP - Air Port Road HORN ISLAND QLD 4875 - Lot 81 Plan SP181523 and Lot 8 Plan SP181523 and Lot 82 Plan SP181523
60-(2b) Waste disposal >2000t but <5000t yr (1)(b)	Horn Island Waste Disposal - Lot 10 Plan SP148513
16-(2a) Extractive >5000t but <100000t yr	Horn Island Extraction - Lot 9 Plan SP142707 and Lot 7 Plan SP142707
16-(3a) Screening >5000t but <100000t yr	Horn Island Screening - Lot 7 Plan SP142707

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



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.

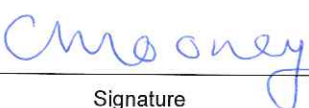
A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994* (EP Act).

Contaminated land

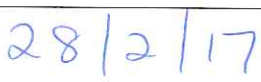
It is a requirement of the EP Act that an owner or occupier of land give written notice to the chief executive if they become aware of the following:

- 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

Christine Mooney
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994


Date

Enquiries:
Amanda Gray
Heritage, Utilities and Government
Organisations Assessment
Department of Environment and Heritage
Protection
GPO Box 2454
BRISBANE QLD 4001
Phone: 1300 130 372
Fax: 07 3330 6037
Email: amanda.gray@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 - Common Conditions for All Sites

Environmentally relevant activity(ies)	Location(s)
63-(1d) Sewage treatment >4000 to 10000EP	Thursday Island STP - Lot 142 Plan TS148
60-(2c) Waste disposal >5000t but <10000t yr (1)(b) 60-(1a) Waste disposal <50000t yr (1)(a)	Thursday Island Waste Disposal - Lot 142 Plan TS148
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16-(3a) Screening >5000t but <100000t yr	Horn Island Screening - Lot 7 Plan SP142707

Agency interest: General	
Condition number	Condition
G1-1	In carrying out an ERA to which this approval relates, all reasonable and practicable measures must be taken to prevent and / or to minimise the likelihood of environmental harm being caused.
G1-2	The operator of an ERA to which this approval relates must: (a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval; 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.
G1-3	A copy of this part of this environmental authority and the Site Based Management Plan for the licensed place must be kept in a location readily accessible to personnel carrying out the environmentally relevant activity.
G1-4	From commencement of the activity, 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 Environmentally Relevant Activities that are carried out. The site based management plan must address the following matters: • Environmental commitments - a commitment by senior management to achieve environmental goals. • Identification of environmental issues and potential impacts. • Control measures for routine operations to minimise likelihood of environmental harm. • Contingency plans and emergency procedures for non-routine situations. • Organisational structure and responsibility. • Effective communication. • Monitoring of the contaminant releases. • Conducting environmental impact assessments. • Staff training. • Record keeping. • Periodic review of environmental performance and continual improvement.

G1-5	Prior to the commencement of any environmentally relevant activity ('the activities') under this environmental authority, the holder of this environmental authority must: • develop an Integrated Environmental Management System (IEMS) which provides for the effective management by the holder of the actual and potential environmental impacts resulting from the carrying out of the activities; and • implement and maintain the IEMS from the commencement of carrying out the activities.
G1-6	The IEMS must provide for at least the following functions: • Training staff in the awareness of environmental issues related to carrying out the activities, which must include at least: ○ The environmental policy of the holder, so that all persons that carry out the activities are aware of all relevant commitments to environmental management; and ○ Any relevant environmental objectives and targets, so that all staff are aware of the relevant performance objectives and can work towards these; and ○ Control procedures to be implemented for routine operations for day to day activities to minimise likelihood of environmental harm, however occasioned or caused; and ○ Contingency plans and emergency procedures to be implemented for non-routine situations to deal with foreseeable risks and hazards including corrective responses to prevent and mitigate environmental harm (including any necessary site rehabilitation); and ○ Organisational structure and responsibility to ensure that roles, responsibilities and authorities are appropriately defined to manage environmental issues effectively; and ○ Effective communication to ensure two-way communication on environmental matters between operational staff and higher management; ○ Their obligations in respect of monitoring, notification and record keeping obligations under the IEMS and relevant environmental authorities and/or development approvals; and • Monitoring of the release of contaminants into the environment including procedures, methods, record keeping and notification of results; • Conducting assessment of the environmental impact of any release of contaminants into the environment; • Periodic conduct of energy audits and review of environmental performance and procedures adopted, not less frequently than once every two years; and • Waste prevention, treatment and disposal; and • A program for continuous improvement.

G1-7	The holder of this environmental authority must not implement or amend an IEMS (including any environmental management plan) that contravenes any condition of this environmental authority or any development condition applicable to carrying out the activities.
G1-8	Record, compile and keep all monitoring results required by this document and present this information to the administering authority when requested, in a specified format.
G1-9	Any record or document required to be kept by a condition of this environmental authority must be kept at the licensed place for a period of at least five (5) years and be available for examination by an authorised person. For daily and weekly records, the record retention requirements of this condition will be satisfied if any daily and weekly records are kept for a period of at least three (3) years and these records are then kept in the form of annual summaries after that period.
G1-10	No change, replacement or operation of any plant or equipment is permitted if the change, replacement or operation of the plant or equipment increases, or is likely to substantially increase, the risk of environmental harm above that expressly provided by this environmental authority. An example of a substantial increase in the risk of environmental harm is an increase of 10% or more in the quantity of the contaminant to be released into the environment.
G1-11	All instruments and devices used for the measurement or monitoring of any parameter under any condition of this environmental authority must be calibrated, and appropriately operated and maintained.
G1-12	A competent person(s) must conduct any monitoring required by this approval.

PART 2 - Site Specific Conditions

Environmentally relevant activity(ies)	Location(s)
63-(1d) Sewage treatment >4000 to 10000EP	Thursday Island STP - Lot 142 Plan TS148

The environmentally relevant activity(ies) conducted at the location as described above must be conducted in accordance with the following site specific conditions of approval.

Agency interest: General	
Condition number	Condition
G2-1	Where waste or effluent is discharged to any part of the environment vested in or under the control of a person or body other than the holder of this environmental authority, the holder of this environmental authority must have the permission or approval of such body or person to discharge the waste onto that property.

Agency interest: Water	
Condition number	Condition
WT2-1	Sewage or treated sewage effluent must not be directly or indirectly released from any source on the licensed place to any waters at any location other than: (a) the discharge of treated effluent from Release Point W1 to Aplin Pass through a 1:10 diffuser at the location shown in Schedule 1; and (b) overflows from sewage pump stations in accordance with the requirements of this environmental authority.
WT2-2	The discharge point serving Release Point Number W1 must be submerged such that the top of the outfall pipe is at least one (1) metre below Low Water Datum.
WT2-3	The total quantity of contaminants released from Release Point W1 during any dry weather day must not exceed 1,490 cubic metres and during a wet weather day must not exceed 4,450 cubic metres.
WT2-4	The release of contaminants to waters from Release Point W1 must comply, at the sampling and in situ monitoring point/s specified in condition WT2-6, with each of the limits specified in Table 1 for each quality characteristic.

WT2-5

The release of contaminants to waters from Release Point W1 must not produce visible floating oil, grease, scum or litter.

Table 1 - Release Quality Characteristic Limits

QUALITY CHARACTERISTICS	RELEASE LIMIT	LIMIT TYPE
5-day Biochemical Oxygen Demand (mg/l)	20	80th percentile (long term)
	60	maximum
Suspended Solids (mg/l)	30	80th percentile (long term)
	90	maximum
pH (pH Units)	6.5-8.5	range
Dissolved Oxygen (mg/l)	2	minimum
Total Nitrogen (mg/l)	10	50th percentile (long term)
	20	maximum
Total Phosphorus as P (mg/l)	tbs	maximum
Oil and Grease (mg/l)	10	maximum
Faecal coliforms ⁽¹⁾	tbs	median ⁽²⁾
	tbs	80th percentile ⁽³⁾

Note: "tbs" means to be specified following consideration of the results of studies yet to be carried out.

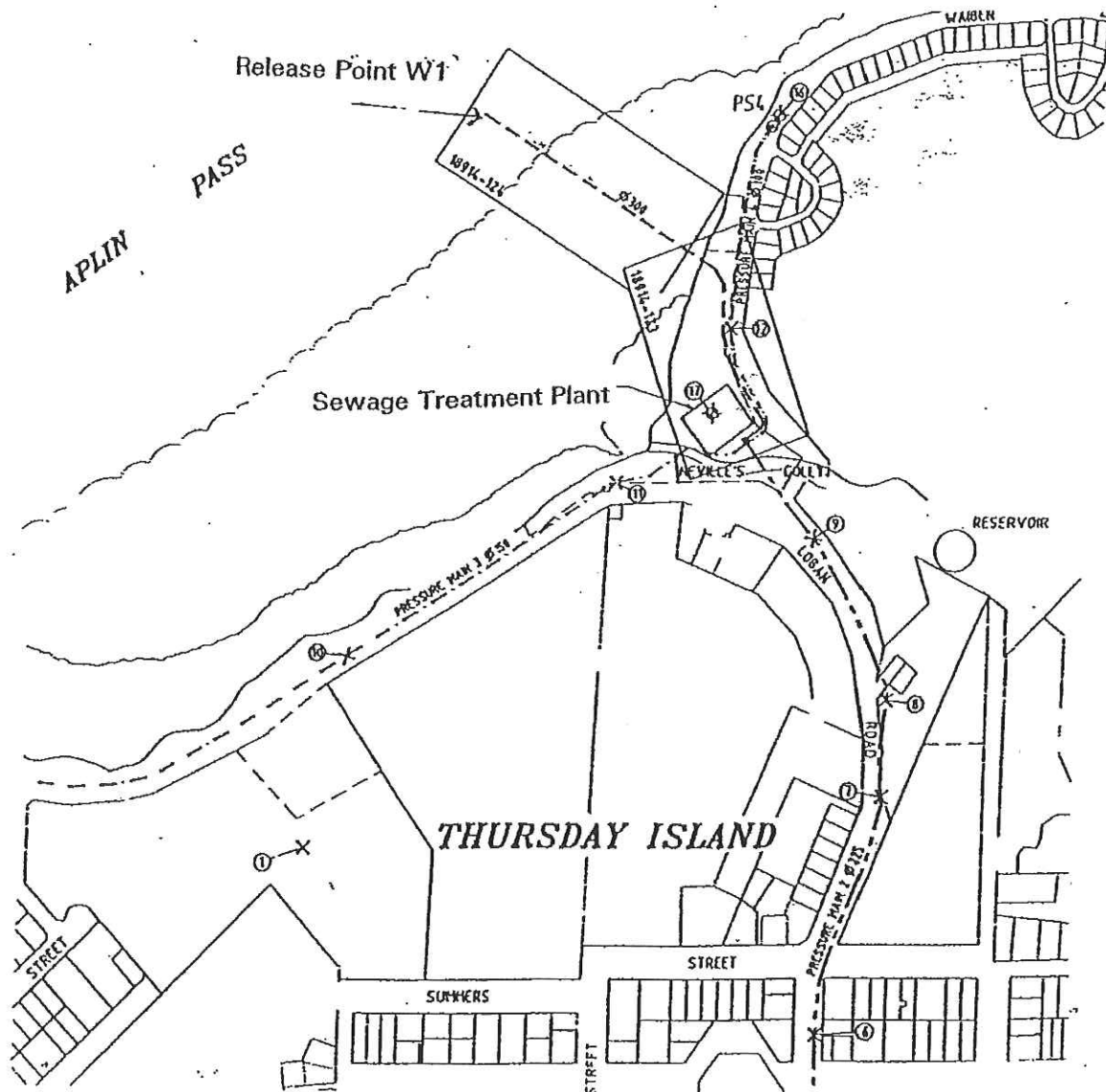
- (1) ANZECC standards for secondary contact recreation (boating, fishing, etc.) are a median of 1000 organisms per 100 ml and a 80th percentile of 4000 organisms per 100 ml. However, for receiving waters producing edible fish, shellfish or crustacea the recommended ANZECC water quality standards for faecal coliforms are a median of fourteen (14) organisms per 100 ml and a 80th percentile of forty-three (43) organisms per 100 ml and, if these standards are appropriate, sufficient dilution must be ensured to comply with these limits.
- (2) Median for this quality characteristic must be based on the results of at least five samples, with individual samples being collected at intervals of not less than thirty (30) minutes.
- (3) "80th percentile" for this quality characteristic means that the measured values of the quality characteristic must not be greater than the release limit for any more than one out of five consecutive samples.

WT2-6	The holder of this environmental authority is responsible for the making of determinations and keeping of records of the quality of the contaminants released for the release points, quality characteristics, and at not less than the frequency specified in Table 2. Table 2 <table border="1" data-bbox="320 555 1473 1167"> <thead> <tr> <th data-bbox="320 555 1139 611">Quality Characteristic Determination</th><th data-bbox="1139 555 1473 611">Frequency</th></tr> </thead> <tbody> <tr> <td data-bbox="320 611 1139 667">5-day Biochemical Oxygen Demand</td><td data-bbox="1139 611 1473 667">monthly</td></tr> <tr> <td data-bbox="320 667 1139 723">Suspended Solids</td><td data-bbox="1139 667 1473 723">monthly</td></tr> <tr> <td data-bbox="320 723 1139 779">PH</td><td data-bbox="1139 723 1473 779">weekly</td></tr> <tr> <td data-bbox="320 779 1139 835">Specific Conductance</td><td data-bbox="1139 779 1473 835">weekly</td></tr> <tr> <td data-bbox="320 835 1139 891">Dissolved Oxygen</td><td data-bbox="1139 835 1473 891">weekly</td></tr> <tr> <td data-bbox="320 891 1139 947">Temperature - Celsius degrees</td><td data-bbox="1139 891 1473 947">weekly</td></tr> <tr> <td data-bbox="320 947 1139 1003">Total Nitrogen</td><td data-bbox="1139 947 1473 1003">monthly</td></tr> <tr> <td data-bbox="320 1003 1139 1059">Oil and Grease</td><td data-bbox="1139 1003 1473 1059">monthly</td></tr> <tr> <td data-bbox="320 1059 1139 1115">Faecal Coliforms (Organisms/100 ml CFU)</td><td data-bbox="1139 1059 1473 1115">monthly</td></tr> <tr> <td data-bbox="320 1115 1139 1167">Total Phosphorus</td><td data-bbox="1139 1115 1473 1167">monthly</td></tr> </tbody> </table>	Quality Characteristic Determination	Frequency	5-day Biochemical Oxygen Demand	monthly	Suspended Solids	monthly	PH	weekly	Specific Conductance	weekly	Dissolved Oxygen	weekly	Temperature - Celsius degrees	weekly	Total Nitrogen	monthly	Oil and Grease	monthly	Faecal Coliforms (Organisms/100 ml CFU)	monthly	Total Phosphorus	monthly
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WT2-7	Determinations of the quality of contaminants released to waters to check conformity with the release quality characteristics specified in Table 1 of this environmental authority must be undertaken on samples collected from the effluent discharge pipe at a location immediately prior to discharge from the licensed place.																						
WT2-8	The daily quantity of contaminants released to waters must be determined by the use of a flow recorder.																						
WT2-9	Records must be kept of the results of all determinations of the daily quantity of contaminants released to waters, irrigated to land or supplied to another body or person for irrigation to land.																						
WT2-10	A composite sample, of the sludge generated from the licensed place since the previous sample was taken, must be taken at least once in each three (3) years and analysed for the concentrations of the following parameters: (a) total zinc; (b) total copper; (c) total aluminium; and (d) total organochlorine pesticides.																						

WT2-11	The only pump stations permitted to release contaminants to any waters are those listed below at the corresponding discharge locations: <table><tr><th>PUMP STATION</th><th>LOCATION</th><th>DISCHARGE TO</th></tr><tr><td>PS1</td><td>Laneway off Jetty Street</td><td>Existing CED outfall</td></tr><tr><td>PS2</td><td>Victoria Parade (between Normanby and Jardine Streets)</td><td>Existing CED outfall</td></tr><tr><td>PS3</td><td>Cnr Cook Esplanade and Stephen Street</td><td>Existing CED outfall - Aplin Pass</td></tr><tr><td>PS4</td><td>Cnr Waiben Esplanade and Bowe Crescent</td><td>Existing CED outfall - Aplin Pass</td></tr><tr><td>PS5</td><td>Aubrey Parade (Beside Hospital)</td><td>New headwall in Seawall</td></tr><tr><td>PS6</td><td>Waiben Esplanade (behind Lots 1 & 2 on RP737293)</td><td>New headwall onto Reef Flat</td></tr><tr><td>PS7</td><td>Cnr Chester and Hargrave Streets</td><td>Existing watercourse</td></tr><tr><td>PS8</td><td>Cnr Hargrave and Douglas Streets</td><td>Stormwater Drain (Downstream of Culvert under Hargrave Street)</td></tr><tr><td>PS9</td><td>Loban Road (Cnr Council Depot access Road)</td><td>Nevilles Gully</td></tr><tr><td>PS10</td><td>Stephen Street (Between Clark and Poruma Streets)</td><td>Stormwater Drain (Downstream of Culvert under Stephen Street)</td></tr><tr><td>PS11</td><td>At Helipad</td><td>Existing CED outfall - Aplin Pass</td></tr></table>	PUMP STATION	LOCATION	DISCHARGE TO	PS1	Laneway off Jetty Street	Existing CED outfall	PS2	Victoria Parade (between Normanby and Jardine Streets)	Existing CED outfall	PS3	Cnr Cook Esplanade and Stephen Street	Existing CED outfall - Aplin Pass	PS4	Cnr Waiben Esplanade and Bowe Crescent	Existing CED outfall - Aplin Pass	PS5	Aubrey Parade (Beside Hospital)	New headwall in Seawall	PS6	Waiben Esplanade (behind Lots 1 & 2 on RP737293)	New headwall onto Reef Flat	PS7	Cnr Chester and Hargrave Streets	Existing watercourse	PS8	Cnr Hargrave and Douglas Streets	Stormwater Drain (Downstream of Culvert under Hargrave Street)	PS9	Loban Road (Cnr Council Depot access Road)	Nevilles Gully	PS10	Stephen Street (Between Clark and Poruma Streets)	Stormwater Drain (Downstream of Culvert under Stephen Street)	PS11	At Helipad	Existing CED outfall - Aplin Pass
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WT2-12	Sewage pump stations whose failure would or would be likely to result in a direct or indirect release of contaminants to waters must be fitted with stand-by pumps and pump-failure alarms as well as high level alarms to warn of imminent pump station overflow. All alarms must be able to operate without mains power if such power failure occurs.																																				
WT2-13	All sewage pump stations must comply with the following design criteria: (a) overflows must be screened to prevent the release of gross solids; and (b) overflows resulting from infiltration should not occur for less than five (5) times design average dry weather flow (ADWF).																																				

Agency interest: Land	
Condition number	Condition
L2-1	The holder of this environmental authority must not discharge any contaminants to land under their control unless the discharge of the contaminants to that area of land is permitted under this schedule of this environmental authority.
L2-2	By 1 July 2000, the holder of this environmental authority must submit to the administering authority a proposal for the re-use of treated sewage effluent, by the irrigation on land. This report must investigate the opportunities for wastewater reuse on areas currently irrigated with potable water and address at least the following issues for the areas investigated: (a) the ecological sustainability of the irrigation or re-use proposal; (b) the suitability for irrigation with treated sewage effluent of the land to be irrigated; and (c) best practice environmental management (BPEM) to minimise any environmental harm resulting from the irrigation.
Agency interest: Waste	
Condition number	Condition
W2-1	The Waste Management Plan prepared for the licensed place must address: (a) the minimisation of infiltration and other stormwater inflows to sewage reticulation systems; and (b) proposed methods for storage, treatment, transport and reuse or disposal of sewage sludge.
W2-2	The holder of this environmental authority may only accept regulated waste into the sewerage system when such wastes are commingled with normal domestic sewage or in accordance with Torres Shire Council's trade waste policy.

Schedule 1 - Thursday Island Sewage Treatment Plant and Release Point W1



Definitions

“licensed place” in this part of this environmental authority means the Thursday Island Sewage Treatment Plant on Lot 142, TS148, Parish of Port Kennedy, County of Torres and located at Aplin Road, Thursday Island Qld 4875 and includes any pump stations, reticulation systems and other ancillary works associated with the plant.

“dry weather day” refers to a day during which no rain falls within the catchment of the sewage treatment plant from the commencement of measurement for that day. The term also excludes days during which measurement is made which occur within three (3) days following cumulative rainfall of 100 mm over the three (3) preceding days.

“wet weather day” refers to any day other than a dry weather day.

PART 3 - Site Specific Conditions

Environmentally relevant activity(ies)	Location(s)
60-(2c) Waste disposal >5000t but <10000t yr (1)(b)	Thursday Island Waste Disposal - Lot 142 Plan TS148
60-(1a) Waste disposal <50000t yr (1)(a)	

The environmentally relevant activity(ies) conducted at the location as described above must be conducted in accordance with the following site specific conditions of approval.

Agency interest: General	
Condition number	Condition
G3-1	The Site Closure and Post Closure Care Plan must extend for a nominal period of at least thirty (30) years after cessation of waste disposal activities and must be implemented until it can be demonstrated to the administering authority that the site will not release contaminants to the environment.
G3-2	All determinations of the quality of contaminants released to the environment and all measurement and reporting of noise levels that are required by this environmental authority must be undertaken by a person or body possessing appropriate experience and qualifications to perform the required determinations and the required measurements.
G3-3	All above ground bulk chemical, waste oil and fuel storage tanks on the licensed places must be bunded so that the capacity of the bund is sufficient to contain at least 100 % of the largest storage tank plus 10% of the second largest tank within the bund.
G3-4	All drum storages of chemical, waste oil and fuel on the licensed places must be bunded so that the capacity of the bund is sufficient to contain at least 25% of the maximum design storage volume within the bund.
G3-5	The holder of the environmental authority must ensure that any stormwater captured within any bund on the licensed places is free from contaminants or wastes prior to any release to the environment.
G3-6	The holder of this environmental authority must ensure that: (a) at least 1 (one) composite sample is collected of each batch of treatment tank sludges and residues to be re-used as final cover on the licensed place; and (b) each composite sample consists of at least five (5) representative samples of 100g each. (c) each composite sample collected is analysed for the contaminants listed in Table 3 prior to the reuse of such wastes.

G3-7	All complaints received by the holder of this environmental authority relating to releases of contaminants from operations at the licensed places must be recorded and kept with the following details: (a) time, date, licensed place to which the complaint refers and nature of complaint; (b) type of communication (telephone, letter, personal etc.); (c) name, contact address and contact telephone number of complainant (Note: if the complainant does not wish to be identified then "Not identified" is to be recorded); (d) response and investigation undertaken as a result of the complaint; (e) name of person responsible for investigating complaint; and (f) action taken as a result of the complaint investigation and signature of responsible person.
G3-8	All determinations of the quality of contaminants released to waters must be made in accordance with methods prescribed in the Environmental Protection Agency Water Quality Sampling Manual, 3rd Edition, December 1999, or more recent additions or supplements to that document as such become available.
G3-9	The holder of this environmental authority must keep a written record of the results of all monitoring programs required under this environmental authority. This record must: (a) record the results of all analyses, measurements and observations; (b) record the date and time of sampling; (c) be endorsed by a person or body possessing appropriate experience and qualifications to perform the required measurements on all the records of analysis results; (d) have all records of analyses, measurements and observations signed by a responsible officer; and (e) be made available upon request to any authorised person who must be permitted to make copies thereof.

G3-10	The holder of this environmental authority must submit a report to the administering authority with the Annual Return which shall include but not be limited to: (a) a summary of the previous twelve month's monitoring results obtained under any monitoring programs required under this environmental authority and, in graphical form, a comparison of the previous twelve month's monitoring results to both the licence limits and to relevant prior results; (b) an evaluation/explanation of the data from the monitoring programs; and (c) a summary of any record of quantities of discharge required to be kept under this environmental authority; and (d) a summary of the record of equipment failures or events recorded for any licensed place; and (e) an outline of actions taken or proposed to minimise the environmental risk from any deficiency identified by the monitoring or recording programs; and (f) for any sewage treatment plants licensed under this environmental authority: i. the number of domestic tenements newly connected to the sewage treatment works during the previous twelve months; and ii. the progressive total number of connections; and iii. a summary of any trade waste agreements entered into or amended during the year, including the nature of the industry.
G3-11	The licensee must keep a record, in the form of a log, of any equipment failures or events likely to have adversely affected a licensed place's environmental performance whilst still complying with this licence. This log must include at least the following details: (a) time, date and nature of event; (b) response and investigation undertaken to deal with the event; (c) name of person responsible for investigating the event; and (d) action taken as a result of the event investigation, and signature of responsible person; and (e) must be made available upon request to any authorised person who shall be permitted to make copies thereof.

Environmental authority

G3-12	Where the holder of this environmental authority has not given notification to the administering authority under section 320 of the Environmental Protection Act, as soon as practicable after becoming aware of any emergency or incident which 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 this environmental authority must notify the administering authority of the release by telephone or facsimile. Note: The notification of emergencies and incidents required under this condition must also include sewage pump failures, sewage pump station overflows or any other incident resulting in the release of raw sewage to the environment.
G3-13	Where the holder of this environmental authority has not given notification to the administering authority under section 320 of the Environmental Protection Act, the notification of emergencies or incidents as required by condition G3-12 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 and or environmental nuisance caused, threatened, or to be caused by the release; and (i) actions taken to prevent further any release and mitigate any environmental harm and or environmental nuisance caused by the release.
G3-14	Where the holder of this environmental authority has not given notification to the administering authority under section 320 of the Environmental Protection Act, not more than fourteen (14) days following the initial notification of an emergency or incident, the holder of this environmental authority must provide written advice of the information supplied in accordance with condition (G3-13) in addition to: (a) proposed actions to prevent a recurrence of the emergency or incident; (b) outcomes of actions taken at the time to prevent or minimise environmental harm and or environmental nuisance.
G3-15	If a program notice has been submitted under Section 350 of the Act, condition G3-14 will have been complied with if the required information is submitted by the date specified in a Section 352 notice requiring submission of a draft Environmental Management Program.
G3-16	The holder of this environmental authority must notify the administering authority in writing of any monitoring result which indicates an exceedance of any environmental authority limit within twenty-eight (28) days of completion of analysis.

G3-17	The written notification required by condition G3-16 above must include: (a) the full analysis results, and (b) details of investigation or corrective actions taken, and (c) results of any subsequent analysis carried out to verify the success of any corrective actions taken.
G3-18	If a program notice has been submitted under Section 350 of the Act, conditions G3-15 and G3-16 will have been complied with if the required information is submitted by the date specified in a Section 352 notice requiring submission of a draft Environmental Management Program.
Agency interest: Air	
Condition number	Condition
A3-1	Any stockpiles of inert cover material must be managed so as to minimise windblown dust emissions.
A3-2	The holder of this environmental authority must ensure that all wastes received onto the licensed place are handled or stockpiled or disposed of in such a way as to minimise dust generation.
A3-3	The holder of this environmental authority must ensure waste oil is not applied for dust suppression to any road on the licensed place.
Agency interest: Water	
Condition number	Condition
WT3-1	The holder of this environmental authority must not allow any direct or indirect release of contaminated stormwater or leachate generated on the licensed place to any roadside gutter, stormwater drain or waters beyond the boundary of the licensed place.
Agency interest: Noise	
Condition number	Condition
N3-1	In the event of a complaint about unreasonable noise generated on the licensed place, that the administering authority considers to be neither frivolous nor vexatious, then the holder of this environmental authority must take action to ensure that the noise is no longer an unreasonable noise.

Agency interest: Land	
Condition number	Condition
L3-1	The holder of this environmental authority must not allow any direct or indirect release of contaminated stormwater or leachate generated on the licensed place to any land beyond the boundary of the licensed place.
Agency interest: Waste	
Condition number	Condition
W3-1	The holder of this environmental authority must cease to receive wastes at Thursday Island Landfill on or before 30 August 2003.
W3-2	The holder of this environmental authority must commence closure activities at Thursday Island Landfill in accordance with the completed Closure and Post Closure Care Plan on or before 15 September 2003.

W3-3	This environmental authority permits only the following wastes to be received at the licensed place prior to condition W3-1 taking effect: (a) construction wastes and demolition waste; (b) dewatered treatment tank sludges and residues from the Thursday Island Sewage Treatment Plant; (c) minor quantities of regulated wastes incidental to and commingled with domestic refuse; (d) fish processing wastes; (e) food processing wastes; (f) solid inert waste; (g) untreated infectious wastes; (h) putrescible wastes and domestic garbage; (i) green wastes; and (j) industrial and commercial wastes (other than regulated wastes unless specifically permitted under this condition); (k) tyres; and (l) asbestos sheeting or asbestos products. Note: i. paper covered plasterboard must only be received at the licensed place if it is generated by construction and demolition activities and delivered to the licensed place as part of a mixed load of materials; ii. car bodies and other large metal objects for recycling may be temporarily received and stored at the licensed place; iii. treatment tank sludges and residues from the Thursday Island Sewage Treatment Plant may be received and temporarily stored on the licensed place; iv. drums containing any residual regulated wastes are themselves a regulated waste and must not be accepted for disposal at the licensed place unless they have been triple rinsed or thoroughly cleaned; and v. oil and batteries may be temporarily stored at the licensed place.
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Environmental authority

W3-4	The holder of this environmental authority must ensure the following wastes are not accepted onto the licensed place: (a) pyrophoric wastes (where co-disposed with other potentially combustible material); (b) explosives and ammunition, pyrotechnics or propellants, apart from trace residues no longer capable of supporting combustion or an explosive reaction; (c) liquescent waste streams or any waste capable of yielding free liquids; and (d) pharmaceutical wastes, pathogenic wastes and cytotoxic wastes; or (e) regulated wastes other than those specified under condition W3-3.
W3-5	The holder of this environmental authority must ensure that the licensed place is inspected as often as is necessary and not less frequently than once per week so as to ensure compliance with this environmental authority.
W3-6	Where waste is to be disposed of above an area previously used for waste disposal, existing cover material must be ripped or removed so as to allow leachate and contaminated stormwater to percolate through the wastes deposited below.
W3-7	The holder of this environmental authority must ensure all perimeter embankments on the licensed place are constructed and maintained to ensure their stability and integrity at all times.
W3-8	The holder of this environmental authority must ensure that all reasonable and practical measures are taken to minimise the generation of leachate within the waste disposal facility.
W3-9	The holder of this environmental authority may only dispose of leachate or contaminated stormwater generated on the waste disposal facility: (a) by evaporation on the waste disposal facility; or (b) by recirculation back into the areas of the waste disposal facility where waste disposal is taking place; or (c) by irrigation over exposed wastes on the waste disposal facility; or (d) to sewer in accordance with a local government trade waste agreement.
W3-10	Leachate or contaminated stormwater must not be disposed of on any area of the waste disposal facility that has received its final cover of topsoil or on any revegetated areas unless the quality of the leachate is such that it will not cause any environmental harm through soil contamination or damage to vegetation.
W3-11	The holder of this environmental authority must ensure waste disposal activities are carried out in accordance with the Site Based Management Plan prepared for the licensed place.
W3-12	The holder of this environmental authority must ensure that waste disposal activities do not extend beyond the boundary of the licensed place.

W3-13	The holder of this environmental authority must take effective measures to ensure that all wastes received for disposal at the licensed place are not disposed of: (a) beyond any trench designated for the disposal of wastes in the Site Development Plan; and (b) into any uncontaminated stormwater collected at the base of any active waste disposal trench or designated waste disposal trench.
W3-14	With the exception of wastes requiring special disposal procedures, all wastes received for disposal at the licensed place must be confined to the active waste disposal trench.
W3-15	The holder of this environmental authority must ensure that the active waste disposal trench is managed so as to minimise the area of exposed wastes.
W3-16	All large metal articles received for disposal must be effectively compacted before being deposited at the base of the active waste disposal trench.
W3-17	Used wet cell batteries may only be temporarily stored on the licensed place, provided that the batteries are removed from the licensed place not less frequently than once every week. Used wet cell batteries may be stored on the licensed place for longer periods provided they are contained in a bunded area and are covered so as to prevent clean stormwater contacting the batteries.
W3-18	Used oil may be temporarily stored in drums or other containers at the licensed place, provided that the drums or containers are removed from the licensed place not less frequently than once every week. Drums or other containers used to store waste oils may be stored on the licensed place for longer periods provided they are stored in a bunded area and are covered so as to prevent the drums contacting clean stormwater.
W3-19	Treatment Tank Sludges and Residues received from Thursday Island Sewage Treatment Plant may be stockpiled on the licensed place for a period of no longer than three (3) years provided the stockpiles are bunded so as to prevent any leachate generated by the stockpiles from migrating beyond the area designated in the Site Development Plan for stockpiling of such waste.
W3-20	Regulated waste containers received at the licensed place which have not been triple rinsed, pressure rinsed or have not been thoroughly cleaned must only be temporarily stored in an area: (a) designated for this purpose; and (b) bunded in accordance with the conditions of this environmental authority.
W3-21	Any asbestos wastes disposed of in a designated waste disposal trench must be not less than two (2) metres below the surface level of the trench and, where applicable, not less than two (2) metres in from any perimeter embankment.

W3-22	All asbestos wastes disposed of in any designated waste disposal trench: (a) must be covered as soon as practicable after disposal has taken place; and (b) the date of disposal marked on the Site Development Plan as soon as practicable after disposal has taken place.														
W3-23	Untreated infectious wastes must be disposed of under supervised burial into designated waste disposal trenches.														
W3-24	All untreated infectious wastes received at the waste disposal facility must be disposed of so that on completion such wastes are not less than two (2) metres below the surface level of the designated disposal trench and, where applicable, not less than two (2) metres in from any perimeter embankment.														
W3-25	Untreated infectious wastes disposed of in any designated infectious waste disposal trench: (a) must be covered, as soon as practicable after disposal has taken place, with a layer of inert earthen material or other non combustible inert material so as to prevent access of flies, rodents, or other animals to these wastes; and (b) the date of disposal marked on the Site Development Plan as soon as practicable after disposal has taken place.														
W3-26	Where contaminant levels of the dewatered treatment tank sludges and residues received from Thursday Island Sewage Treatment Plant exceeds limits specified in Table 3 or where samples of such wastes have not been collected and analysed in accordance with condition W3-49 the holder of this environmental authority may dispose of such waste at the licensed place provided: (a) the treatment tank sludges and residues are disposed of into trenches on the licenced place; or (b) where such wastes have been dewatered to 70% dry solids content they may be disposed of as temporary cover material; and (c) the treatment tank sludges and residues are covered as soon as practicable after disposal has taken place. Table 3 <table border="1"> <thead> <tr> <th>Contaminant</th><th>mg/kg dry solids</th></tr> </thead> <tbody> <tr> <td>Cadmium</td><td>85</td></tr> <tr> <td>Total Chromium</td><td>3000</td></tr> <tr> <td>Copper</td><td>4300</td></tr> <tr> <td>Lead</td><td>840</td></tr> <tr> <td>Nickel</td><td>420</td></tr> <tr> <td>Zinc</td><td>7500</td></tr> </tbody> </table>	Contaminant	mg/kg dry solids	Cadmium	85	Total Chromium	3000	Copper	4300	Lead	840	Nickel	420	Zinc	7500
Contaminant	mg/kg dry solids														
Cadmium	85														
Total Chromium	3000														
Copper	4300														
Lead	840														
Nickel	420														
Zinc	7500														

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W3-27	Wastes deposited in any active waste disposal trench must be evenly and effectively consolidated, compacted and covered by mechanical plant capable of ensuring compliance with this environmental authority.
W3-28	The holder of this environment authority must ensure that mechanical plant is available and capable of covering asbestos wastes and infectious wastes with a layer of inert earthen material or other non combustible inert material in sufficient quantities so as to achieve compliance with this environmental authority before disposal of such wastes takes place.
W3-29	The holder of this environmental authority must ensure that a stockpile of cover material in sufficient quantities to cover waste disposed on the waste disposal facility over any one (1) week period is readily accessible at all times.
W3-30	With the exception of infectious wastes and asbestos wastes, the holder of this environmental authority must ensure that all other wastes disposed of on the licensed place are consolidated, compacted and covered with: (a) a layer of inert earthen material, other non-combustible inert material; or (b) treatment tank sludges and residues applied in accordance with part (b) of condition W3-26 as often as is necessary to effectively: i. prevent the access of flies, birds, rodents or other animals to covered wastes; ii. minimise the propagation of odours from deposited waste; iii. minimise the generation of windblown litter; and iv. reduce the risk of fire.
W3-31	Wastes disposed of on the licensed place by the holder of this environmental authority as part of any domestic collection and disposal service or by persons authorised by Torres Shire Council to collect and dispose of domestic refuse must be effectively consolidated, compacted and covered with a layer of inert earthen material or other non-combustible, inert material as often as is necessary to ensure compliance with the conditions of this environmental authority, but in any case not less frequently than once per week.
W3-32	The holder of this environmental authority must ensure all weather access roads are constructed and maintained so that at all times whilst the licensed place is open for receiving wastes, vehicles have access to any active waste disposal trench.
W3-33	The holder of this environmental authority must ensure that access roads are constructed and maintained so as to minimise dirt and mud being carried off the licensed place by vehicles leaving the licensed place.
W3-34	The holder of this environmental authority must carry out any works required by the administering authority to prevent or abate any public health problem or nuisance which may arise as a result of the operation of the licensed place.

W3-35	The holder of this environmental authority must take all practical measures to ensure that waste disposal activities are conducted at all times in a nuisance free manner, particularly regarding fly breeding, mosquito breeding and rat harbourage and breeding.
W3-36	The holder of this environmental authority must erect written signs or pictorial symbols, maintained in good repair and giving the following information, in prominent locations on the waste disposal facility: (a) the name of the licensed place and site contact telephone number (where applicable); (b) the hours and days the licensed place will be open for receiving wastes; (c) the wastes permitted to be received at the licensed place; (d) advise that when the licensed place is closed to the public that unauthorised dumping of waste is prohibited (citing the penalty); (e) prohibition of the lighting of unauthorised fires on the licensed place; and (f) directing traffic to the location of any active waste disposal trench and recycling area.
W3-37	The holder of this environmental authority must establish and maintain a fire break(s) so as to prevent: (a) fire spreading from the licensed place to adjoining land; (b) fire spreading from adjoining land to the licensed place; and (c) from one area of the licensed place to another.
W3-38	In the event of any fire occurring at the licensed place the holder of this environmental authority must extinguish the fire, as soon as it is safe to do so.
W3-39	Relocatable litter screens or wind deflectors must be provided and maintained at the licensed place and arranged so as to confine windblown litter generated by the disposal of wastes in the active waste disposal trench.
W3-40	Fences, gates and other barriers must be erected and maintained at the licensed place so as to prevent: (a) unauthorised vehicle access to any area of the licensed place used for waste disposal which has not received final cover; (b) unauthorised access to any area of the licensed place where precautions are taken in respect of disposal of particular wastes; and (c) unauthorised access to any waste storage area.
W3-41	The holder of this environmental authority must ensure all gates to the licensed place are kept locked except during official operating hours so as to achieve compliance with this environmental authority.

W3-42	Fences or barriers must be erected and maintained so as to prevent the access by the public to any; (a) treatment tank sludges and residues disposal trench; or (b) completed area of the licensed place where the final cover includes treatment tank sludges and residues for the period in specified part (g) of condition W3-43.
W3-43	Dewatered treatment tank sludges and residues received from Thursday Island Sewage Treatment Plant may be reused at the licensed place in the rehabilitation of completed areas of the waste disposal facility provided: (a) that any such waste has been aged for a period of not less than one (1) year; (b) samples of the treatment tank sludges and residues have been collected for analysis in accordance with condition W3-49; (c) the contaminant levels of the treatment tank sludges and residues do not exceed limits specified in Table 3 of this environmental authority; (d) the treatment tank sludges and residues are not applied to the same area any more than once in any five (5) year period; (e) the treatment tank sludges and residues are thoroughly mixed with green waste or clean earth prior to application to completed areas; (f) the treatment tank sludges and residues are dried to at least 70% solid contents; (g) the treatment tank sludges and residues are not accessible by public or stock animals for at least four (4) weeks after application to completed areas; (h) the treatment tank sludges and residues are not applied to slopes greater than 25% and in any case not applied to any slope greater than 15% during the months from December through to April in any year; (i) the treatment tank sludges and residues are not applied during any prolonged rainfall event.
W3-44	Any completed waste disposal area must be capped with low permeability material and compacted so as to effectively minimise infiltration of stormwater.
W3-45	Soils or other materials used to construct the capping of any waste disposal area must achieve a maximum in situ hydraulic conductivity of no greater than 1×10^{-8} metres per second.
W3-46	Any completed and capped waste disposal area must be progressively covered to a depth of at least 250 millimetres with clean earth or treatment tank sludges and residues received from the Thursday Island Sewage Treatment Plant provided the final cover material is: (a) applied in accordance with condition W3-43; and (b) capable of supporting shallow rooted vegetation. A thicker top soil may be necessary to support deeper rooted vegetation and also to prevent root penetration of the cap.

W3-47	The final surface of any completed waste disposal area must, after covering as specified in condition W3-44 be graded, drained and vegetated so as to: (a) minimise soil erosion; (b) divert clean stormwater away from completed disposal trenches; and (c) prevent stormwater ponding.
W3-48	In the areas awaiting rehabilitation or those in the process of being rehabilitated, vehicle access must be restricted by suitable barriers to prevent surface disturbance.
W3-49	The holder of this environmental authority must ensure that: (a) at least 1 (one) composite sample is collected of each batch of treatment tank sludges and residues to be re-used as final cover on the licensed place; and (b) each composite sample consists of at least five (5) representative samples of 100g each. (c) each composite sample collected is analysed for the contaminants listed in Table 3 prior to the reuse of such wastes.
W3-50	The holder of this environmental authority must not: (a) burn waste at or on any licensed place covered by this environmental authority unless otherwise approved by this environmental authority; nor (b) allow waste to burn or be burnt at or on any licensed place covered by this environmental authority unless otherwise approved by this environmental authority; nor (c) remove waste from any licensed place covered by this environmental authority and burn such waste elsewhere except in accordance with the requirements of the Environmental Protection Act 1994.
W3-51	Where regulated waste is removed from a licensed place (other than by a release as permitted under another schedule of this environmental authority), the holder of this environmental authority must ensure that: (a) the removal and transport of such wastes, where it constitutes an environmentally relevant activity under the Environmental Protection Regulation 1998, is carried out by a person licensed for carrying out this activity under the Environmental Protection Act 1994; and (b) records are kept of the following: i. the date, quantity and type of waste removed; and ii. name of the waste transporter and/or disposal operator that removed the waste; and iii. the intended treatment/disposal destination of the waste. NOTE: Records of documents maintained in compliance with a waste tracking system established under the Environmental Protection Act 1994 or any other law for regulated waste will be deemed to satisfy this licence condition.

[illegible]

Definitions

For the purposes of this environmental authority the following definitions apply:

“licensed place” in this part of this environmental authority means Thursday Island Waste Disposal Facility, Lot 142 Plan TS148, Parish of Port Kennedy, County of Torres, located at Waiben Esplanade, Thursday Island Qld 4875.

“administering authority” means the Environmental Protection Agency or its successor.

“total nitrogen” means the sum of Organic Nitrogen, Ammonia Nitrogen, Nitrite plus Nitrate Nitrogen

“mg/l” means milligrams per litre.

“80th percentile (long term)” is the value which is exceeded by twenty (20) percent of the values for the characteristic in question and should be calculated on the basis of a log - normal distribution using twelve (12) months consecutive results for the characteristic.

“50th percentile” means that the measured values of the quality characteristic must not be greater than the release limit for any more than three out of six consecutive samples where the time interval between the taking of each consecutive sample is not less than three (3) days.

“grab” sample means one sample collected at any point in time.

“median” means the middle value, where half the data are smaller, and half the data are larger. If the number of samples is even, the median is the arithmetic average of the two middle values.

“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.

“range” means that the measured value of the quality characteristic or contaminant must not be greater than the higher release limit stated nor lower than the lower release limit stated.

“attenuate” means the decrease in concentration of chemical species present in liquid, eg the decrease in concentration of pollutants in liquid migrating from the base of a landfill as a result of its movement through soil.

“aquifer” means a subsurface zone or formation of rock which contains exploitable resources of groundwater.

“permeability” means a measure of the rate at which a fluid will pass through a medium. The coefficient of permeability of a given fluid is an expression of the rate of flow through unit area and thickness under unit differential pressure at a given temperature and is synonymous with hydraulic conductivity when the fluid is water.

“leachate” means contaminated water which has been generated in or percolated through or drained from wastes.

“compaction” means increasing the density of solid waste in landfills by the repeated passage of heavy machinery over its surface or by other methods such as bailing.

“cover” means material used to cover wastes deposited in landfills or sanitary depots.

“leachate recirculation” means the practice of returning leachate to the upper layers of a landfill, from which it has been abstracted, usually by direct spraying or pump well injection.

“leachate collection system” means drains, sumps and pumps employed to direct leachate generated in a landfill to a leachate collection pond or dam.

“capping” means the covering of a landfill or sanitary depot trench with impervious material to inhibit penetration by liquids.

“future waste disposal cell, evaporation area, leachate storage pond and above ground perimeter embankment” means any waste disposal cell, evaporation area, leachate storage pond and groundwater embankment constructed after this environmental authority takes effect.

“waste disposal activities” means all activities relating to waste disposal and includes the shredding of waste (where applicable), stockpiling of cover material, temporary waste storage, leachate collection and disposal, litter control and cell, trench or disposal area construction and irrigation of wastewater.

“waste disposal trench or area” means any trench or area used to dispose of wastes received at a licensed place in accordance with this environmental authority.

“active waste disposal trench” means any tipping trench currently being used to dispose of wastes received at a licensed place in accordance with this environmental authority and includes all or part of a disposal trench.

“solid inert waste” includes large metal objects and car bodies.

“regulated waste” means non-domestic waste listed in schedule 7 of the *Environmental Protection Regulation 1998*, and includes:

- (a) for an element - any chemical compound containing the element;
- (b) anything that has contained a regulated waste; and
- (c) regulated waste that has been treated or immobilised.

“licensed places” means all the licensed places listed individually in the other parts of this environmental authority.

“the holder of this environmental authority” means Torres Shire Council.

PART 4 - Site Specific Conditions

Environmentally relevant activity(ies)	Location(s)
63-(1c) Sewage treatment >1500 to 4000EP	Horn Island STP - Air Port Road HORN ISLAND QLD 4875 - Lot 81 Plan SP181523 and Lot 8 Plan SP181523 and Lot 82 Plan SP181523

The environmentally relevant activity(ies) conducted at the location as described above must be conducted in accordance with the following site specific conditions of approval.

Agency interest: General	
Condition number	Condition
G4-1	A record of all waste (screenings, sludge cake etc) must be kept detailing the following information: (a) date of pickup of waste; (b) description of waste; (c) quantity of waste; (d) origin of the waste; and (e) destination of the waste. Note: Trackable wastes as listed in Schedule 1 of the Environmental Protection (Waste Management) Regulation 2000 are not covered by this condition. Trackable wastes have similar recording requirements to this condition in accordance with a waste tracking system established under the above Regulation.
G4-2	The latest edition of the Queensland Environmental Protection Agency's INSTRUCTIONS FOR THE TREATMENT AND MANAGEMENT OF ACID SULFATE SOILS, 2001, ('the Instructions') must be complied with when treating and managing acid sulfate soils.
G4-3	Acid sulfate soils must be managed such that contaminants are not directly or indirectly released to any waters.
G4-4	All acid sulphate soils must be disposed of or managed within the authorised place.

G4-5	An annual monitoring report must be prepared each year and presented to the administering authority when requested. This report shall include but not be limited to: (a) a summary of the previous twelve (12) months monitoring results obtained under any monitoring programs required under this approval and, in graphical form showing relevant limits, a comparison of the previous twelve (12) months monitoring results to both this approvals limits and to relevant prior results; (b) an evaluation/explanation of the data from any monitoring programs; (c) a summary of any record of quantities of releases required to be kept under this approval; (d) a summary of the record of equipment failures or events recorded for any site under this approval; (e) an outline of actions taken or proposed to minimise the environmental risk from any deficiency identified by the monitoring or recording programs; (f) the number of domestic tenements newly connected to the sewage treatment works during the previous twelve (12) months; (g) the progressive total number of connections; and (h) a summary of any trade waste agreements entered into or amended during the year, including the nature of the industry.
G4-6	Telephone the EPA's Pollution Hotline or local office as soon as practicable after becoming aware of any release of contaminants not in accordance with the conditions of this approval.
G4-7	A written notice detailing the following information must be provided to the EPA within 14 days of any advice provided in accordance with condition G4-6: (a) the name of the operator, including their approval / registration number; (b) the name and telephone number of a designated contact person; (c) quantity and substance released; (d) vehicle and registration details; (e) person/s involved (driver and any others); (f) the location and time of the release; (g) the suspected cause of the release; (h) a description of the effects of the release; (i) the results of any sampling performed in relation to the release, (j) actions taken to mitigate any environmental harm caused by the release; and (k) proposed actions to prevent a recurrence of the release.
G4-8	The daily operation of the waste water treatment system and pollution control equipment must be carried out by a person(s) with appropriate experience and/or qualifications to ensure the effective operation of that treatment system and control equipment.

G4-9	An appropriate spill kit, personal protective equipment and relevant operator instructions/emergency procedure guides for the management of wastes and chemicals associated with the ERA must be kept at the site.						
G4-10	The site based management plan must not be implemented or amended in a way that contravenes any condition of this approval.						
Agency interest: Air							
Condition number	Condition						
A4-1	The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any nuisance sensitive or commercial place.						
Agency interest: Water							
Condition number	Condition						
WT4-1	The total quantity of contaminants released to waters via the release points listed in Table 4 - Maximum permitted quantity of release, must not exceed the respective quantities stated in Table 4 - Maximum permitted quantity of release for each release point in on any dry weather day or on any one day. Table 4 - Maximum permitted quantity of release <table><tr><th>Release point</th><th>Maximum release on any dry weather day</th><th>Maximum release on any one day</th></tr><tr><td>W1</td><td>385,000 litres</td><td>1,925,000 litres</td></tr></table>	Release point	Maximum release on any dry weather day	Maximum release on any one day	W1	385,000 litres	1,925,000 litres
Release point	Maximum release on any dry weather day	Maximum release on any one day					
W1	385,000 litres	1,925,000 litres					
WT4-2	The daily volume of contaminants released to waters must be determined or estimated by an appropriate method, for example a flow meter, and records kept of such determinations and estimates.						
WT4-3	The discharge location W1 must be submerged such that the top of the outfall pipe is at least 4 metres below Low Water Datum.						
WT4-4	All contaminants from discharge location W1 must be released through a suitable diffuser to achieve a minimum initial dilution of 10%						
WT4-5	Contaminant pumping stations must be fitted with stand-by pumps and pump-failure alarms as well as high level alarms to warn of imminent pump station overflow. All alarms must be able to operate without mains power.						

WT4-6	All ponds used for the storage or treatment of contaminants, sewage or wastes at or on the authorised place must be constructed, installed and maintained: (a) so as to minimise the likelihood of any release of effluent through the bed or banks of the pond to any waters (including ground water); (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.																																																																																												
WT4-7	Suitable banks and/or diversion drains must be installed and maintained to exclude stormwater runoff from entering any ponds or other structures used for the storage or treatment of contaminants or wastes.																																																																																												
WT4-8	Erosion protection measures and sediment control measures must be implemented and maintained to minimise erosion and the release of sediment.																																																																																												
WT4-9	Contaminants must only be released to surface waters in compliance with the release limits listed in Table 5 - Contaminant release limits to water and the following discharge locations. Discharge Location (W1) - namely release of treated final effluent from Wasaga sewage treatment plant to surface waters. Table 5 - Contaminant release limits to water <table><tr><th rowspan="2">Discharge point</th><th rowspan="2">Quality Characteristics</th><th rowspan="2">Units</th><th colspan="4">Release Limit</th><th rowspan="2">Monitoring Frequency</th></tr><tr><th>Minimum</th><th>50th Percentile</th><th>80th Percentile</th><th>Maximum</th></tr><tr><td>W1</td><td>5-day Biochemical Oxygen Demand</td><td>mg/L</td><td>-</td><td>30</td><td>-</td><td>50</td><td>Monthly</td></tr><tr><td>W1</td><td>Suspended Solids</td><td>mg/L</td><td>-</td><td>60</td><td>-</td><td>100</td><td>Monthly</td></tr><tr><td>W1</td><td>pH</td><td>pH units</td><td>6.5</td><td>-</td><td>-</td><td>8.5</td><td>Weekly</td></tr><tr><td>W1</td><td>Dissolved Oxygen</td><td>mg/L</td><td>2</td><td>-</td><td>-</td><td>-</td><td>Monthly</td></tr><tr><td>W1</td><td>Ammonia Nitrogen</td><td>mg/L</td><td>-</td><td>5</td><td>8</td><td>10</td><td>Monthly</td></tr><tr><td>W1</td><td>Total Nitrogen</td><td>mg/L</td><td>-</td><td>20</td><td>-</td><td>30</td><td>Monthly</td></tr><tr><td>W1</td><td>Total Phosphorus</td><td>mg/L</td><td>-</td><td>10</td><td>-</td><td>15</td><td>Monthly</td></tr><tr><td>W1</td><td>Oil and Grease</td><td>mg/L</td><td>-</td><td>7.5</td><td>-</td><td>10</td><td>Monthly</td></tr><tr><td>W1</td><td>Faecal Coliforms</td><td>cfu/100ml</td><td>-</td><td>600</td><td>-</td><td>1400</td><td>Monthly</td></tr><tr><td>W1</td><td>Specific Conductance</td><td>µS/cm</td><td>-</td><td>-</td><td>-</td><td>3500</td><td>Monthly</td></tr></table>	Discharge point	Quality Characteristics	Units	Release Limit				Monitoring Frequency	Minimum	50th Percentile	80th Percentile	Maximum	W1	5-day Biochemical Oxygen Demand	mg/L	-	30	-	50	Monthly	W1	Suspended Solids	mg/L	-	60	-	100	Monthly	W1	pH	pH units	6.5	-	-	8.5	Weekly	W1	Dissolved Oxygen	mg/L	2	-	-	-	Monthly	W1	Ammonia Nitrogen	mg/L	-	5	8	10	Monthly	W1	Total Nitrogen	mg/L	-	20	-	30	Monthly	W1	Total Phosphorus	mg/L	-	10	-	15	Monthly	W1	Oil and Grease	mg/L	-	7.5	-	10	Monthly	W1	Faecal Coliforms	cfu/100ml	-	600	-	1400	Monthly	W1	Specific Conductance	µS/cm	-	-	-	3500	Monthly
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Agency interest: Noise	
Condition number	Condition
N4-1	Noise from the ERA must not cause an environmental nuisance at any nuisance sensitive place or commercial place

Definitions

Words and phrases used throughout this permit¹ are defined below. Where a definition for a term used in this permit¹ is sought and the term is not defined within this permit¹ the definitions provided in the relevant legislation shall be used.

"administering authority" means the Environmental Protection Agency or its successor.

"annual return" means the return required by the annual notice (under section 316 of the *Environment Protection Act 1994*) for the section 73F registration certificate that applies to the development approval.

"approval" means 'notice of development application decision' or 'notice of concurrence agency response' under the *Integrated Planning Act 1997*.

"approved plans" means the plans and documents listed in the approved plans section in the notice attached to this development approval.

"authorised place" means the place authorised under this development approval for the carrying out of the specified environmentally relevant activities.

"clinical waste" means waste that has the potential to cause disease including, for example, the following:

- animal waste;
- discarded sharps;
- human tissue waste;
- laboratory waste.

"commercial place" means a place used as an office or for business or commercial purposes.

"dredge spoil" means material taken from the bed or banks of waters by using dredging equipment or other equipment designed for use in extraction of earthen material.

"dwelling" means any of the following structures or vehicles that is principally used as a residence –

- a house, unit, motel, nursing home or other building or part of a building;
- a caravan, mobile home or other vehicle or structure on land;
- a water craft in a marina.

"Environmental Protection Agency" means the department or agency (whatever called) administering the *Coastal Protection and Management Act 1995* or the *Environmental Protection Act 1994*.

"high water mark" means the ordinary high water mark at spring tides.

"infectious waste" means waste containing viable micro-organisms or their toxins which are known or suspected to cause disease in animals or humans.

"intrusive noise" means noise that, because of its frequency, duration, level, tonal characteristics, impulsiveness or vibration –

- is clearly audible to, or can be felt by, an individual; and
- annoys the individual.
- In determining whether a noise annoys an individual and is unreasonably intrusive, regard must be given to Australian Standard 1055.2 – 1997 Acoustics – Description and Measurement of Environmental Noise Part 2 – Application to Specific Situations.

"L_A 10, adj, 10 mins" means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 10% of any 10 minute measurement period, using Fast response.

"**L_A 1, adj, 10 mins**" means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 1% of any 10 minute measurement period, using Fast response.

"**L_A, max adj, T**" means the average maximum A-weighted sound pressure level, adjusted for noise character and measured over any 10 minute period, using Fast response.

"**land**" in the "land schedule" of this document means land excluding waters and the atmosphere.

"**mg/L**" means milligrams per litre.

"**noxious**" means harmful or injurious to health or physical well being.

"**NTU**" means nephelometric turbidity units.

"**nuisance sensitive place**" includes –

- a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or
- a kindergarten, school, university or other educational institution; or
- a medical centre or hospital; or
- a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 1992* or a World Heritage Area; or
- a public thoroughfare, park or gardens; or
- 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.

"**offensive**" means causing offence or displeasure; is disagreeable to the sense; disgusting, nauseous or repulsive.

"**protected area**" means –

- a protected area under the *Nature Conservation Act 1992*; or
- a marine park under the *Marine Parks Act 1992*; or
- a World Heritage Area.

"**regulated waste**" means non-domestic waste mentioned in Schedule 7 of the *Environmental Protection Regulation 1998* (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.

"**site**" means land or tidal waters on or in which it is proposed to carry out the development approved under this development approval.

"**tidal water**" means the sea and any part of a harbour or watercourse ordinarily within the ebb and flow of the tide at spring tides.

"**watercourse**" means a river, creek or stream in which water flows permanently or intermittently–

- in a natural channel, whether artificially improved or not; or
- in an artificial channel that has changed the course of the watercourse.

"**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.

"**works**" or "**operation**" means the development approved under this development approval.

"**you**" means the holder of this development approval or owner / occupier of the land which is the subject of this development approval.

"**50th percentile**" means not more than three (3) of the measured values of the quality characteristic are to exceed the stated release limit for any six (6) consecutive samples for a release/monitoring point at any time during the environmental activity(ies) works.

"80th percentile" means not more than one (1) of the measured values of the quality characteristic is to exceed the stated release limit for any five (5) consecutive samples for a sampling point at any time during the environmental activity(ies) works

PART 5 - Site Specific Conditions

Environmentally relevant activity(ies)	Location(s)
60-(2b) Waste disposal >2000t but <5000t yr (1)(b)	Horn Island Waste Disposal - Lot 10 Plan SP148513

The environmentally relevant activity(ies) conducted at the location as described above must be conducted in accordance with the following site specific conditions of approval.

Agency interest: General	
Condition number	Condition
G5-1	A Site Development Plan for the authorised place must be prepared and submitted to the administering authority (which includes finished contours levels) to cover each twelve (12) month period from the date of this development approval or until a Post Closure Care Plan has been implemented. Each Site Development Plan must be finalised and submitted at least three (3) months before the expiry of the previous plan. Note: Content of Site Development Plans Any Site Development Plan required under condition number G5-1 of this development approval must include details of at least the following: - the location and accurate dimensions of any designated areas to be used for the disposal and storage of waste at the authorised place over the period covered by the Site Development Plan; and - any area of the authorised place where precautions are taken in respect of disposal of a particular waste must be marked on the Site Development Plan as soon as practicable after the waste has been disposed of along with: - a description of the waste; and - the accurate location and depth and dimensions of the area in which this waste was deposited; and - the date the waste was deposited; and - an accurate location of any leachate storage dam or pond, pump well or other plant and equipment installed as part of a leachate collection, storage or recirculation system; and - the location of any stormwater drains or diversion embankments to be constructed to achieve compliance with this development approval; and - the location of any areas to be capped, the proposed final surface levels and contours, and the final drainage system as part of a rehabilitation program for the authorised place over the period covered by the Site Development Plan.
G5-2	A Closure and Post Closure Care Plan must be submitted to the administering authority at least twelve (12) months prior to the completion of waste receipt operations at the landfill.

G5-3	The Closure and Post Closure Care Plan for the authorised place must cover a nominal period of at least thirty (30) years after cessation of waste disposal activities and must be implemented until it can be demonstrated to the administering authority that the site no longer poses a threat to the environment.
G5-4	The post closure care element of the Closure and Post Closure Care Plan must include, but not necessarily be limited to the following: (a) maintenance of the integrity and effectiveness of final cover systems; (b) maintenance and operation of the leachate collection system; (c) leachate quality monitoring; (d) maintenance and operation of the groundwater quality monitoring network; (e) groundwater quality monitoring; (f) surface water monitoring; (g) maintenance and operation of the landfill gas management system; and (h) landfill gas monitoring.
G5-5	A record must be maintained of environmental events including but not limited to: (a) any fire at the authorised place; (b) any release of leachate or stormwater runoff which has been in contact with any wastes and contaminants not likely to be in accordance with the conditions of this development approval to the receiving waters; (c) detection by the environmental monitoring program of any release of contaminants not likely to be in accordance with the conditions of this development approval; and (d) incidents which have adverse public health consequences and/or cause nuisance including time, date, duration and nature of the incident.
G5-6	Where the holder of this development approval has not given notification to the administering authority under section 320 of the Environmental Protection Act 1994, as soon as practicable after becoming aware of any emergency or incident which results in the release of contaminants not in accordance, or reasonably expected to be not in accordance with the conditions of this development approval, the administering authority must be notified of the release by telephone or facsimile.

G5-7	Where the administering authority has not been notified under section 320 of the Environmental Protection Act 1994, the notification of emergencies or incidents as required by condition A8-9 must include but not be limited to the following: (a) the name (or identification) of the holder of this development approval; (b) the location of the emergency or incident; (c) the number of the development approval; (d) the name and telephone number of the designated contact person; (e) the time of the release; (f) the time the holder of the development approval became aware of the release; (g) the suspected cause of the release; (h) the environmental harm and/or environmental nuisance caused, threatened, or suspected to be caused by the release; and (i) actions taken to prevent any further release and mitigate any environmental harm and/or environmental nuisance caused by the release.
G5-8	Where notification has not been given to the administering authority under section 320 of the Environmental Protection Act 1994, not more than fourteen (14) days following the initial notification of an emergency or incident, the holder of the development approval must provide written advice of the information supplied in accordance with condition G5-10 in addition to: (a) proposed actions to prevent a recurrence of the emergency or incident; (b) outcomes of actions taken at the time to prevent or minimise environmental harm and/or environmental nuisance, and (c) the results of any environmental monitoring performed.
G5-9	If a program notice has been submitted under Section 350 of the Act, condition numbers G5-7 and G5-8 will have been complied with if the required information is submitted by the date specified in a Section 352 notice requiring submission of a draft Environmental Management Program.
G5-10	The administering authority must be notified in writing of any monitoring result which indicates an exceedance of any development approval limit within twenty eight (28) days of completion of analysis.
G5-11	The written notification required by condition number G5-10 above must include: (a) the full analysis results, and (b) details of investigation or corrective actions taken, and (c) any subsequent analysis.

G5-12	If a program notice has been submitted under Section 350 of the Act, condition numbers G5-10 and G5-11 will have been complied with if the required information is submitted by the date specified in a Section 352 notice requiring submission of a draft Environmental Management Program.
G5-13	All determinations of the quality of contaminants released to the environment and all measurement and reporting of noise levels that are required by this development approval must be undertaken by a person or body possessing appropriate experience and qualifications to perform the required determinations and the required measurements.
G5-14	All complaints received must be recorded including investigations undertaken, conclusions formed and action taken. This information must be made available to the administering authority on request.
Agency interest: Air	
Condition number	Condition
A5-1	The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any odour sensitive place.
A5-2	The release of dust and/or particulate matter resulting from the activity must not cause an environmental nuisance at any dust sensitive place.
A5-3	When requested by the Administering Authority, dust and particulate monitoring must be undertaken to investigate any complaint of environmental nuisance caused by dust and/or particulate matter, and the results notified within 14 days to the administering authority following completion of monitoring. Monitoring must be carried out at a place(s) relevant to the potentially affected dust sensitive place and at upwind control sites and must include: (a) for a complaint alleging dust nuisance, dust deposition; and (b) for a complaint alleging adverse health effects caused by dust, the concentration per cubic metre of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM10) suspended in the atmosphere over a 24hr averaging time.
A5-4	The following materials must not be used for dust suppression purposes on trafficable areas or be released on rehabilitated areas or areas undergoing rehabilitation: (a) any leachate; (b) any landfill gas condensate; (c) waste oil; and (d) any stormwater that has become contaminated following contact with waste.
A5-5	All areas on the authorised place which have been landfilled with waste must be revegetated as soon as practicable upon the completion of waste disposal operations in that particular area.

A5-6	Rehabilitation must be carried out in such a manner as to minimise releases of wind-blown dust and erosion.
A5-7	Access to areas awaiting rehabilitation or being rehabilitated must be restricted by suitable barriers to prevent disturbance of these areas.
A5-8	A collection system for landfill gas must be installed and maintained at the authorised place to effectively: (a) minimise the likelihood of any subsurface migration of landfill gas from the landfill; and (b) prevent any uncontrolled emission of landfill gas. For the purpose of this condition, the landfill gas collection system must be installed on site to allow adequate drainage of gas if landfill gas monitoring indicates hazardous concentrations of gases at the authorised place.
A5-9	A landfill gas extraction system must be installed in any useable confined space or building on the authorised place where a landfill gas monitoring program detects landfill gas in concentrations greater than 25% of the lower explosive limit for methane in useable confined spaces and buildings on the authorised place other than the gas control units or parts thereof.
A5-10	An effective landfill gas monitoring program must be developed and implemented for the authorised place. The system must include, but not be limited to, a sufficient number of monitoring locations to: (a) establish landfill gas concentrations across the landfill; (b) establish landfill gas concentrations in all confined spaces on the authorised place; and (c) detect any landfill gas migration beyond the boundary of the landfill.
A5-11	Monitoring referred to in condition A5-10 must be undertaken for at least the following parameters: (a) methane; (b) oxygen; (c) carbon dioxide; and (d) atmospheric pressure.
Agency interest: Water	
Condition number	Condition
WT5-1	Prevent the release of sediment to waters or a build up of sediment in any stormwater drain.
WT5-2	Contaminants must not be released from the site to any waters or the bed and banks of any waters.

WT5-3	There must be no release of stormwater runoff that has been in contact with any contaminants at the site to any waters, roadside gutter or stormwater drain.
WT5-4	The landfill liner system must be installed and maintained at the authorised place to effectively: (a) minimise the likelihood of any release of contaminants to groundwaters; and (b) minimise the likelihood of subsurface migration of landfill gas from the landfill.
WT5-5	A leachate collection system must be installed and maintained at the authorised place to effectively and efficiently: (a) collect any leachate generated in the landfill; (b) convey the collected leachate to a leachate storage or disposal facility; and (c) minimise the leachate head on the base of the landfill.
WT5-6	All reasonable and practical measures must be taken to minimise the generation of leachate within the landfill.
WT5-7	Leachate or contaminated stormwater intercepted by the leachate collection system may only be disposed of: (a) by evaporation in a pond constructed on the authorised place; or (b) by recirculation back into the landfilled waste ; or (c) by irrigation over exposed wastes on the authorised place; or (d) to a sewage treatment plant.
WT5-8	Notices must be prominently displayed on any leachate irrigation area, warning the public that the area has been irrigated with leachate and not to use or drink the fluid. These notices must be maintained in a visible and legible condition.
WT5-9	When conditions prevent the irrigation of leachate on exposed waste (such as during rain events), alternative measures must be taken to store / dispose the leachate (such as storage tanks, tankering off site to a sewage treatment plant or recirculation through the landfill).
WT5-10	Leachate must not be disposed of on the surface of areas of the authorised place that have received their final cover or on any revegetated area.
WT5-11	Any landfill gas condensate must be intercepted and either: (a) disposed of by recirculation back into the landfill; or (b) conveyed to a sewage treatment plant.
WT5-12	Any leachate storage tank installed on the authorised place must be contained within an on site containment system and controlled in such a manner that prevents environmental harm.

WT5-13	Where any leachate storage tank or any part thereof is installed above ground on the authorised place, the base and sidewalls must be maintained to ensure their stability and integrity.
WT5-14	Any leachate storage tank installed on the authorised place must be bunded in accordance with this development approval.
WT5-15	Leachate or contaminated stormwater collected within the bunded area must be drained to the leachate collection system.
WT5-16	All determinations of the quality of contaminants must be: (a) made in accordance with methods prescribed in the latest edition of the Environmental Protection Agency Water Quality Sampling Manual; and (b) carried out on representative samples.
WT5-17	A written record of the results of all monitoring programs required under this development approval must be maintained that: (a) records the results of all analyses, measurements and observations; (b) records the date and time of sampling; and (c) has all records of analyses, measurements and observations signed by a responsible officer.
WT5-18	An effective leachate monitoring program must be developed and implemented for the authorised place. The program must include, but not be limited to, a sufficient number of monitoring locations to establish the composition of leachate generated within the landfill.

WT5-19	The leachate monitoring program specified in condition number WT5-18 must monitor and record leachate quality for at least the following water quality characteristics: (a) pH; (b) electrical conductivity; (c) dissolved oxygen; (d) bicarbonate (HC03); (e) nitrate as N; (f) ammonia; (g) calcium; (h) sulphate; (i) chloride; (j) chromium; (k) cadmium; (l) manganese; (m) iron; (n) lead; (o) zinc; (p) Chemical Oxygen Demand (COD); (q) 5-Day Biological Oxygen Demand (BOD5); (r) Total Organic Carbon (TOC).
WT5-20	Leachate quality samples must be collected from the landfill on at least one occasion in the month of February each year.
WT5-21	An effective surface water monitoring program must be developed and implemented for the authorised place. The program must include, but not be limited to, a sufficient number of monitoring locations to: (a) establish the background quality of surface waters upstream from the landfill; and (b) detect any impact on surface waters as a consequence of landfill operation.

WT5-22	The surface water monitoring program specified in condition number WT5-21 must monitor and record the quality of surface water to detect any possible release(s) of contaminants. This monitoring must be undertaken for at least the following water quality characteristics: (a) pH; (b) electrical conductivity; (c) dissolved oxygen; (d) ammonia; (e) nitrate as N; (f) calcium; (g) sulphate; (h) chloride; (i) manganese; (j) total iron; (k) lead; (l) zinc; (m) Chemical Oxygen Demand (COD); and (n) 5-Day Biological Oxygen Demand (BOD5).
WT5-23	Surface water quality samples must be collected from sample points in accordance with the surface water monitoring program on at least one occasion in the months of February and May each year.
WT5-24	An effective groundwater monitoring program must be developed and implemented for the authorised place. The program must include, but not be limited to, a sufficient number of monitoring locations to: (a) establish the background quality of groundwater upgradient of the landfill site; and (b) detect any impact on groundwater as a consequence of landfill operation.

WT5-25	The groundwater monitoring program specified in condition WT5-24 must provide for a sufficient number of monitoring wells installed at locations and depths which yield representative groundwater samples to detect any possible release(s) of contaminants. This monitoring must be undertaken for at least the following groundwater quality characteristics: (a) pH; (b) electrical conductivity; (c) dissolved oxygen; (d) total dissolved solids; (e) ammonia; (f) bicarbonate (HC03); (g) sulphate; (h) Chloride; (i) manganese; (j) total iron; (k) lead; (l) zinc; and (m) Chemical oxygen Demand (COD);
WT5-26	Groundwater quality samples must be collected from sample points in accordance with the groundwater monitoring program on at least one occasion in the months of October, January, April and July each year.
Agency interest: Noise	
Condition number	Condition
N5-1	Noise from activities must not cause an environmental nuisance at any noise affected premises.
N5-2	When requested by the Administering Authority, noise monitoring must be undertaken to investigate any complaint of noise nuisance, and the results notified within 14 days to the administering authority. Monitoring must include: • LA 10, adj, 10 mins • LA 1, adj, 10 mins • the level and frequency of occurrence of impulsive or tonal noise; • atmospheric conditions including wind speed and direction; • effects due to extraneous factors such as traffic noise; and • location, date and time of recording.

N5-3	The method of measurement and reporting of noise levels must comply with the latest edition of the Environmental Protection Agency's Noise Measurement Manual.
Agency interest: Land	
Condition number	Condition
L5-1	Contaminants must not be released to land.
L5-2	Spillage of all chemicals and fuels must be contained within an on-site containment system and controlled in a manner that prevents environmental harm. NOTE: All petroleum product storage's must be designed, constructed and maintained in accordance with AS 1940 - Storage and Handling of Flammable and Combustible Liquids.
Agency interest: Waste	
Condition number	Condition
W5-1	Only the following waste materials are permitted to be accepted for disposal: • general and limited regulated waste Note: i. paper covered plasterboard must only be received at the authorised place if it is generated by construction and demolition activities and delivered to the authorised place as part of a mixed load of materials; ii. car bodies and other large metal objects for recycling may be temporarily received and stored at the authorised place; iii. treatment tank sludges and residues from Sewage Treatment Plants may be received and temporarily stored on the authorised place; iv. drums containing any residual regulated wastes are themselves a regulated waste and must not be accepted for disposal at the authorised place unless they have been triple rinsed or thoroughly cleaned; and v. oil and batteries may be temporarily stored at the authorised place.
W5-2	Keep and maintain records of source, volumes and composition of all waste types accepted at the premises and report these values to the administering authority by 31 August each year.
W5-3	Waste must not: i. be burnt or be allowed to burn on the approved place; or ii. be removed from the premises and burnt elsewhere, unless that waste is incinerated at a facility licensed under the Environmental Protection Act 1994.

W5-4	All regulated waste removed from the site must be removed by a person who holds a current authority / approval to transport such wastes under the provisions of the Environmental Protection Act 1994.
W5-5	Notwithstanding any condition of this development approval, the following waste materials are not permitted to be accepted for disposal at the authorised place: i. liquescent waste or any waste capable of yielding free liquids (except leachates, landfill gas condensate arising from gas collection generated within the landfill and/or waste water generated by washing waste transport vehicles and by the wheel washing facility); ii. cytotoxic wastes; iii. drugs and poisons as cited in the Standards for Uniform Scheduling of Drugs and Poisons (Schedules 8 and 9 drugs as per the Poisons (Health and Drugs) Regulation 1996); iv. all radioactive wastes, unless otherwise approved under the Radiation Safety Act 1999; v. pyrophoric wastes, where co-disposed with other potentially combustible materials; vi. explosives and ammunition (except 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); vii. whole tyres; viii. any other regulated waste and/or contaminated soil which cause or are likely to cause environmental harm when deposited in the landfill; and ix. any other waste material (including organic waste materials) which can be recycled or reprocessed to produce saleable products unless it has been demonstrated to the administering authority in a competent manner that it is impractical to recycle or reprocess the material. For the purpose of this condition, "free liquid" means liquid which readily separates from the solid portion of a waste under ambient temperature and pressure as determined by Method 9095 (Paint Filter Liquids Test) described in "U.S. EPA: Free Liquids (Paint Filter)" Federal Register, Vol. 50, No. 83, page 18370, April 30, 1985.
W5-6	Appropriate measures must be taken to minimise the likelihood of litter escaping from the authorised place.
W5-7	An all weather internal road must be provided and maintained at all times to the working face of the authorised place.
W5-8	All works and control equipment must be installed and operated, and all measures taken to ensure that the carrying out of the environmentally relevant activity does not cause any adverse effect on public health or any nuisance, particularly in relation to propagation of diseases, fly breeding, mosquito breeding, and harbourage and/or breeding of rats, dogs, birds and other pest organisms and/or vectors.

W5-9	In the event of any adverse effect upon public health and/or any nuisance arising from the conduct of the environmentally relevant activity, any works necessary must be undertaken to: i. abate such adverse effects and such nuisance; and ii. prevent the likelihood of any recurrence of the circumstances which gave rise to such adverse effects and/or such nuisance.
W5-10	At all times when the authorised place is open to receive waste, at least one (1) person must be present who is responsible for the control and operation of the landfill.
W5-11	Waste tyres may be stored in temporary above ground stockpiles on the authorised place provided that; i. there are no more than 200 waste tyres at any time in any one (1) stockpile; ii. measures are taken to prevent mosquito breeding; and iii. the total number of tyres stored at the authorised place does not exceed 500 at any time.
W5-12	Where there is more than one (1) stockpile of waste tyres, adequate separation distances must be maintained between the stockpiles to prevent fire from spreading: (a) from one (1) tyre stockpile to another; and (b) to other waste stored or disposed of at the authorised place.
W5-13	Used wet cell batteries may only be temporarily stored on the authorised place in: (a) the area designated for this purpose in the Site Development Plan; and (b) a covered enclosure which has been bunded and sealed to contain spillages and leakages.
W5-14	Waste oil may be temporarily stored in drums or other containers at the authorised place, provided that: (a) the drums or other containers are stored in the area designated for this purpose in the Site Development Plan; (b) the drums or other containers are bunded to contain spillages and leakages; (c) the drums or other containers are securely sealed when full to prevent rainwater entry and spillage (if knocked over); and (d) the drums or other containers have a filling mechanism which prevents rainwater entry.
W5-15	All asbestos wastes received for disposal at the authorised place must be disposed of at a location within the landfill which is at least two (2) metres below the final contour of the completed waste disposal area and not less than two (2) metres in from the batters or flanks of the completed waste disposal area. The asbestos must be covered as soon as practicable after being deposited at that location.

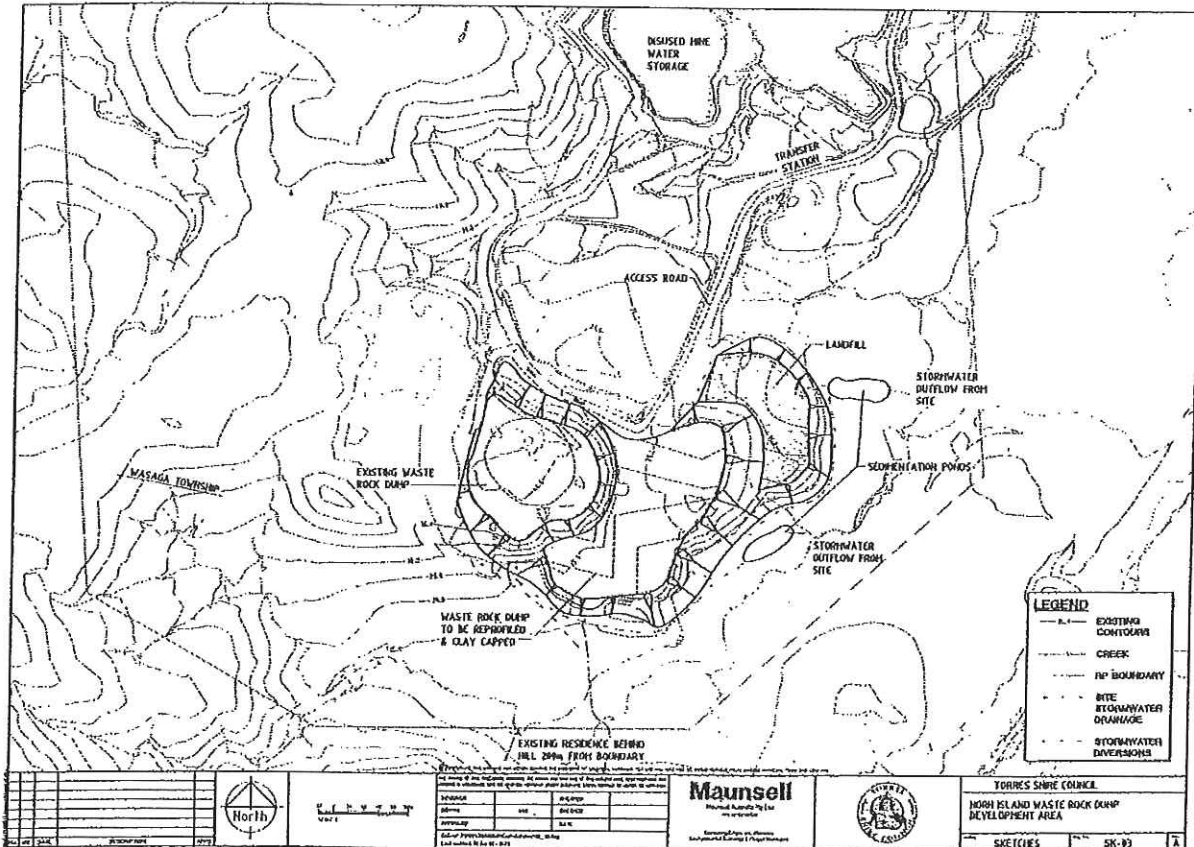
W5-16	The location of any area of the authorised place used to dispose of asbestos waste must be marked on the Site Development Plan.
W5-17	All required measures must be taken to ensure that all wastes accepted for disposal at the authorised place are not disposed of: (a) beyond any area designated for the disposal or storage of such wastes in the Site Development Plan; (b) into waters or leachate collected at the base of any active waste disposal area; and (c) beyond the catchment of leachate collection drains installed as part of a leachate collection system.
W5-18	With the exception of wastes requiring special disposal procedures, all wastes received for disposal at the authorised place must be confined to the working face of the landfill.
W5-19	The working face of the landfill must be managed to minimise the area of exposed wastes.
W5-20	All large metal articles received for disposal must be effectively compacted before being deposited at the base of the working face.
W5-21	Wastes deposited at the landfill must be evenly and effectively consolidated, compacted and covered by mechanical plant.
W5-22	All mechanical plant necessary must be available and capable of covering asbestos wastes with a layer of inert earthen material or other non combustible inert material before the disposal of such waste takes place.
W5-23	Where waste is to be disposed of above an area previously used for waste disposal, existing cover material must be ripped or removed to allow leachate and contaminated stormwater to percolate through the wastes deposited beneath.
W5-24	Signage or pictorial symbols must be erected and maintained in good repair which give the following information, at prominent locations on the landfill: (a) the name of the authorised place and site contact telephone number (where applicable); (b) the hours and days the authorised place will be open for receiving wastes; (c) the wastes permitted to be received at the authorised place; (d) advise that unauthorised dumping of waste is prohibited (citing the penalty); (e) prohibition of the lighting of unauthorised fires on the landfill; and (f) directing traffic to the location of the working face and recycling area.

W5-25	Fire break(s) must be maintained to prevent: (a) fire spreading from the authorised place to adjoining land; (b) fire spreading from adjoining land to the authorised place; and (c) from one area of the authorised place to another.
W5-26	In the event of any fire occurring at the authorised place the fire must be extinguished, as soon as it is safe to do so.
W5-27	An effective management program must be developed and implemented prior to treatment tank sludges and residues received from Sewage Treatment Plants being re-used as final cover on the authorised place.
W5-28	Fences, gates and other barriers must be erected and maintained at the authorised place so as to prevent: (a) unauthorised vehicle access to any area of the authorised place used for waste disposal which has not received final cover; (b) unauthorised access to any area of the authorised place where precautions are taken in respect of disposal of particular wastes; and (c) unauthorised access to any waste storage area.
W5-29	All gates to the authorised place must be kept locked except during official operating hours to restrict unauthorised access to the landfill.
W5-30	Closure activities at the authorised place must commence in accordance with the Closure and Post Closure Care Plan no later than 28 days after the date on which the landfill accepts the final delivery of waste.

SCHEDULE 3 - Location of Horn Island Landfill



Site Plan of Horn Island Landfill



Definitions

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"administering authority" means the Environmental Protection Agency or its successor.

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"this authority" means this environmental authority/development approval.

"authority" means level 1 licence (without development approval), or level 1 approval (without development approval), or level 2 approval (without development approval) under the *Environmental Protection Act 1994*.

"approval" means 'notice of development application decision' or 'notice of concurrence agency response' under the *Integrated Planning Act 1997*

"dust sensitive place" means -

- a dwelling, mobile home or caravan park, residential marina or other residential place;
 - a motel, hotel or hostel;
 - a kindergarten, school, university or other educational institution;
 - a medical centre or hospital;
 - a protected area;
 - a park or gardens; or
 - a place used as an office or for business or commercial purposes.
- and includes the curtilage of any such place.

"odour sensitive place" has the same meaning as a "dust sensitive place"

"dwelling" means any of the following structures or vehicles that is principally used as a residence-

- a house, unit, motel, nursing home or other building or part of a building;
- a caravan, mobile home or other vehicle or structure on land;
- a water craft in a marina.

"noxious" means harmful or injurious to health or physical well being.

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

"nuisance sensitive place" includes -

- a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or
- a kindergarten, school, university or other educational institution; or
- a medical centre or hospital; or
- a protected area under the Nature Conservation Act 1992, the Marine Parks Act 1992 or a World Heritage Area; or
- a public thoroughfare, park or gardens; or
- 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.

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" $L_{A, \text{max adj}, T}$ " means the average maximum A-weighted sound pressure level, adjusted for noise character and measured over any 10 minute period, using Fast response.

"noise affected premises" means a "noise sensitive place" or a "commercial place"

"noise sensitive place" means -

- a dwelling, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or
- a kindergarten, school, university or other educational institution; or
- a medical centre or hospital; or
- a protected area; or
- a park or gardens.

and includes the curtilage of such place.

"commercial place" means a place used as an office or for business or commercial purposes.

"intrusive noise" means noise that, because of its frequency, duration, level, tonal characteristics, impulsiveness or vibration -

- is clearly audible to, or can be felt by, an individual; and
- annoys the individual.

In determining whether a noise annoys an individual and is unreasonably intrusive, regard must be given to Australian Standard 1055.2 - 1997 Acoustics - Description and Measurement of Environmental Noise Part 2 - Application to Specific Situations.

"protected area" means -

- a protected area under the Nature Conservation Act 1992; or
- a marine park under the Marine Parks Act 1992; or
- a World Heritage Area.

"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.

"50th percentile" means not more than three (3) of the measured values of the quality characteristic are to exceed the stated release limit for any six (6) consecutive samples for a release/monitoring point at any time during the environmental activity(ies) works.

"80th percentile" means not more than one (1) of the measured values of the quality characteristic is to exceed the stated release limit for any five (5) consecutive samples for a sampling point at any time during the environmental activity(ies) works

"land" in the "land schedule" of this document means land excluding waters and the atmosphere.

"mg/L" means milligrams per litre.

"NTU" means nephelometric turbidity units

"regulated waste" means non-domestic waste mentioned in Schedule 7 of the Environmental Protection Regulation 1998 (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.

"annual return" means the return required by the annual notice (under section 316 of the Environment Protection Act, 1994) for the section 86(2) licence that applies to the development approval.

"landfill" means all contiguous land and structures, other appurtenances, and improvements on the land used or associated with the disposal of waste.

"public health problem" means an adverse effect or likely adverse effect on the health of any person(s) which results from the carrying out of the environmentally relevant activity and includes transmission of disease(s), and breeding and/or harbourage of flies, mosquitoes, rodents and other pests.

PART 6 - Site Specific Conditions

Environmentally relevant activity(ies)	Location(s)
16-(2a) Extractive >5000t but <100000t yr	Horn Island Extraction - Lot 9 Plan SP142707 and Lot 7 Plan SP142707

The environmentally relevant activity(ies) conducted at the location as described above must be conducted in accordance with the following site specific conditions of approval.

Agency interest: General	
Condition number	Condition
G6-1	You must comply with the latest edition of the Queensland Environmental Protection Agency's INSTRUCTIONS FOR THE TREATMENT AND MANAGEMENT OF ACID SULFATE SOILS, 2001, produced by the Queensland Environmental Protection Agency in consultation with the Department of Natural Resources and Mines and the Department of Primary Industries.
G6-2	Acid sulfate soils must be managed such that contaminants are not be directly or indirectly released, as a result of the activity, to any waters or the bed and banks of any waters.
G6-3	All complaints received must be recorded including investigations undertaken, conclusions formed and action taken. This information must be made available to the administering authority on request.
G6-4	In consultation with the administering authority, cooperate with and participate in any community environmental liaison committee established in respect of either the site specifically, or the industrial estate where the site is located.
Agency interest: Air	
Condition number	Condition
A6-1	The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any odour sensitive place.
A6-2	The release of dust and/or particulate matter resulting from the activity must not cause an environmental nuisance at any dust sensitive place.

A6-3	Exceedance of any of the following levels when measured at any dust sensitive place is an environmental nuisance for the purposes of condition A6-2. - Dust deposition of 120 milligrams per square metre per day, when monitored in accordance with Australian Standard AS 3580.10 of 1991; OR - A concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM10) suspended in the atmosphere of 150 micrograms per cubic metre over a 24 hour averaging time, at a dust sensitive place downwind of the site, when monitored in accordance with: - Australian Standard AS 3580.9.6 'Ambient air - Particulate matter - Determination of suspended particulate PM10 high-volume sampler with size-selective inlet - Gravimetric method'; or - any alternative method of monitoring PM10 which may be permitted by the 'Air Quality Sampling Manual' as published from time to time by the administering authority.
A6-4	When requested by the Administering Authority, dust and particulate monitoring must be undertaken to investigate any complaint of environmental nuisance caused by dust and/or particulate matter, and the results notified within 14 days to the administering authority following completion of monitoring. Monitoring must be carried out at a place(s) relevant to the potentially affected dust sensitive place and at upwind control sites and must include: - for a complaint alleging dust nuisance, dust deposition; and - for a complaint alleging adverse health effects caused by dust, the concentration per cubic metre of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM10) suspended in the atmosphere over a 24hr averaging time.
Agency interest: Water	
Condition number	Condition
WT6-1	Prevent the release of sediment to waters or a build up of sediment in any stormwater drain.
WT6-2	Contaminants must not be released from the site to any waters or the bed and banks of any waters.
WT6-3	There must be no release of stormwater runoff that has been in contact with any contaminants at the site to any waters, roadside gutter or stormwater drain.
Agency interest: Noise	
Condition number	Condition
N6-1	Noise from activities must not cause an environmental nuisance at any noise affected premises.

N6-2	Vibration emitted from activities must not cause a nuisance at any vibration sensitive place.
N6-3	When requested by the Administering Authority, vibration monitoring and recording must be undertaken to investigate any complaint of nuisance, and the results notified within 14 days to the administering authority. Monitoring must include: • peak particle velocity (mm/s); and • location of the blast/s within the site (including which bench level); and • atmospheric conditions including temperature, relative humidity and wind speed and direction; and • the level and frequency of occurrence of impulsive or tonal noise; • atmospheric conditions including wind speed and direction; • effects due to extraneous factors; and • location, date and time of recording.
Agency interest: Land	
Condition number	Condition
L6-1	The authorised place must be rehabilitated (including all disturbed areas such as slopes, borrow pits, stockpile and screening areas) in a manner such that: • suitable native species of vegetation are planted and established; • potential for erosion of the site is minimised; • the quality of stormwater, water and seepage released from the site is such that releases of contaminants such as suspended solids, turbidity, total dissolved salts, pH, total iron, total aluminium, and total manganese are not likely to cause environmental harm; • the likelihood of environmental nuisance being caused by release of dust is minimised; • the water quality of any residual water bodies meets criteria for subsequent uses and does not have potential to cause environmental harm; • the final landform is stable and not subject to slumping; and • any actual and potential acid sulfate soils in or on the site are either not disturbed; or, submerged, or treated so as to not be likely to cause environmental harm.
L6-2	Rehabilitation of disturbed areas must take place progressively as works are staged and new areas of extraction are commenced.

Definitions

Words and phrases used throughout this licence are defined below:

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Word Definitions

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"authorised place" means the place authorised under this environmental authority/development approval for the carrying out of the specified environmentally relevant activities.

"this authority" means this environmental authority/development approval.

"authority" means level 1 licence (without development approval), or level 1 approval (without development approval), or level 2 approval (without development approval) under the *Environmental Protection Act 1994*.

"dust sensitive place" means -

- a dwelling, mobile home or caravan park, residential marina or other residential place;
 - a motel, hotel or hostel;
 - a kindergarten, school, university or other educational institution;
 - a medical centre or hospital;
 - a protected area;
 - a park or gardens; or
 - a place used as an office or for business or commercial purposes.
- and includes the curtilage of any such place.

"dwelling" means any of the following structures or vehicles that is principally used as a residence-

- a house, unit, motel, nursing home or other building or part of a building;
- a caravan, mobile home or other vehicle or structure on land;
- a water craft in a marina.

"noxious" means harmful or injurious to health or physical well being.

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

"nuisance sensitive place" includes -

- a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or
- a kindergarten, school, university or other educational institution; or
- a medical centre or hospital; or
- a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 1992* or a World Heritage Area; or
- a public thoroughfare, park or gardens; or

- 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.

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" $L_{A, \text{max adj}, T}$ " means the average maximum A-weighted sound pressure level, adjusted for noise character and measured over any 10 minute period, using Fast response.

"noise affected premises" means a "noise sensitive place" or a "commercial place"

"noise sensitive place" means -

- a dwelling, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or
- a kindergarten, school, university or other educational institution; or
- a medical centre or hospital; or
- a protected area; or
- a park or gardens.

and includes the curtilage of such place.

"commercial place" means a place used as an office or for business or commercial purposes.

"intrusive noise" means noise that, because of its frequency, duration, level, tonal characteristics, impulsiveness or vibration -

- is clearly audible to, or can be felt by, an individual; and
- annoys the individual.

In determining whether a noise annoys an individual and is unreasonably intrusive, regard must be given to Australian Standard 1055.2 - 1997 Acoustics - Description and Measurement of Environmental Noise Part 2 - Application to Specific Situations.

"protected area" means -

- a protected area under the *Nature Conservation Act 1992*; or
- a marine park under the *Marine Parks Act 1992*; or
- a World Heritage Area.

"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.

"land" in the "land schedule" of this document means land excluding waters and the atmosphere.

"regulated waste" means non-domestic waste mentioned in Schedule 7 of the *Environmental Protection Regulation 1998* (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.

"licensed vehicle" means a vehicle authorised to be used under the licence to transport regulated waste.

"registered vehicle" means "licensed vehicle"

"vibration sensitive place" means a noise sensitive place or a commercial place.

"annual return" means the return required by the annual notice (under section 316 of the *Environment Protection Act, 1994*) for the section 86(2) licence that applies to the development approval.

PART 7 - Site Specific Conditions

Environmentally relevant activity(ies)	Location(s)
16-(3a) Screening >5000t but <100000t yr	Horn Island Screening - Lot 7 Plan SP142707

The environmentally relevant activity(ies) conducted at the location as described above must be conducted in accordance with the following site specific conditions of approval.

Agency interest: General	
Condition number	Condition
G7-1	You must comply with the latest edition of the Queensland Environmental Protection Agency's INSTRUCTIONS FOR THE TREATMENT AND MANAGEMENT OF ACID SULFATE SOILS, 2001, produced by the Queensland Environmental Protection Agency in consultation with the Department of Natural Resources and Mines and the Department of Primary Industries.
G7-2	Acid sulfate soils must be managed such that contaminants are not be directly or indirectly released, as a result of the activity, to any waters or the bed and banks of any waters.
G7-3	All complaints received must be recorded including investigations undertaken, conclusions formed and action taken. This information must be made available to the administering authority on request.
G7-4	In consultation with the administering authority, cooperate with and participate in any community environmental liaison committee established in respect of either the site specifically or the industrial estate where the site is located.
Agency interest: Air	
Condition number	Condition
A7-1	The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any odour sensitive place.
A7-2	The release of dust and/or particulate matter resulting from the activity must not cause an environmental nuisance at any dust sensitive place.

A7-3	Exceedance of any of the following levels when measured at any dust sensitive place is an environmental nuisance for the purposes of condition A7-2. - Dust deposition of 120 milligrams per square metre per day, when monitored in accordance with Australian Standard AS 3580.10 of 1991; OR - A concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (μm) (PM10) suspended in the atmosphere of 150 micrograms per cubic metre over a 24 hour averaging time, at a dust sensitive place downwind of the site, when monitored in accordance with: - Australian Standard AS 3580.9.6 'Ambient air - Particulate matter - Determination of suspended particulate PM10 high-volume sampler with size-selective inlet - Gravimetric method'; or - any alternative method of monitoring PM10 which may be permitted by the 'Air Quality Sampling Manual' as published from time to time by the administering authority.
A7-4	When requested by the Administering Authority, dust and particulate monitoring must be undertaken to investigate any complaint of environmental nuisance caused by dust and/or particulate matter, and the results notified within 14 days to the administering authority following completion of monitoring. Monitoring must be carried out at a place(s) relevant to the potentially affected dust sensitive place and at upwind control sites and must include: - for a complaint alleging dust nuisance, dust deposition; and - for a complaint alleging adverse health effects caused by dust, the concentration per cubic metre of particulate matter with an aerodynamic diameter of less than 10 micrometre (μm) (PM10) suspended in the atmosphere over a 24hr averaging time.
Agency interest: Water	
Condition number	Condition
WT7-1	Prevent the release of sediment to waters or a build up of sediment in any stormwater drain.
WT7-2	Contaminants must not be released from the site to any waters or the bed and banks of any waters.
WT7-3	There must be no release of stormwater runoff that has been in contact with any contaminants at the site to any waters, roadside gutter or stormwater drain.
Agency interest: Noise	
Condition number	Condition
N7-1	Noise from activities must not cause an environmental nuisance at any noise affected premises.

N7-2	Vibration emitted from activities must not cause a nuisance at any vibration sensitive place.											
N7-3	Vibration emitted from activities must not exceed the levels specified Table 6 at any vibration sensitive place. Table 6 - Vibration limits - 'Sensitive place' <table><tr><th rowspan="2"></th><th colspan="2">Vibration measured at a 'Vibration sensitive place'</th></tr><tr><th>Monday to Friday 9am - 3pm Saturday 9am - 1pm</th><th>Sundays and public holidays</th></tr><tr><td>Houses and low rise residential buildings and commercial buildings not included below.</td><td>10 mm/s</td><td>No blasting to occur</td></tr><tr><td>Commercial and industrial buildings or structures of reinforced concrete or steel construction.</td><td>25 mm/s</td><td>No blasting to occur</td></tr></table>		Vibration measured at a 'Vibration sensitive place'		Monday to Friday 9am - 3pm Saturday 9am - 1pm	Sundays and public holidays	Houses and low rise residential buildings and commercial buildings not included below.	10 mm/s	No blasting to occur	Commercial and industrial buildings or structures of reinforced concrete or steel construction.	25 mm/s	No blasting to occur
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Agency interest: Land	
Condition number	Condition
L7-1	The authorised place must be rehabilitated (including all disturbed areas such as slopes, borrow pits, stockpile and screening areas) in a manner such that: • suitable native species of vegetation are planted and established; • potential for erosion of the site is minimised; • the quality of stormwater, water and seepage released from the site is such that releases of contaminants such as suspended solids, turbidity, total dissolved salts, pH, total iron, total aluminium, and total manganese are not likely to cause environmental harm; • the likelihood of environmental nuisance being caused by release of dust is minimised; • the water quality of any residual water bodies meets criteria for subsequent uses and does not have potential to cause environmental harm; • the final landform is stable and not subject to slumping; and • any actual and potential acid sulfate soils in or on the site are either not disturbed; or, submerged, or treated so as to not be likely to cause environmental harm.
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- a dwelling, mobile home or caravan park, residential marina or other residential place;
 - a motel, hotel or hostel;
 - a kindergarten, school, university or other educational institution;
 - a medical centre or hospital;
 - a protected area;
 - a park or gardens; or
 - a place used as an office or for business or commercial purposes.
- and includes the curtilage of any such place.

"odour sensitive place" has the same meaning as a "dust sensitive place"

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- a caravan, mobile home or other vehicle or structure on land;
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- a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
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 - a kindergarten, school, university or other educational institution; or
 - a medical centre or hospital; or
 - a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 1992* or a World Heritage Area; or
 - a public thoroughfare, park or gardens; or
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" $L_{A, \text{max adj}, T}$ " means the average maximum A-weighted sound pressure level, adjusted for noise character and measured over any 10 minute period, using Fast response.

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 - a motel, hotel or hostel; or
 - a kindergarten, school, university or other educational institution; or
 - a medical centre or hospital; or
 - a protected area; or
 - a park or gardens.
- and includes the curtilage of such place.

"commercial place" means a place used as an office or for business or commercial purposes.

"intrusive noise" means noise that, because of its frequency, duration, level, tonal characteristics, impulsiveness or vibration -

- is clearly audible to, or can be felt by, an individual; and

- annoys the individual.

In determining whether a noise annoys an individual and is unreasonably intrusive, regard must be given to Australian Standard 1055.2 - 1997 Acoustics - Description and Measurement of Environmental Noise Part 2 - Application to Specific Situations.

"protected area" means -

- a protected area under the *Nature Conservation Act 1992*; or
- a marine park under the *Marine Parks Act 1992*; or
- a World Heritage Area.

"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.

"50th percentile" means not more than three (3) of the measured values of the quality characteristic are to exceed the stated release limit for any six (6) consecutive samples for a release/monitoring point at any time during the environmental activity(ies) works.

"80th percentile" means not more than one (1) of the measured values of the quality characteristic is to exceed the stated release limit for any five (5) consecutive samples for a sampling point at any time during the environmental activity(ies) works

"dredge spoil" means material taken from the bed or banks of waters by using dredging equipment or other equipment designed for use in extraction of earthen material.

"land" in the "land schedule" of this document means land excluding waters and the atmosphere.

"mg/L" means milligrams per litre.

"NTU" means nephelometric turbidity units

"regulated waste" means non-domestic waste mentioned in Schedule 7 of the *Environmental Protection Regulation 1998* (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.

"licensed vehicle" means a vehicle authorised to be used under the licence to transport regulated waste.

"registered vehicle" means "licensed vehicle"

"clinical waste" means waste that has the potential to cause disease including, for example, the following:

- animal waste;
- discarded sharps;
- human tissue waste;
- laboratory waste.

"infectious waste" means "clinical waste"

"vibration sensitive place" means a noise sensitive place or a commercial place.

"annual return" means the return required by the annual notice (under section 316 of the *Environment Protection Act, 1994*) for the section 86(2) licence that applies to the development approval.

END OF PERMIT