

Permit

Environmental Protection Act 1994

Environmental authority P-EA-100225245

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

Environmental authority number: P-EA-100225245

Environmental authority takes effect on day the authority is issued.

The anniversary date of this environmental authority is 25 March each year.

The payment of the annual fee will be due each year on this day.

Environmental authority holder(s)

Name(s)	Registered address
PEABODY COPPABELLA PTY LTD	Level 14 31 Duncan Street FORTITUDE VALLEY QLD 4006

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
ERA 63 - Sewage Treatment - 1(b-i) - Operating sewage treatment works, other than no-release works, with a total daily peak design capacity of more than 100 but not more than 1500EP if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme	1/SP158697

Additional information for applicants

Environmentally relevant activities

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

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

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

Mobile and temporary activities

If you operate a mobile and temporary environmentally relevant activity (ERA), other than regulated waste transport, you are required to maintain a work diary. You must:

- use the approved form for a work diary (ESR/2015/1696);
- keep the work diary records for 2 years after the last entry;
- inform the administering authority within 7 days of the work diary being lost or stolen;
- record the information required in the work diary for each location within 1 day of leaving the location.

Contaminated land

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

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

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

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

Take effect

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

- a) if the authority is for a prescribed ERA and it states that it takes effect on the day nominated by the holder of the authority in a written notice given to the administering authority - on the nominated day; or
- b) if the authority states a day or an event for it to take effect-on the stated day or when the stated event happens; or
- c) otherwise - on the day the authority is issued.

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

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

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



Signature

2 May 2025

Date

Casey Sirl
Department of the Environment, Tourism, Science
and Innovation

Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:

Permits and Licensing/Operational Support
GPO Box 2454, BRISBANE QLD 4001

Phone: 1300 130 372

Email: palm@desi.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)

Other permits required

This permit only provides an approval under the *Environmental Protection Act 1994*. In order to lawfully operate you may also require permits / approvals from your local government authority, other business units within the department and other State Government agencies prior to commencing any activity at the site. For example, this may include permits / approvals with your local Council (for planning approval), the Department of Transport and Main Roads (to access State controlled roads), the Department of Resources (to clear vegetation), and the Department of Agriculture and Fisheries (to clear marine plants or to obtain a quarry material allocation).

Obligations under the *Mining and Quarrying Safety and Health Act 1999*

If you are operating a quarry, other than a sand and gravel quarry where there is no crushing capability, you will be required to comply with the *Mining and Quarrying Safety and Health Act 1999*. For more information on your obligations under this legislation contact Mine Safety and Health at www.resources.qld.gov.au, or phone 13 QGOV (13 74 68) or your local Mines Inspectorate Office.

Development Approval

This permit is not a development approval under the *Planning Act 2016*. The conditions of this environmental authority are separate, and in addition to, any conditions that may be on the development approval. If a copy of this environmental authority is attached to a development approval, it is for information only, and may not be current. Please contact the Department of Environment and Science to ensure that you have the most current version of the environmental authority relating to this site.

Conditions of environmental authority

Environmentally relevant activities	Location
ERA 63 - Sewage Treatment 1: Operating sewage treatment works, other than no-release works, with a total daily peak design capacity of (b-i) more than 100 but not more than 1500EP if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme	Peak Downs Highway, Coppabella, QLD 4741 Lot 1 on SP158697

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

Agency interest: General	
Condition number	Condition
G1	Scope of Activity This approval authorises the construction and operation of a sewage treatment works with a peak design capacity of 796 equivalent persons (EP) [based on effluent generation rate of 200 L/EP/day] to treat up to 159.2 kilolitres of effluent generated per day, under peak dry weather flow conditions at RSA (Moorvale Station) Pty Ltd, Peak Downs Highway COPPABELLA QLD 4741 (Lot 1 on SP158697).
G2	Prevent and/or Minimise Likelihood of Environmental Harm In carrying out the activity to which this permit relates, all reasonable and practicable measures must be taken to prevent and/or to minimise the likelihood of environmental harm being caused.
G3	Site Based Management Plan From commencement of the activity to which this approval relates, a Site Based Management Plan (SBMP) must be implemented. The activity must be operated in accordance with the Site Based Management Plan (SBMP).

G4	The SBMP must identify all potential 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 carried out at this site. 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 the likelihood of environmental harm; d) contingency plans and emergency procedures; e) organisational structure and responsibility; f) effective communication; g) monitoring of contaminant releases; h) conducting environmental impact assessments; i) staff training; j) record keeping; k) complaint management process ; and l) periodic review of environmental performance and continual improvement.
G5	The SBMP must not be implemented or amended in a way that contravenes any condition of this permit. If there is a potential conflict between the SBMP and the conditions of this permit, the conditions of this permit take precedent.
G6	The SBMP must be reviewed every 2 years. Any subsequent revisions must be submitted to the approving body no later than 14 days after revisions are implemented.
G7	Maintenance of Measures, Plant and Equipment The holder of this permit must: a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this permit; 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.
G8	Monitoring An experienced and suitably qualified person(s) must conduct any monitoring required by this permit.
G9	Sample Analysis All analyses and tests required to be conducted under this permit must be carried out by a laboratory that has National Association Testing Association (NATA) certification for such analyses and tests, except as otherwise authorised by the administering authority.
G10	The registered operator of the environmentally relevant activity to which this development permit relates must ensure that for each document or record made or created in response to a monitoring requirement, reporting requirement, investigation or incident that the record is kept for a minimum of five (5) years from the date the document is made or created.

G11	Equipment Calibration All instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of this approval must be calibrated, records kept of such calibrations, and appropriately and competently operated and maintained.
G12	Trained/Experienced Operator(s) The operation of the sewer infrastructure, sewage treatment plant 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 plant and control equipment.
G13	Spill Kit(s) Appropriate spill kit(s), protective equipment, and relevant operator instructions/emergency procedure guides for the management of wastes and chemicals associated with this permit must be kept at the site.
G14	Spill Kit Training Anyone operating under this permit must be trained in the use of the spill kit(s) and the emergency guidelines.
G15	Record Keeping The holder of this permit must record, compile and keep all data required by this permit. This data must be made available to the administering authority if requested.
G16	All records required by this permit must be kept for 5 years.
G17	Notification Any emergency, incident or event, which results in the release of contaminants not in accordance with, or reasonably expected to be in accordance with the conditions of this permit, must be reported by telephone to the administering authorities' pollution hotline or the district office located in the area where the release occurred. Any such release must be reported as soon as practicable, but no later than 24 hours after the holder of the permit becomes aware of the release.
G18	Information to Follow Notification Within 14 days of any notification advice in accordance with condition G17, a written notice detailing the following information must be provided to the administering authority: a) the name of the operator, including their permit/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.

G19	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 12 months monitoring results obtained under any monitoring programs required under this permit and, in graphical form showing relevant limits, a comparison of the previous 12 months monitoring results to both this permits 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 permit; d) a summary of the record of equipment failures or events recorded for any site under this permit; and e) an outline of actions taken or proposed to minimise the environmental risk from any deficiency identified by the monitoring or recording programs must be submitted along with the annual monitoring report.
G20	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 expressly provided for by this approval.
Agency interest: Air	
Condition number	Condition
A1	Odour Nuisance The release of noxious or offensive odours, or any other noxious or offensive airborne contaminants, resulting from the activity must not cause an environmental nuisance at any nuisance sensitive place.
A2	On receipt or notification of an odour complaint, the development permit holder must: a) address the complaint including the use of appropriate dispute resolution if required; and b) immediately implement odour abatement measures so that emissions from the activity do not result in further environmental nuisance.
A3	Dust Nuisance The release of dust and/or particulate matter resulting from the activity must not cause an environmental nuisance at any nuisance sensitive place.

A4	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 4.0 grams per square metre per month, when measured in accordance with Australian Standard AS3580.10:2003 <i>Methods of sampling and analysis of ambient air — Determination of particulate matter — Deposited matter — Gravimetric method</i> (or more recent edition); or b) a concentration of particulate matter with an aerodynamic diameter of less than 10 micrometres (PM10) suspended in the atmosphere of 50 micrograms per cubic metre over a 24 hour averaging period, at a nuisance sensitive place downwind of the site, when monitored in accordance with: i) Australian Standard AS3580.9.6 <i>Ambient Air — Particulate Matter — Determination of suspended particulate PM10 high-volume sampler with size — selective inlet — gravimetric method</i>; or ii) any alternative method of monitoring PM10 that may be permitted by the <i>Air Quality Sampling Manual</i> as published from time to time by the administering authority.
A5	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 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 10 micrometre (µm) (PM10) suspended in the atmosphere over a 24hr averaging time.
A6	On receipt or notification of a dust complaint, the environmental authority holder must: a) address the complaint including the use of appropriate dispute resolution if required; and b) immediately implement dust abatement measures so that emissions from the activity do not result in further environmental nuisance.
Agency interest: Water	
Condition number	Condition
WA1	Water Release Contaminants that will or have the potential to cause environmental harm must not be released directly or indirectly to any waters except as permitted under the conditions of this permit.
WA2	Stormwater Management 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. Suitable banks 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.

WA3	Any spillage of wastes, contaminants or other materials must be cleaned up as quickly as practicable. Such spillages must not be cleaned up by hosing, sweeping or otherwise releasing such wastes, contaminants or material to any stormwater drainage system, roadside gutter or waters.
WA4	Monitoring of Groundwater Quality Water quality monitoring conducted in accordance with this permit must comply with the requirements the most recent edition of administering authority's <i>Monitoring and Sampling Manual 2009 Environmental Protection (Water) Policy 2009 Version 2 September 2010</i> or more recent additions or supplements to that document that become available.
WA5	The registered operator must implement an on-going Groundwater Monitoring Program (GMP), including the development of a suitable groundwater monitoring network, to monitor the quality of groundwater potentially impacted by any direct or indirect release of contaminants associated with the authorised activity.
WA6	The groundwater monitoring network referred to in condition WA5 must: a) be installed and maintained by a suitably qualified and experienced person; and b) be constructed in accordance with the Agriculture and Resource Management Council of Australia and New Zealand manual titled <i>Minimum Construction Requirements for Water Bores in Australia, Edition 2, Revised September 2003</i> , or more recent editions or supplements to that document as such become available.

WA7

The GMP must include the following requirements:

- a) a minimum of three groundwater bores, with one reference (background) groundwater bore to be installed;
- b) the groundwater bores must be hydrologically located to detect potential groundwater impacts from irrigating treated effluent to land, and the sewage treatment plant;
- c) all determinations of the quality of contaminants released to waters must be made in accordance with, but are not limited to, methods prescribed in:
 - i) AS/NZS 5667:11:1998 *Water Quality— Sampling — Guidance* on sampling of groundwaters, or more recent editions or supplements to that document as such become available; and/or
 - ii) the administering authority's *Monitoring and Sampling Manual 2009 Environmental Protection (Water) Policy 2009 Version 2 September 2010* or more recent additions or supplements to that document that become available;
- d) groundwater samples taken from the bores must be analysed for, but are not limited to, the water quality parameters required in *Table 1- Groundwater Monitoring*;
- e) standing water levels and total well depths in metres must be measured and recorded on during each sampling event. Such measurements must be undertaken prior to any disturbance by sampling activities and must be reported as the depth in metres from the top edge of the highest point of the casing collar to the water surface within the bore;
- f) groundwater samples taken from the bores must be representative of the aquifer(s); and
- g) groundwater samples must be taken from each of the bores before commencement of the environmentally relevant activity and during each sampling event.

Table 1- Groundwater Monitoring Quality Characteristics

Water Quality Parameters	Units	Monitoring Frequency
pH	pH Scale	Every 6 months from commencement of release of effluent to land.
Electrical Conductivity	µS/cm	
Total Nitrogen	mg/L as Nitrogen	
Ammonia	mg/L as Nitrogen	
Nitrite	mg/L as Nitrogen	After 4 monitoring events from commencement of irrigation, administering authority, based on the findings of the Groundwater Monitoring Analysis Report, may approve monitoring to be conducted annually.
Nitrate	mg/L as Nitrogen	
Total Phosphorous	mg/L as Phosphorus	
<i>E. Coli</i>	colony forming units/100 mL	
Biological Oxygen Demand	5 day inhibited, mg/L	

WA8	Groundwater Monitoring Analysis Reporting The registered operator must ensure that the groundwater monitoring data gathered in accordance with this permit is analysed and interpreted to assess the nature and extent of any environmental harm. The assessment must also include, but not be limited to: a) the location of the groundwater bores; b) nature (confined, unconfined etc.) of the aquifer; c) water quality of each aquifer; d) define groundwater contours; and e) indicate direction of flow. The data collation, analysis and assessment must be conducted by a suitably qualified and experienced person and must be submitted to the administering authority with the annual return.
WA9	Monitoring of Volume of Sewage The daily volume and flow rate of sewage entering the Sewage Treatment Plant must be determined or estimated by an appropriate method with an accuracy of +/- 5%, for example a calibrated flow meter and records kept of such determinations.
WA10	Sewage Pump Stations and Overflow Structures There must be sufficient backup power available to operate the sewage treatment plant, associated infrastructure, alarms and any instrumentation in the event of mains power failure.
WA11	Sewage pump stations must be fitted with stand-by pumps and pump-failure alarms and/or telemetry, as well as high-level alarms to warn of imminent pump station overflow.
WA12	All alarms and telemetry systems referred to in condition WA11 must be able to raise an alarm should mains power failure occur at the pump station. An appropriately qualified person must respond to the alarm.
WA13	Sewage pump overflows must be contained for return back into the sewage treatment system.
WA14	An updated list of all sewage pump stations, and overflow structures connected to the Sewage Treatment Plant must be maintained. This list must contain at least the following information: a) sewage pump station identification (e.g., sewage pump station number by which the sewage pump station is uniquely identified); and b) location of the sewage pump station.
WA15	Treated effluent must not be used for any other purpose at the place to which this approval relates other than for irrigation at designated effluent irrigation area or non-potable uses consistent with the <i>Queensland Water Recycling Guidelines 2005</i> or more recent editions and in accordance with the conditions of this approval.
WA16	The recycled water system shall be separate and independent of any potable water supply system.

Agency interest: Noise																					
Condition number	Condition																				
N1	Nuisance Noise resulting from the environmentally relevant activity must not cause an environmental nuisance at any nuisance sensitive place.																				
N2	When requested by the administering authority, noise monitoring must be undertaken within five days to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the department) of environmental nuisance at any sensitive or commercial place, and the monitoring investigation report must be notified within 14 days to the administering authority following completion of monitoring.																				
N3	If the permit holder can provide evidence through monitoring that the limits defined in <i>Table 2 — Noise Limits</i>, are not being exceeded then the holder is not in breach of condition N1. Table 2 — Noise Limits <table><tr><th rowspan="3">Noise level dB(A)</th><th colspan="3">Monday to Sunday (including public holidays)</th></tr><tr><th>7am - 6pm</th><th>6pm - 10pm</th><th>10pm - 7am</th></tr><tr><th colspan="3">Noise measured at a 'nuisance sensitive or commercial place'</th></tr><tr><td>LA10, adj, 10 mins</td><td>B/g + 5</td><td>B/g + 5</td><td>B/g + 3</td></tr><tr><td>LA1, adj, 10 mins</td><td>B/g + 10</td><td>B/g + 10</td><td>B/g + 5</td></tr></table> <i>Note: Where "Background"(B/g) means background sound pressure level measured in accordance with the latest edition of the administering authority's Noise Measurement Manual. Table 2 does not purport to set operating hours for the environmentally relevant activity.</i> Monitoring must include: a) background noise level b) LA 10, adj, 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.			Noise level dB(A)	Monday to Sunday (including public holidays)			7am - 6pm	6pm - 10pm	10pm - 7am	Noise measured at a 'nuisance sensitive or commercial place'			LA10, adj, 10 mins	B/g + 5	B/g + 5	B/g + 3	LA1, adj, 10 mins	B/g + 10	B/g + 10	B/g + 5
Noise level dB(A)	Monday to Sunday (including public holidays)																				
	7am - 6pm	6pm - 10pm	10pm - 7am																		
	Noise measured at a 'nuisance sensitive or commercial place'																				
LA10, adj, 10 mins	B/g + 5	B/g + 5	B/g + 3																		
LA1, adj, 10 mins	B/g + 10	B/g + 10	B/g + 5																		
N4	If monitoring indicates exceedance of the limits in <i>Table 2 - Noise Limits</i> , then the permit holder must: a) address the complaint including the use of appropriate dispute resolution if required; and b) immediately implement noise abatement measures so that emissions of noise from the activity do not result in further environmental nuisance.																				
N5	The method of measurement and reporting of noise levels under this permit must be in accordance with the most recently published edition of the administering authority's <i>Noise Measurement Manual</i> or an																				

	equivalent authoritative document approved by the administering authority (e.g., AS1055 <i>Acoustics — Description and measurement of environmental noise</i>).
Agency interest: Land	
Condition number	Condition
L1	Protecting Land from Contaminants Contaminants must not be released to land, except where otherwise stated in a condition of this approval.
L2	Activities on site must be conducted in a way that prevents any potential or actual release of contaminants to land that constitutes environmental nuisance or harm.
L3	Chemicals and Flammable or Combustible Liquids All flammable and combustible liquids must be contained within an on-site containment system and controlled in a manner that prevents environmental harm and maintained in accordance with the current edition of AS1940 — <i>Storage and Handling of Flammable and Combustible Liquids</i> .
L4	Spillage of all flammable and combustible liquids must be controlled in a manner that prevents environmental harm.
L5	All chemicals must be contained within an on-site containment system and controlled in a manner that prevents environmental harm and maintained in accordance with the current version of the relevant Australian Standard.
L6	Spillage of all chemicals must be controlled in a manner that prevents environmental harm.
L7	All corrosive substances, toxic substances, gases and dangerous goods must be stored and handled in accordance with the relevant Australian Standard including AS3780 — <i>The Storage and Handling of Corrosive Substances</i> .
L8	All chemicals and flammable or combustible liquids stored on site that have the potential to cause environmental harm 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 available, 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.
L9	Description of Contaminants Released to Land From commencement of an environmentally relevant activity to which this approval relates, the only contaminants permitted to be released to land identified as Lot 1 on SP158697 are treated effluent shown in <i>Attachment 1 entitled: Proposed Facilities Plan</i> .
L10	All treated effluent released from the sewage treatment facilities must be monitored at the location and at the frequency for the parameters stated in <i>Table 3 - Treated Effluent Quality Characteristics</i> .

L11	Sewage effluent used for irrigation must not exceed sewage effluent release limits defined in <i>Table 3 -Treated Effluent Quality Characteristics</i>. <table><tr><th colspan="5">Table 3 - Treated Effluent Quality Characteristics</th></tr><tr><th>Water Quality Parameters</th><th>Units</th><th>Minimum</th><th>Maximum</th><th>Monitoring Frequency</th></tr><tr><td>pH</td><td>pH Scale</td><td>6.0</td><td>8.5</td><td>continuous</td></tr><tr><td>Residual Chlorine</td><td>mg/L</td><td>1</td><td>-</td><td>continuous</td></tr><tr><td>Turbidity</td><td>NTU</td><td>-</td><td>2</td><td>continuous</td></tr><tr><td>Thermotolerant coliforms</td><td>colony forming units/100 mL</td><td>-</td><td>100</td><td>monthly</td></tr><tr><td>E. Coli</td><td>colony forming units/100 mL</td><td>-</td><td>100</td><td>monthly</td></tr><tr><td>Total Nitrogen</td><td>mg/L as Nitrogen</td><td>-</td><td>30</td><td>monthly</td></tr><tr><td>Total Phosphorous</td><td>mg/L as Phosphorus</td><td>-</td><td>10</td><td>monthly</td></tr><tr><td>Total Suspended Solids</td><td>mg/L</td><td>-</td><td>30</td><td>monthly</td></tr><tr><td>Biochemical Oxygen Demand</td><td>5 day inhibited, mg/L</td><td>-</td><td>30</td><td>monthly</td></tr></table>	Table 3 - Treated Effluent Quality Characteristics					Water Quality Parameters	Units	Minimum	Maximum	Monitoring Frequency	pH	pH Scale	6.0	8.5	continuous	Residual Chlorine	mg/L	1	-	continuous	Turbidity	NTU	-	2	continuous	Thermotolerant coliforms	colony forming units/100 mL	-	100	monthly	E. Coli	colony forming units/100 mL	-	100	monthly	Total Nitrogen	mg/L as Nitrogen	-	30	monthly	Total Phosphorous	mg/L as Phosphorus	-	10	monthly	Total Suspended Solids	mg/L	-	30	monthly	Biochemical Oxygen Demand	5 day inhibited, mg/L	-	30	monthly
Table 3 - Treated Effluent Quality Characteristics																																																								
Water Quality Parameters	Units	Minimum	Maximum	Monitoring Frequency																																																				
pH	pH Scale	6.0	8.5	continuous																																																				
Residual Chlorine	mg/L	1	-	continuous																																																				
Turbidity	NTU	-	2	continuous																																																				
Thermotolerant coliforms	colony forming units/100 mL	-	100	monthly																																																				
E. Coli	colony forming units/100 mL	-	100	monthly																																																				
Total Nitrogen	mg/L as Nitrogen	-	30	monthly																																																				
Total Phosphorous	mg/L as Phosphorus	-	10	monthly																																																				
Total Suspended Solids	mg/L	-	30	monthly																																																				
Biochemical Oxygen Demand	5 day inhibited, mg/L	-	30	monthly																																																				
L12	Treated Effluent Quality Characteristics must be sampled from the treated effluent storage tank prior to irrigation.																																																							
L13	Notwithstanding the quality characteristics limits specified in <i>Table 3 — Treated Effluent Quality Characteristics</i> , release of recycled water to land must not have any properties nor contain any organisms or other contaminants in concentrations that are capable of causing environmental harm.																																																							
L14	The maximum daily volume of treated effluent to be irrigated is not to exceed 5mm/day.																																																							
L15	The daily volume of contaminants as treated effluent released to land must be determined or estimated by an appropriate method with an accuracy of +1- 5%, for example a flow meter, and records kept of such determinations or estimations.																																																							
L16	Land used for the irrigation of treated effluent must have a minimum surface area of 5.5 hectares excluding necessary stormwater drain, residential, remnant vegetation buffers.																																																							
L17	Irrigation of the treated effluent must only be conducted during the night between the hours of 10pm to 6am.																																																							
L18	A horizontal separation distance of 30m must be left between the effluent disposal area and any permanent/intermittent watercourses on the site.																																																							
L19	Notices must be prominently displayed on areas undergoing recycled water irrigation, warning the public that the area is irrigated with recycled water and not to use or drink the recycled water. These notices must be maintained in a visible and legible condition and be in compliance with AS1319 - <i>Safety signs for the occupational environment</i> .																																																							
L20	Pipelines and fittings associated with the recycle water irrigation system must be clearly identified. Lockable valves or removable handles must be fitted to all release pipes situated in public areas.																																																							
L21	Any biomass (grass/vegetation clippings) removed from plants growing on irrigated land must be transported and disposed of other in areas than on the irrigated land.																																																							

L22	Wet Weather Storage When conditions prevent the application of treated effluent to land, the treated effluent must be directed to wet weather storage.				
L23	A minimum storage capacity of 1.7 ML must be available for wet weather storage of treated effluent.				
L24	Treated Effluent Irrigation Management Plan The registered operator must develop and implement an Irrigation Management Plan (IMP) within 14 days of the completion of the upgrade. This plan must detail how the effluent irrigation process will be effectively and appropriately managed so as to ensure that the release of effluent to land is carried out in an environmentally sustainable manner.				
L25	The IMP should detail how irrigation will be managed and monitored so that the following occur: a) vegetation is not damaged; b) soil erosion and/or soil structure damage are avoided; c) effluent is evenly distributed on the irrigation area; d) infiltration of effluent beyond the plant root zone is minimised; e) the capacity of land to assimilate nitrogen, phosphorous, salts and organic matter is not exceeded; f) the quality of groundwater is not adversely affected; g) how irrigation using effluent to land will be carried out if soil moisture conditions are such that surface runoff, ponding or pooling beyond the property boundary is likely to occur and how this will be managed (e.g., soil moisture meters); h) how irrigation of land will not result in adverse public health issues (i.e., plumbing controls, signage); and i) procedures for educating and training staff about public health issues associated with using recycled water onsite.				
L26	A copy of the IMP must be kept at the premises and made available upon request.				
L27	The registered operator must develop and implement a Treated Effluent Release Area Monitoring Program by 26 November 2010 to effectively monitor the condition of the land to which the treated effluent is applied.				
L28	Treated Effluent Release Area Monitoring Program In accordance with condition L27, the Treated Effluent Release Area Monitoring Program must at a minimum include: a) annual soil monitoring of the following parameters as specified in <i>Table 4 - Soil Monitoring of Treated Effluent Release Area</i>; b) interpretation of soil testing results; c) determination of sustainable loadings and soil management; and d) implementation of such measures as to ensure sustainable loadings and soil management. Table 4 - Soil Monitoring of Treated Effluent Release Area <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Soil Quality Parameters</th><th>Units</th></tr> </thead> <tbody> <tr> <td>pH</td><td>pH Scale</td></tr> </tbody> </table>	Soil Quality Parameters	Units	pH	pH Scale
Soil Quality Parameters	Units				
pH	pH Scale				

	<table> <tr> <td>Electrical Conductivity</td><td>µS/cm</td></tr> <tr> <td>Available Phosphorus</td><td>mg/kg</td></tr> <tr> <td>Available Potassium</td><td>mg/kg</td></tr> <tr> <td>Total Nitrogen</td><td>mg/kg</td></tr> <tr> <td>Total cations (inc. Na, Ca, Mg, K)</td><td>mq/L</td></tr> <tr> <td>Cation Exchange Capacity</td><td>meq/100g</td></tr> <tr> <td>Exchangeable Sodium Percentage</td><td>meq/100g</td></tr> <tr> <td>Chloride</td><td>mq/L</td></tr> <tr> <td>Trace elements</td><td>ppm</td></tr> <tr> <td>Heavy metals</td><td>ppm</td></tr> <tr> <td>Organic carbon</td><td>%</td></tr> </table>	Electrical Conductivity	µS/cm	Available Phosphorus	mg/kg	Available Potassium	mg/kg	Total Nitrogen	mg/kg	Total cations (inc. Na, Ca, Mg, K)	mq/L	Cation Exchange Capacity	meq/100g	Exchangeable Sodium Percentage	meq/100g	Chloride	mq/L	Trace elements	ppm	Heavy metals	ppm	Organic carbon	%
Electrical Conductivity	µS/cm																						
Available Phosphorus	mg/kg																						
Available Potassium	mg/kg																						
Total Nitrogen	mg/kg																						
Total cations (inc. Na, Ca, Mg, K)	mq/L																						
Cation Exchange Capacity	meq/100g																						
Exchangeable Sodium Percentage	meq/100g																						
Chloride	mq/L																						
Trace elements	ppm																						
Heavy metals	ppm																						
Organic carbon	%																						
L29	The registered operator must submit to the administering authority with the annual return a report on the Treated Effluent Release Area Monitoring Program, including: a) an assessment of the impact of the release of recycled water to the irrigation area(s), whether the release is being carried out in an environmentally sustainable manner; and b) recommendations to achieve sustainability should monitoring indicate non-sustainable application of treated effluent to land.																						
L30	The approved operator must supply a third-party certification from an independent third party qualified person that the effluent will meet Class A quality within 28 days from the appointment of the successful supplier of the sewage treatment plant.																						
Agency interest: Waste																							
Condition number	Condition																						
W1	Waste Management Plan A waste management plan must be developed within 14 days of the completion of the upgrade. The Waste Management Plan must address at least the following matters: a) the types and amounts of waste generated by the environmentally relevant 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) Policy 2000); c) procedures for identifying and implementing opportunities to improve the waste management practices; 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.
W2	A record of all regulated waste 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.
W3	All regulated waste removed from the site must be removed by a person who holds a current permit to transport such waste under the provisions of the <i>Environmental Protection Act 1994</i>.
W4	All waste generated in carrying out the activity must be disposed of at a facility that can lawfully accept that waste.
W5	Biosolids Sewage biosolids and sludges must be transported by authorised regulated waste transporters and disposed at a lawful facility.
Agency interest: Social	
Condition number	Condition
S1	Complaint Response The operator of the activity must record the following details for all complaints received and provide this information to the administering authority on request: a) time, date, name and contact details of the complainant; b) the allegation made by the complainant; c) details of communications with the complainant; d) any investigations undertaken; and e) conclusions formed; and any actions taken.
S2	The operator of the activity must attempt to make contact with any complainant within 24 hours of a complaint being received and initiate complaint resolution measures.

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.

administering authority means the Department of Environment and Science or its successor.

approved plans mean the plans and documents listed in the approved plans section in the notice attached to this approval.

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

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

contaminant means:

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

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

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

- a) a house, unit, motel, nursing home or other building or part of a building;
- b) a caravan, mobile home or other vehicle or structure on land;
- c) a watercraft in a marina.

environmental nuisance means unreasonable interference or likely interference with an environmental value caused by:

- a) noise, dust, odour, light; or
- b) an unhealthy, offensive or unsightly condition because of contamination; or
- c) another way prescribed by regulation (e.g. unreasonable noise or dust emissions).

$L_{A, \max \text{ adj, T}}$ 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 of this permit means land excluding waters and the atmosphere.

mg/L means milligrams per litre.

measure means an action, system, procedure and infrastructure that is intended as a means to an end (i.e., to take measures to prevent dust release).

nuisance sensitive place includes —

- a) a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- b) a motel, hotel or hostel; or
- c) a kindergarten, school, university or other educational institution; or
- d) a medical centre or hospital; or
- e) a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 2004* or a World Heritage Area; or
- f) a public thoroughfare, park or gardens; or
- g) 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.

receiving waters means all groundwater and surface water that are not disturbed areas authorised by this permit.

regulated waste means non-domestic waste mentioned in Schedule 7 of the Environmental Protection Regulation 2019 (whether or not it has been treated or immobilised), and includes -

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

release means —

- a) to deposit, discharge, emit or disturb the contaminant; and
- b) to cause or allow the contaminant to be deposited, discharged, emitted or disturbed;
- c) to allow the contaminant to escape; and
- d) to fail to prevent the contaminant from escaping.

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

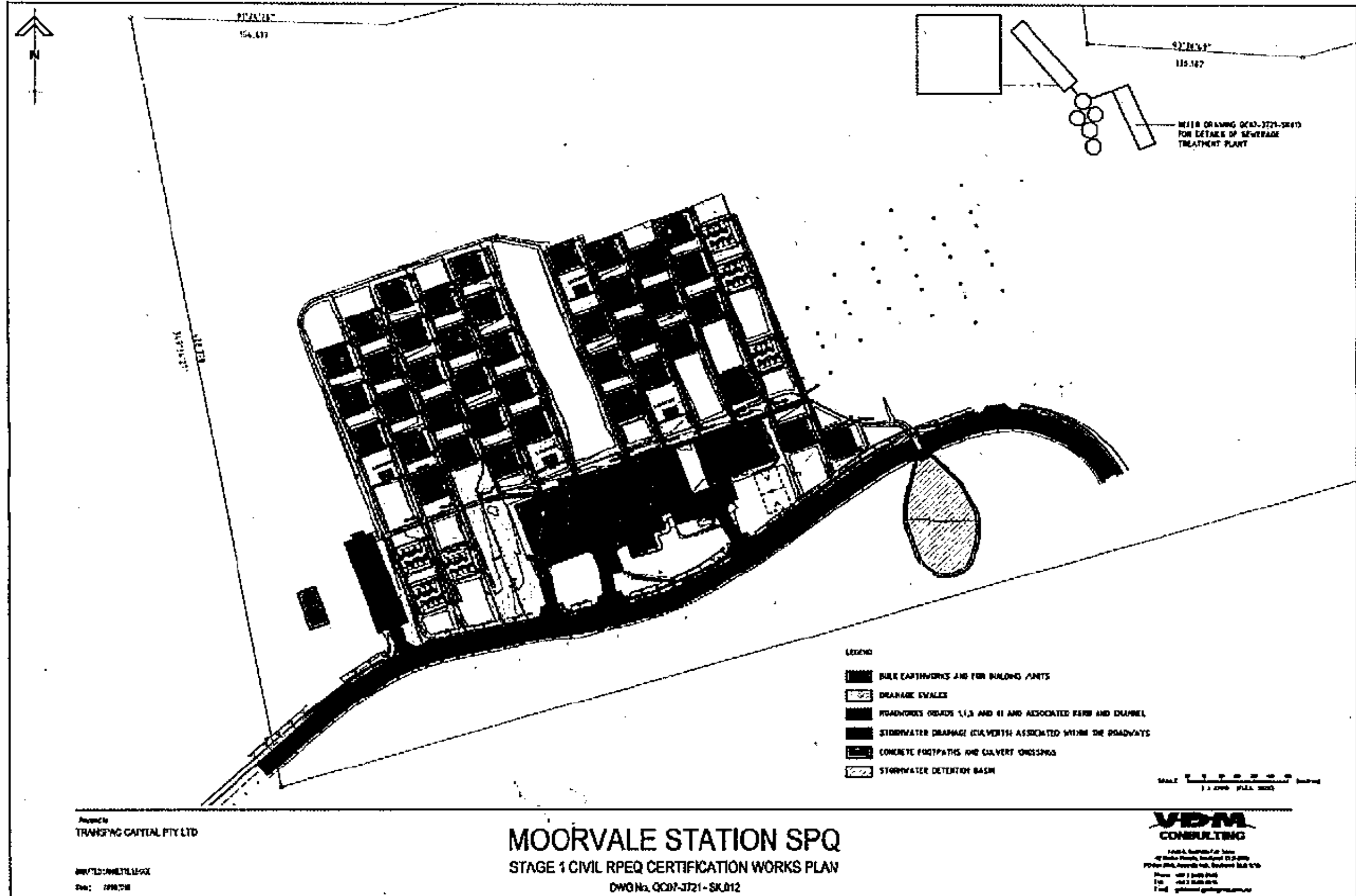
watercourse the meaning assigned to it in schedule 4 of the *Water Act 2000*.

waters mean —

- a) river, creek, stream in which water flows permanently or intermittently either:
- b) in a natural channel, whether artificially improved or not; or
- c) in an artificial channel that has changed the course of the river, creek or stream; or
- d) lake, lagoon, pond, swamp, wetland, dam; or
- e) unconfined surface water; or
- f) storm water channel, storm water drain, roadside gutter; or
- g) bed and banks and any other element of a river, creek, stream, lake, lagoon, pond, swamp, wetland, storm water channel, storm water drain, roadside gutter or dam confining or containing water; or
- h) groundwater; or
- i) non-tidal or tidal waters (including the sea); or
- j) any part-thereof.

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

Appendix 1 – Proposed Facilities Plan.



END
OF

ENVIRONMENTAL AUTHORITY