Queensland Government

Department of
Environment and Heritage Protection

05-JUL-2013

To: Ausco Modular Pty Ltd
4-44 Formation Street
WACOL QLD 4076

Email: adrian.moffatt@ausco.com.au

Our reference: 380410

Application details

I refer to the application that was received by the administering authority on 28-JUN-2013.

Land description: 1329 Bruce Hwy, MERINDA Lot 111 Plan HR1821 and Lot 110 Plan HR989.

Decision

Your application has been approved and your environmental authority (reference EPPR01232313) is attached.

Additional comments or advice

You are advised that if you are not the owner of the land to which the environmental authority relates, you have 10 business days from receipt of this environmental authority to give each owner of the land, written notice that you have been issued this environmental authority.

Should you have any further enquiries, please contact Nathan Sirl on telephone 1300 130 372.

Yours sincerely

	9/7/13
Signature	Date

Anthony Schmid
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

Nathan Sirl
Permit and Licence Management
Department of Environment and Heritage Protection
GPO Box 2454
BRISBANE QLD 4001
Phone: 1300 130 372
Fax: (07) 3330 5875
Email: palm@ehp.qld.gov.au
Website **www.ehp.qld.gov.au**
ABN 46 640 294 485

Enclosed

Permit - environmental authority (reference EPPR01232313)

Permit[1]

Environmental Protection Act 1994

Environmental authority

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

Permit[1] number: EPPR01232313

Environmental authority takes effect on 05-JUL-2013.

The anniversary date of this environmental authority remains 29 May. An annual return and the payment of the annual fee which is currently $5,961.60 will be due each year on this day.

Environmental authority holder(s)

Name	Registered address
Ausco Modular Pty Ltd	4-44 Formation Street WACOL QLD 4076

Environmentally relevant activity and location details

Environmentally relevant activity	Location(s)
63-(1b)(i) Sewage treatment >100 to 1500EP - IT or IR	1329 Bruce Hwy, MERINDA - Lot 111 Plan HR1821 and Lot 110 Plan HR989

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).

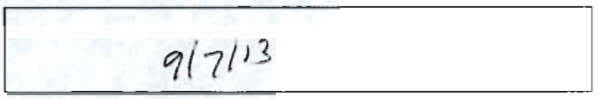
Contaminated land

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

It is a requirement of the EP Act that if an owner or occupier of land becomes aware a notifiable activity (as defined in Schedule 3 and Schedule 4) is being carried out on the land, or that the land has been, or is being, contaminated by a hazardous contaminant, the owner or occupier must, within 22 business days after becoming so aware, give written notice to the chief executive.



Signature



Date

Anthony Schmid
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Nathan Sirl
Permit and Licence Management
Department of Environment and Heritage Protection
GPO Box 2454
BRISBANE QLD 4001
Phone: 1300 130 372
Fax: (07) 3330 5875
Email: palm@ehp.qld.gov.au

Obligations under the *Environmental Protection Act 1994*

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

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

Conditions of environmental authority

Location: 1329 Bruce Hwy, MERINDA

Lot 111 Plan HR1821 and Lot 110 Plan HR989

Relevant activity/ies:

63-(1b)(i) Sewage treatment >100 to 1500EP - IT or IR

The environmentally relevant activity 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**
A1	**Scope:** This development approval authorises the construction and operation of a sewage treatment plant with a total daily peak design capacity of 800 equivalent persons (EP) at the Abbot Point Coal Terminal X50 Expansion Project Construction Accommodation Camp, 1329 Bruce Highway, Bowen, QLD 4805, also known as Lot 110 on HR1989.
A2	The sewage treatment plant must be designed in accordance with **Schedule I - Figure 1,** 'Preliminary Site Plan General Arrangement', Akwa-Worx, dated 25 November 2011 (Drawing number BOW-01).
A3	**Notification of Commissioning of Upgraded Sewage Treatment Plant.** The person undertaking the activity to which this approval relates must notify the administering authority in writing of the commissioning of the sewage treatment plant within five (5) business days after it is commissioned.
A4	**Copy of Development Approval Must Be Kept At Approved Place.** A copy of this development approval must be kept at the approved place
A5	**Prevent and/or minimise likelihood of environmental harm.** In carrying out an Environmentally Relevant Activity (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.

A6	**Maintenance of Measures, Plant and Equipment.** 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.
A7	**Alterations.** 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 expressively provided for by this approval. *Note: any changes to the sewage treatment plant design, as stated in condition **(A2)** of this development permit, may require an approval from the administering authority.*
A8	**Site Based Management Plan**. From commencement of an ERA to which this approval relates, a site based management plan (SBMP) must be implemented. The SBMP must identify all sources of environmental harm, including but not limited to the actual and potential release of all contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused. The SBMP must also provide for the review and 'continual improvement' in the overall environmental performance of all ERAs that are carried out. The SBMP must address the following matters: (a) environmental commitments - a commitment by senior management to achieve specified and relevant environmental goals; (b) identification of environmental issues and potential impacts; (c) control measures for routine operations to minimise likelihood of environmental harm; (d) contingency plans and emergency procedures for non-routine situations; (e) organisational structure and responsibility; (f) effective communication; (g) monitoring of contaminant releases; (h) conducting environmental impact assessments; (i) staff training; (j) record keeping; and (k) periodic review of environmental performance and continual improvement.
A9	The SBMP must not be implemented or amended in a way that contravenes any condition of this approval.
A10	An up to date copy of the SBMP must be kept at the approved place and be available to the administering authority on request.
A11	**Irrigation Monitoring Program.** Implement and maintain an irrigation monitoring program (IMP) for the release of contaminants to land(s). At a minimum, the IMP must include: (a) soil and sub-soil analysis, including assessment of the soil types and structures, phosphorus adsorption capacity, nutrient status, salinity and sodicity, cation exchange capacity and sodium absorption ratio of the contaminant release areas, to be carried out at no less than six representative sites on an annual basis; (b) groundwater monitoring that determines the existence and rate of infiltration of effluent that has been irrigated to land, and the potential or actual impacts on ground water from such infiltration, to be carried out on an annual basis; (c) plant analysis to assess nutrient export to be carried out on a bi-annual basis; (d) determination of the quantity and quality of contaminants applied; (e) periodic re-assessment, including modelling of the water, nutrient and salt balances and irrigation rate and return period must be undertaken, if necessary, to ensure sustainable use of the contaminant release area is being achieved; (f) planning and maintenance in accordance with condition (018) of this development permit; (g) reporting of monitoring results, and an assessment of the impact of the releases on the contaminant release areas.

A12	**Records.** If a condition of this approval requires the person undertaking the activity to which this approval relates to make or keep a record (however described), or prepare a document, the person must: (a) keep the record or document at the approved place; (b) keep the record or document in a place that is accessible by all persons engaged in the activity; (c) produce the record or document for inspection by an authorised person for inspection if requested or upon request from the administering authority, supply the record or document in the form and by means requested by the administering authority within fourteen (14) days; (d) for each document or record made or created in response to a monitoring requirement, reporting requirement, investigation or incident - keep the record for a minimum of five (5) years from the date the document is made or created; and (e) if the record of document is sent (in any form) to the administering authority - keep a copy of the document at the approved place in a way that is accessible to any person engaged in the activity at the approved place.
A13	**Monitoring.** A suitably qualified and competent person(s) must conduct all monitoring required by this approval.
A14	**Sample Analysis.** All weekly and monthly analyses and tests required to be conducted under this development approval must be carried out by a laboratory that has National Association of Testing Authorities (NATA) certification for such analysis and tests, except as otherwise authorised in writing by the administering authority.
A15	**Equipment Calibration**. All instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of this approval must be calibrated, appropriately operated and maintained.
A16	**Trained / Experienced Operator(s).** 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.
A17	**Containment of Chemicals, Fuels and Other Liquid Contaminants.** All chemicals, fuels and other liquid contaminants must be contained within an on-site containment system and controlled in a manner that prevents environmental harm and in accordance with AS4326 *Storage and Handling* of *Oxidising Substances,* AS1940 - *Storage and Handling* of *Flammable and Combustible Liquids* and AS3780 - *The Storage and Handling* of *Corrosive Substances.*
A18	Any spills and / or release of regulated waste or chemicals must be cleaned up as soon as practicable after the spill even!.
A19	All chemicals and flammable or combustible liquids stored on site must be stored in or serviced by an effective containment system that is impervious to the materials stored and managed to prevent the release of liquids to waters or land. Where no relevant Australian Standard is applicable, the following must be applied: (a) storage tanks must be bunded so that the capacity and construction of the bund is sufficient to contain at least 110% of a single storage tank or 100% of the largest storage tank plus 10% of the second largest storage tank in multiple storage areas; and (b) drum storages must be bunded so that the capacity and construction of the bund is sufficient to contain at least 25% of the maximum design storage volume within the bund.
A20	**Spill Kit.** An appropriate spill kit, personal protective equipment and relevant operator instructions/emergency procedure guides for the management of wastes and chemicals associated with an ERA to which this development permit applies must be kept at the site.

A21	Anyone operating under this approval must be trained in the use of the spill kit and emergency response procedures.
A22	**Appropriate Signage.** Pipelines and fittings associated with the sewage treatment system must be clearly identified. Lockable valves or removable handles must be fitted to all release pipes situated in public access areas.
A23	**Alarms.** The sewage treatment train, including any relevant ancillary infrastructure, must be fitted with an alarm system(s) that, as a minimum, notifies the operator of the following: (a) pump failure; (b) electrical fault(s) and power outage; (c) high sewage levels in tanks; (d) overflows from plant and pump stations; (e) blower failure; (f) disinfection failure; and (g) chlorine dosing failure.

Agency interest: Air	
Condition number	**Condition**
B1	**Nuisance.** 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.
B2	**Dust or Particulate Matter.** The release of dust and/or particulate matter resulting from the activity, must not cause, or be likely to cause, a nuisance at any nuisance sensitive or commercial place.
B3	Release of dust or particulate, exceeding the following levels, when measured at any nuisance sensitive place, is considered as an environmental nuisance: (a) dust deposition of one hundred and twenty (120) milligrams per square metre per day over a thirty (30) days averaging period, when monitored in accordance with *Australian Standard* AS *3580.10.1:2003 Methods of sampling and analysis of ambient air - Determination of particulate matter - Deposited matter - Gravimetric method* (or more recent editions); or (b) a concentration of particulate matter with an aerodynamic diameter of less than ten (10) micrometres (PM_{10}) suspended in the atmosphere of fifty (50) micrograms per cubic metre over a twenty-four (24) hour averaging period, at a nuisance sensitive place downwind of the site, when monitored in accordance with: (i) Australian Standard AS 3580.9.6 of 2003 (or more recent editions) 'Ambient air - Particulate matter - Determination of suspended particulate PM_{10} high-volume sampler with size-selective inlet - Gravimetric method'; or (ii) any alternative method of monitoring PM_{10} which may be permitted by the 'Air Quality Sampling Manual' as published from time to time by the administering authority.
B4	When requested by the administering authority, dust and particulate monitoring must be undertaken within a reasonable timeframe nominated by the administering authority, to investigate any complaint of environmental nuisance caused by dust and/or particulate matter. The results of the monitoring must be notified to the administering authority within fourteen (14) days following completion of the monitoring. Monitoring must be carried out at a place(s) relevant to the potentially affected nuisance 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 ten (10) micrometre (um) (PM_{10}) suspended in the atmosphere over a twenty-four (24) hour averaging time.

B5	**Reasonable Adjustment of Practices, Procedures or Infrastructure for Resolving Nuisance Complaints.** The person undertaking the activity to which this approval relates must investigate, or commission the investigation of, any complaints of nuisance caused by noxious or offensive odours or airborne contaminants and, if these complaints are validated, make reasonable and appropriate adjustments to processes or equipment to prevent a recurrence of the nuisance and provide a report associated with the investigation within fourteen (14) days of completion of the investigation to the administering authority
Agency interest: Water	
Condition number	**Condition**
C1	**Release to Waters.** An ERA to which this approval relates must not release contaminants to waters, a roadside gutter or stormwater drainage.
C2	An ERA to which this approval relates must not release contaminants at a place, and in a way, so that the contaminant could reasonably be expected to wash, or otherwise move into waters, a roadside gutter or stormwater drainage.
C3	**Stormwater Management.** The maintenance and cleaning of vehicles or other equipment must be carried out in areas from where the contaminants cannot be released into any waters, roadside gutter or waters.
C4	Infrastructure associated with ERA activities at the approved place must incorporate appropriate stormwater diversion drains and channels to prevent stormwater from entering contaminated, or potentially contaminated, areas.
C5	**Wet Weather Storage Dam.** The wet weather storage dam must be designed, constructed and maintained: (a) so as to minimise the likelihood of any release of effluent through the bed or banks of the dam to any waters (including groundwater); (b) so that a freeboard of no less than 500mm is maintained at all times; and (c) so as to ensure the stability of the dams' construction.
C6	The wet weather storage dam must be designed to incorporate appropriate stormwater diversions to prevent clean stormwater from entering the wet weather storage dam.
C7	The wet weather storage dam must be lined with impermeable materials that prevent groundwater infiltration of contaminants.

Agency interest: Land	
Condition number	**Condition**
D1	**Land Disposal - Irrigation.** Irrigation using treated effluent must be carried out in accordance with the IMP, as stated in condition **(A11)** of this development permit, and in such a manner that: (a) vegetation is not damaged; (b) soil erosion and soil structure damage is avoided; (c) there is no surface ponding of effluent; (d) there is no runoff of effluent off-site; (e) percolation of effluent beyond the plant root zone is minimised; (f) the capacity of the soils to assimilate nitrogen, phosphorus, salts, organic matter as measured by biochemical oxygen demand and water absorption capabilities is not exceeded; and (g) the quality of ground water is not adversely affected.
D2	The daily volume of contaminants released to land must be determined or estimated by an appropriate method, for example a flow meter, and records kept of such determinations, estimates and flows.
D3	All biomass removed from grass and/or vegetation must be removed from the contaminant release area.
D4	**Irrigation.** The daily maximum volume of treated effluent utilised for irrigation must not exceed 125kL.
D5	The application of treated effluent to land must not exceed a rate greater 3.5mm/day.
D6	A minimum area of 10ha of land, excluding any necessary buffer zones, must be available for the irrigation of treated effluent.
D7	**Stormwater Management.** Suitable banks or diversion drains must be installed and maintained to exclude stormwater runoff from area(s) used for effluent irrigation.

D8 **Release Limits to Land.** The only contaminants permitted to be released to land are those contained within the treated sewage effluent via the approved irrigation area in compliance with the limits stated in **Schedule D - Table 1: Contaminant release limits to land.**

Schedule D - Table 1: Contaminant release limits to land.

Quality Characteristics	Limit Type	Release Limit	Monitoring Location	Monitoring Frequency
pH	Range	6.5-8.5	W1 – discharge from outflow from the final holding tank	Daily
Turbidity	Maximum	1 mg/L	W1 – discharge from outflow from the final holding tank	Continuous
Free Chlorine	Maximum	10 mg/L		
5 Day Biological Oxygen Demand (BOD_5)	Maximum	10mg/L	W1 – Discharge from the outflow from the final holding tank	Monthly
Total Suspended Solids	Maximum	10mg/L		
Total Nitrogen	Maximum	10mg/L		
Total Phosphorous	Maximum	5mg/L		
E coli	Maximum	10cfu/100ml		
Electrical Conductivity	Maximum	1600 µs/cm		

D9 Monitoring must be undertaken of contaminant releases to land not less frequently than specified in **Schedule D - Table 1, Schedule D - Table 2 and Schedule D - Table 3.** All analyses of the quality of contaminants released must be:
(a) made in accordance with methods prescribed in the latest version of the Department of Environment and Resource Management's *Water Quality Sampling Manual;*
(b) carried out on samples that are representative of the effluent discharge; and
(c) for groundwater, made in accordance AS 5667.11:1998 *Water quality sampling - Guidance on sampling of groundwaters* or any subsequent revisions.

<table>
<tr><td>D10</td><td>Monitoring of Soils. The Registered Operator of an ERA to which this development approval relates, must monitor and keep records of soil characteristics which include top-soil and sub-soil samples taken from at least six representative locations in the irrigation area and at the frequency specified in Schedule D - Table 2: Monitoring parameters and frequency for soils within irrigation areas.

Schedule D - Table 2: Monitoring parameters and frequency for soils within irrigation areas.
<table>
<tr><th>Parameter</th><th>Units</th><th>Frequency</th></tr>
<tr><td>Electrical Conductivity</td><td>µS/cm^3</td><td rowspan="5">On commencement and six monthly thereafter</td></tr>
<tr><td>pH</td><td>-log(H+)</td></tr>
<tr><td>Total Nitrogen</td><td>mg/L</td></tr>
<tr><td>Total Phosphorous</td><td>mg/L</td></tr>
<tr><td>Sodium Absorption Ratio (SAR)</td><td>N/A</td></tr>
</table></td></tr>
<tr><td>D11</td><td>Monitoring of Groundwater. Prior to the commencement of an ERA to which this approval relates, the Registered Operator must provide the administering authority with a scaled drawing indicating the location of all groundwater monitoring borehole(s).</td></tr>
<tr><td>D12</td><td>Groundwater monitoring boreholes must be placed in locations that are representative of the actual/potential groundwater contamination and groundwater flow direction.</td></tr>
<tr><td>D13</td><td>Water quality monitoring at the groundwater monitoring bore(s) is to be monitored in accordance with Schedule D - Table 3: Monitoring parameters and frequency for groundwater monitoring.
Schedule D - Table 3: Monitoring parameters and frequency for groundwater monitoring.
<table>
<tr><th>Parameter</th><th>Units</th><th>Frequency</th></tr>
<tr><td>E coli</td><td>cfu/100mL</td><td rowspan="5">On commencement and six monthly thereafter</td></tr>
<tr><td>Nitrate</td><td>mg/L</td></tr>
<tr><td>Ammonia</td><td>mg/L</td></tr>
<tr><td>Total Dissolved Salts</td><td>mg/L</td></tr>
<tr><td>Electrical Conductivity</td><td>µS/cm</td></tr>
</table></td></tr>
<tr><td>D14</td><td>Wet Weather Conditions. Wet weather storage for at least 10 days average dry weather flow (ADWF) must be made available on site.</td></tr>
<tr><td>D15</td><td>When conditions prevent the irrigation of treated effluent to land (such as during or following rain events), the contaminants must be directed to a wet weather storage.</td></tr>
<tr><td>D16</td><td>Alternative measures must be taken to store or lawfully dispose of effluent (such as tanking off site to another treatment plant or sewer) when conditions (such as during or following rain events) prevent the following:
(a) irrigation of treated effluent to land; and
(b) transfer of effluent to a wet weather storage.

Note: Records must be kept of any removal off site, including destination, transporter, dates and volumes.</td></tr>
<tr><td>D17</td><td>Appropriate Signage. Signage in accordance with AS 3500.1:2003 Plumbing and drainage - Water services must be prominently displayed on areas undergoing effluent irrigation, warning the public that the area is irrigated with effluent and not to use or drink the effluent. These notices must be clearly visible and maintained in a legible condition.</td></tr>
</table>

D18	**Provision of Treated Effluent to Other Persons.** If responsibility of the treated effluent is given or transferred to another person: (a) the responsibility of such effluent must only be given or transferred in accordance with a written agreement (the third party agreement); (b) include in the third party agreement a commitment from the person utilising the effluent to use effluent in such a way as to: (i) prevent environmental harm or public health incidences; (ii) specifically make the persons aware of the General Environmental Duty (GED) under section 319 of the *Environmental Protection Act 1994;* (iii) specifically make the persons aware of the Duty to Notify Environmental Harm under section 320 of the *Environmental Protection Act 1994;* (iv) environmental sustainability of any effluent disposal; and (v) protection of environmental values of waters. (c) Upon being notified or otherwise becoming aware that the person's use of effluent is causing, or threatens to cause, environmental harm or is posing a human health risk, and if the person does not rectify the situation upon written request, the giving and transferring responsibility for such effluent must cease and responsibility falls to the Registered Operator. *Note: If necessary, the Registered Operator must obtain any relevant approvals under the* Water Supply (Safety and Reliability) Act 2008 *for providing treated effluent to third parties.*
D19	**Land Rehabilitation.** The site must be rehabilitated in a manner such that: (a) suitable native species of vegetation are planted and established; (b) potential for erosion of the site is minimised; (c) the quality of stormwater, other 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; (d) the likelihood of environmental nuisance being caused by release of dust is minimised; (e) the water quality of any residual water body meets relevant criteria for subsequent uses and does not have potential to cause environmental harm; and (f) any ASS or PASS in or on the site are either not disturbed, or are submerged or treated, so as to not be likely to cause environmental harm.
D20	The registered operator must keep records of rehabilitation measures implemented including photographs demonstrative of rehabilitation achieved and submit a report to the administering authority with each annual return detailing the outcomes of the rehabilitation program in the preceding twelve (12) months.
D21	**Decommissioning of Sewage Treatment Plant.** At least twelve (12) months prior to ceasing an ERA to which this development approval relates, the registered operator must prepare and submit a Site Decommissioning Report to the administering authority for review. The Site Decommissioning Report must detail all practices and measures that will be implemented to prevent or minimise environmental harm occurring, during and after the decommissioning of an ERA.

D22	The Site Decommissioning Report must address at least the following matters: (a) description of the use that is ultimately proposed for the site; (b) a description of the waste management practices to be implemented for the decommissioned plant and equipment any contaminants that may be contained within such plant and equipment; (c) where appropriate revegetation of the site, including ground preparation, species used, methods, density, irrigation, weed control, use of native species endemic to the area where appropriate, staging and timing of revegetation works; (d) protection of newly established vegetation from erosion susceptibility; (e) stability of the final land surface (i.e. erosion control) including assessment of susceptibility of soils to erosion and anticipated erosion control measures; (f) potential long term impacts on environmental values and measures proposed to address these; (g) a proposed maintenance program, including maintenance or erosion control measures, vegetation being established (e.g. watering, weed control, fencing, site security) and water quality of any lakes or ponds; (h) in the event in the event that ASS or PASS are present, appropriate management measures for the soils including avoidance, submergence and treatment; (i) a proposed monitoring program, for example, plant growth, plant health, stormwater quality, water body water quality, erosion protection measures and stability; (j) records to be kept and reporting of outcomes, including the monitoring program results and rehabilitation outcomes achieved; (k) the staging and timing of the expected works; and (l) any bonds kept for rehabilitation, for example, by the local authority.
D23	Within one (1) year of ceasing an ERA to which this development approval relates, the registered operator must have restored or stabilised the site in accordance with the rehabilitation program outlined in the SBMP.
D24	The Registered Operator must provide a written report to the administering authority at the completion of site rehabilitation and decommissioning works within thirty (30) days of completing the required works.
Agency interest: Waste	
Condition number	**Condition**
E1	**Waste General.** Waste generated in the carrying out of the activity to which this development permit relates must be stored, handled and transferred, in accordance with the conditions in this permit, and in a proper and efficient manner so as to prevent spillage or unauthorised contamination of land or waters.

E2	**Waste Management Plan.** From the commencement of the activity to which this approval relates, a waste management plan must be implemented, which addresses the following issues: (a) the types and amounts of waste generated by the activity; (b) how the waste will be dealt with, including a description of the types and amounts of waste that will be dealt with under each of the waste management practices mentioned in the waste management hierarchy (section 10 of the *Environmental Protection (Waste Management) Regulation 2000);* (c) procedures for identifying and implementing opportunities to improve the waste management practices employed e.g. opportunities for beneficial reuse of biosolids; (d) procedures for dealing with accidents, spills and other incidents that may impact on the waste management; (e) details of any accredited management system employed, or planned to be employed, to deal with the waste; (f) how often the performance of the waste management practices will be assessed (at least annually);and (g) the indicators or other criteria on which the performance of the waste management practices will be assessed.
E3	**Regulated Waste.** A record of all regulated wastes 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.*
E4	All vehicles used to transport regulated waste offsite must be lawfully entitled to transport the waste and be registered with the administering authority.
Agency interest: Noise	
Condition number	**Condition**
F1	**Noise Nuisance.** Noise from activities must not cause an environmental nuisance at any nuisance sensitive place or commercial place.

F2

All noise from activities must not exceed the levels specified in **Schedule F - Table 1: Noise Limits at any nuisance sensitive or commercial place.**

Note: All noise monitoring is to be conducted in accordance with the most recent version of the administering authority's Noise Measurement Manual.

Schedule F – Table 1: Noise Limits

Sound pressure dB(A) measured as	Monday to Friday		Saturdays, Sundays and Public Holidays	
	Noise measured at a "Nuisance sensitive place'			
L Aeq, adj T	Background + 5 dB(A)	Background + 0 dB(A)	Background + 5 dB(A)	Background + 0 dB(A)
L A1, adj T	Background + 10 dB(A)	Background + 0 dB(A)	Background + 10 dB(A)	Background + 0 dB(A)

Note: "Background' means background sound pressure level measured in accordance with the latest edition of the administering authority's Noise Measurement Manual

F3

Administering Authority May Require Noise Monitoring to be Undertaken
When requested by the administering authority, noise monitoring, which addresses the following issues, must be undertaken to investigate any complaint of noise nuisance, and the results notified within fourteen (14) days to the administering authority. Monitoring must include:
(a) background noise level;
(b) LA 10. adi. 10 mins;
(c) LA 1, adj, 10 mins;
(d) LA, max adj,. T;
(e) the level and frequency of occurrence of impulsive or tonal noise;
(f) atmospheric conditions including wind speed and direction;
(g) effects due to extraneous factors such as traffic noise; and
(h) location, date and time of recording.

F4

Obligation to Investigate Noise Nuisance Complaints. Subject to condition **(F5)** of this development approval, the person undertaking the activity to which this approval relates must investigate, or commission the investigation of, all complaints alleging noise nuisance[2] from the activity to which this approval relates.
[2] *The form of any investigations made under condition (F4) should be sufficient to enable a conclusion about the validity of the complaint to be made, but may not require formal noise monitoring in the form required under condition (F3).*

F5

The obligation for the person undertaking the activity to which the approval relates to investigate a nuisance complaint is extinguished if all the following apply:
(a) the facts and circumstances forming the basis for the complaint are substantially the same as those alleged in a former complaint by the same complainant;
(b) the results of an investigation into the former complaint was that the complaint could not be substantiated; and
(c) the administering authority or an authorised person has not, by written notice, otherwise revived the obligation to investigate the complaint.

F6

Reasonable Adjustment for Validated Nuisance Complaints. The person undertaking the activity to which this approval relates must make reasonable adjustment[3] for practices, procedures or equipment to resolve any validated complaint investigated under condition **(F4)** of this development approval.

[3] *See section 319 of the Environmental Protection Act 1994 (General environmental duty) for things that must be considered in determining whether a change is a reasonable adjustment.*

Agency interest: Monitoring and Reporting	
Condition number	**Condition**
G1	**Notification of Incidents / Emergencies.** The registered operator must telephone the Department of Environment and Resource Management's Pollution Hotline or local office as soon as practicable, but within 24 hours, after becoming aware of any release of contaminants not in accordance with the conditions of this approval. The information to be provided to the administering authority must include, but not be limited to, the following: (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(s) 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.
G2	**Information to Follow Notification.** A written notice detailing the following information must be provided to the administering authority within 14 days of any advice provided in accordance with condition **(G1)**: (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(s) 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.
G3	**Annual Monitoring Report.** An annual monitoring report must be prepared each year and presented to the administering authority with the annual return. 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; and (e) an outline of actions taken or proposed to minimise the environmental risk from any deficiency by the monitoring or recording programs.

Agency interest: Community	
Condition number	**Condition**
H1	**Complaint Response.** All complaints received must be recorded, including investigations undertaken, conclusions formed and action(s) taken. This information must be made available to the administering authority on request.

Definitions

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

"activity" means - includes that part, if any, of an activity relating to-
- preparing a place for the activity before carrying out the activity; or
- rehabilitating a place after it has been used for carrying out the activity.

"administering authority" means the Department of Environment and Resource Management or its successor.

"ADWF" means Average Dry Weather Flow

"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 *Sustainable Planning Act 2009.*

"AS" means Australian Standard

"authorised place" means the place authorised under this development approval (i.e. Lot 110 on HR1989) for the carrying out of the specified environmentally relevant activities.

"the boundary" means within 1 (one) meter for the cadastral boundary of the authorised place.

"cfu" means colony-forming units.

"chemical" means-
- an agricultural chemical product or veterinary chemical product under the *Agricultural and Veterinary Chemicals Code Act* 1994 (Cwlth); or
- a dangerous good under the dangerous goods code; or
- a drug or poison in the 'Standard for the Uniform Scheduling of Drugs and Poisons' compiled by the Australian Health Ministers' Advisory Council and published by the Commonwealth; or
- a substance intended for use as –
  - a fertiliser for agricultural, horticultural or garden use, other than mushroom growing substrate or compost; or
  - a paint solvent, pigment, dye, printing ink, industrial polish, adhesive, sealant, food additive, bleach, sanitiser, disinfectant, or biocide; or
  - a pesticide, insecticide, fungicide, herbicide, rodenticide, nematocide, miticide, fumigant or
  - related product; or
  - a surface active agent, including, for example, soap and detergent; or
- class 1 or 2 combustible liquids under AS 1940

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

"commissioning" means the condition of anything in active service or use.

"contaminant" can be:
- a gas, liquid or solid; or
- an odour; or
- an organism (whether alive or dead), including a virus; or
- energy, including noise, heat, radioactivity and electromagnetic radiation; or
- a combination of contaminants.;

"control measure" means a device, equipment, structure, or management strategy used to prevent or control the release of a contaminant or waste to the environment.

"dB(A)" means decibels measured on the 'A' frequency weighting network.

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

"deposits" means a person deposits litter, at a place, or a contaminant in waters or at another place if the person drops, places or throws the litter or contaminant in the waters or onto the place; or releases the litter or contaminant, or otherwise causes it to move, into the waters or onto the 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.

"ERA" means environmentally relevant activity, pursuant to Chapter 4 of the *Environmental Protection Act* 1994.
"general waste" means waste other than regulated waste.
"groundwater" means underground water.
"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.

"LA 10, adj, 10 m;ns" means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 1 0% of any 1 0 minute measurement period, using Fast response,
"LA 1, adj, 10 m;ns" means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 1 % of any 1 0 minute measurement period, using Fast response.
"LA, max adj, T" means the average maximum A-weighted sound pressure level, adjusted for noise character and measured over any 1 0 minute period, using Fast response.
"land" in the "land schedule" of this document means land excluding waters and the atmosphere,
"maintenance" means the act of maintaining plant or equipment to achieve the following:
- to keep the plant or equipment in due condition, operation, or force; and
- to keep the plant or equipment in a specified state or position,

"material" means a material in its solid, liquid or gaseous state.
"maximum" means that the measured value of the quality characteristic or contaminant must not be greater than the release limit stated.
"mg/L" means milligrams per litre.
"minimum" means that the measured value of the quality characteristic or contaminant must not be less than the release limit stated,
"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.
"PM10" means particulate matter with an aerodynamic diameter of less than 1 o~m or equal to (PM,o).
"provided plans" means the plans and documents listed in the provided plans section (Schedule J) in this development approval *Environmental Protection Act* 1994 (EP Act), issued under section 73F of the EP Act and in force.
"regulated waste" means waste that-
- is commercial or industrial waste, whether or not it has been immobilised or treated; and
- is of a type, or contains a constituent of a type, mentioned in Schedule 7 of the *Environmental Protection Regulation 2008*

Regulated waste includes -
- for an element - any chemical compound containing the element; and
- anything that contains residues of the waste.

"release" of a contaminant into the environment, includes-
a) to deposit, discharge, emit or disturb the contaminant; and
b) to cause or allow the contaminant to be deposited, discharged emitted or disturbed; and
c) to fail to prevent the contaminant from being deposited, discharged, emitted or disturbed; and
d) to allow the contaminant to escape; and

e) to fail to prevent the contaminant from escaping.

"release limits" means the release limit of a characteristic or property (each being a contaminant under the *Environmental Protection Act* 1994) mentioned for treated effluent released from an ERA to which this approval relates: Schedule C - Table 1 and Schedule D - Table 1.

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

"soil" means-

- that portion of the earth's surface in which plants grow; a well-developed system of inorganic and organic material and of living organisms; and
- particular kind of earth, e.g. sandy soil.

"suitably qualified person" means a person with qualifications in the relevant area or field and at least 5 years experience in that relevant technical area or field.

"this development approval" means the conditions of the contents herein SPCE0398712.

"total Nitrogen" means the sum of Organic Nitrogen, Ammonia, Nitrite plus Nitrate, as mg/L of Nitrogen.

"total Phosphorus" means the sum of the reactive phosphorus, acid-hydrolysable phosphorus and organic phosphorus, as mg/L of Phosphorus. This includes both the inorganic and organic fraction of phosphorus.

"valid complaint" means a complaint that the administering authority has determined is not trivial, frivolous or vexatious.

"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.

Schedules

Schedule 1 —Release limits

Schedule D - Table 1: Contaminant release limits to land.

Quality Characteristics	Limit Type	Release Limit	Monitoring Location	Monitoring Frequency
pH	Range	6.5-8.5	W1 – discharge from outflow from the final holding tank	Daily
Turbidity	Maximum	1 mg/L	W1 – discharge from outflow from the final holding tank	Continuous
Free Chlorine	Maximum	10 mg/L		
5 Day Biological Oxygen Demand (BOD_5)	Maximum	10mg/L	W1 – Discharge from the outflow from the final holding tank	Monthly
Total Suspended Solids	Maximum	10mg/L		
Total Nitrogen	Maximum	10mg/L		
Total Phosphorous	Maximum	5mg/L		
E coli	Maximum	10cfu/100ml		
Electrical Conductivity	Maximum	1600 µs/cm		

Schedule 2—Monitoring

Schedule D - Table 2: Monitoring parameters and frequency for soils within irrigation areas.

Parameter	Units	Frequency
Electrical Conductivity	$\mu S/cm^3$	On commencement and six monthly thereafter
pH	-log(H+)	
Total Nitrogen	mg/L	
Total Phosphorous	Mg/L	
Sodium Absorption Ratio (SAR)	N/A	

Schedule D - Table 3: Monitoring parameters and frequency for groundwater monitoring.

Parameter	Units	Frequency
E coli	cfu/100mL	On commencement and six monthly thereafter
Nitrate	mg/L	
Ammonia	mg/L	
Total Dissolved Salts	mg/L	
Electrical Conductivity	µS/cm	

Schedule 3 —Noise Limits

Schedule F – Table 1: Noise Limits

Sound pressure dB(A) measured as	**Monday to Friday**		**Saturdays, Sundays and Public Holidays**	
	Noise measured at a "Nuisance sensitive place'			
L Aeq, adj T	Background + 5 dB(A)	Background + 0 dB(A)	Background + 5 dB(A)	Background + 0 dB(A)
L A1, adj T	Background + 10 dB(A)	Background + 0 dB(A)	Background + 10 dB(A)	Background + 0 dB(A)

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