

Permit

Environmental Protection Act 1994

Environmental authority EPPR00805313

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

Environmental authority number: EPPR00805313

Environmental authority takes effect on 14-04-2021

Environmental authority holder(s)

Name(s)	Registered address
SOUTH STRADBROKE CARETAKING SERVICES PTY LIMITED	Level 12 111 Elizabeth St SYDNEY NSW 2000 Australia

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
ERA 16 - Extraction and Screening 1: Dredging, in a year, the following quantity of material (a) 1000t to 10,000t	Lot 10 on MCP106985
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	Lot 10 on MCP106985

Additional information for applicants

Environmentally relevant activities

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

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

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

Contaminated land

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

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

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

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

Take effect

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

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

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

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

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

Environmental authority

Mark Franco
Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

Date issued: 15 April 2021

Enquiries:
Coastal and Marine Assessment
Department of Environment and Science

Phone: 1300 130 372
Email: palm@des.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 Natural Resources, Mines and Energy (to clear vegetation), and the Department of Agriculture and Fisheries (to clear marine plants or to obtain a quarry material allocation).

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.

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Conditions of environmental authority

Name	Registered address
SOUTH STRADBROKE CARETAKING SERVICES PTY LIMITED	Level 12 111 Elizabeth St SYDNEY NSW 2000

Environmentally relevant activity	Location
ERA 16 (1a) Extractive and screening-dredging in a year, the following quantity of material -1,000t to 10,000t.	Couran Cove Island Resort South Stradbroke Island. Lot 10 Plan MCP106985.

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
G1	In carrying out the ERA, the holder must take reasonable and practicable measures to prevent and / or to minimise the likelihood of environmental harm being caused.
G2	The holder must: (a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval; (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.
G3	From commencement of the ERA, 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 thereof 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 the ERA. The SBMP must address the following matters: (a) the holder's commitment 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 causation of environmental harm; (d) contingency plans and emergency procedures for non-routine situations which may cause environmental harm;

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	(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.
G4	Record, compile and keep all monitoring results required by or under this approval and present this information in a specified format to the administering authority when requested.
G5	This approval only authorises maintenance dredging of the Spar Island Lagoon.
G6	Provide to the administering authority written notification of the date when dredging will commence at least seven days prior thereto.
G7	All complaints received by the holder must be recorded including investigations undertaken, conclusions formed and action taken. This information must be made available to the administering authority on request.
G8	Dredging must only be conducted over a five-year period.
Agency interest Air	
Condition number	Condition
A1	The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the ERA must not cause a nuisance at any sensitive place.
A2	The release of dust or other particulate matter resulting from the ERA must not cause an environmental nuisance at any sensitive place.
A3	For the purposes of condition A2 and without limiting the applicability of other criteria relevant in particular circumstances, the ERA would cause environmental nuisance where dust or other particulate matter resulting from the ERA exceeds the following limits when measured at a relevant sensitive place: (a) dust deposition of 120 milligrams per square metre per day or 4 grams per square metre per month when monitored in accordance with Australian Standard 3580.10.1 Methods for sampling and analysis of ambient air - Determination of particulates - Deposited matter - Gravimetric method (or more recent editions); or (b) a concentration of suspended particulate matter with an aerodynamic diameter of less than 10 micrometres (μm) (PM_{10}) of 150 micrograms per cubic metre over a 24 hour averaging time at a sensitive place downwind, when monitored in accordance with: i. Australian Standard AS 3580.9.6 Methods for sampling and analysis of ambient air Determination of particulate matter - PM_{10} high-volume sampler with size-selective inlet - Gravimetric method (or more recent editions); or

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	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.																							
A4	Dust or other particulate monitoring must be undertaken as directed by the administering authority to investigate any complaint about dust nuisance being caused by the ERA, which complaint in the opinion of an authorised person is not frivolous, vexatious nor based on mistaken belief, and the results thereof notified to the administering authority within 14 days following completion of monitoring. For the purposes of this condition, dust monitoring must be carried out by a competent person at a site relevant to the potentially affected sensitive place and at upwind control site(s) 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 suspended PM ₁₀ over a 24hr averaging time.																							
A5	If an authorised person's opinion is that monitoring results indicate environmental nuisance is being caused by dust or other particulate matter from the ERA, the holder must: (a) address the complaint including the use of appropriate dispute resolution if required; or (b) immediately implement abatement measures so that emission of dust or other particulate matter from the ERA does not result in further environmental nuisance.																							
Agency interest: Water																								
Condition number	Condition																							
W1	Monitoring must be undertaken at the locations, for the parameters and at the frequency specified in the following <i>Table 1 - Water contaminant release limits</i> , and be: (a) done by a competent person in accordance with methods prescribed in the latest edition of the administering authority's Water Quality Sampling Manual; and (b) carried out on representative samples. <table><tr><th colspan="5">Table 1. Water contaminant release limits</th></tr><tr><th rowspan="2">Monitoring Point</th><th rowspan="2">Water Quality Parameter</th><th colspan="2">Release limit</th><th rowspan="2">Monitoring frequency</th></tr><tr><th>Minimum</th><th>Maximum</th></tr><tr><td rowspan="3">Marina side of the weir</td><td>pH</td><td>6.5</td><td>8.5</td><td rowspan="3">Daily during dredging</td></tr><tr><td>Dissolved Oxygen</td><td>4</td><td>-</td></tr><tr><td>Turbidity</td><td>-</td><td>No visible plume</td></tr></table>	Table 1. Water contaminant release limits					Monitoring Point	Water Quality Parameter	Release limit		Monitoring frequency	Minimum	Maximum	Marina side of the weir	pH	6.5	8.5	Daily during dredging	Dissolved Oxygen	4	-	Turbidity	-	No visible plume
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Monitoring Point	Water Quality Parameter	Release limit		Monitoring frequency																				
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	Dissolved Oxygen	4	-																					
	Turbidity	-	No visible plume																					
W2	Contaminants must not be released by the conduct of the ERA to any waters or to the bed and banks of any waters except as provided for by the <i>Table 1 - Water contaminant release limits</i> .																							
W3	Hazardous contaminants must not be released from the site to any waters or to the bed and banks of any waters.																							

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W4	Spillage of any chemicals including hydrocarbon liquids must be contained within the site and rectified whereby environmental harm is not caused. Storage of flammable or combustible liquids shall accord with Australian Standard 1940 - 2004 Storage and Handling of Flammable and Combustible Liquids (or more recent editions)																											
W5	Dredging must be confined to the lagoon area and not extend beyond the original design specification of the lagoon.																											
W6	Dredging must only be undertaken during low tide when the exchange of water across the weir has ceased.																											
W7	A silt curtain must be installed across the weir (Refer to Figure 110 - EPA Info Request Response letter from SKM, dated 20 July 2005) to prevent sediment transport into the adjacent marina harbour.																											
W8	Compacted weed must be mulched and composted at a site remote from the waterway.																											
Agency interest: Noise																												
Condition number	Condition																											
N1	Subject to condition N2, noise from the ERA must not cause an environmental nuisance at any sensitive place.																											
N2	Noise monitoring must be undertaken as directed by the administering authority to investigate any complaint of noise nuisance being caused by the ERA, which complaint in the opinion of an authorised person is not frivolous, vexatious nor based on mistaken belief, and the results thereof notified to the administering authority within 14 days following completion of monitoring. For the purposes of this condition, noise monitoring must be done in accordance with the latest edition of the environmental authority's Noise Measurement Manual and include: (a) $L_{A, \max \text{ adj, T}}$; (b) relevant background sound level; (c) the level and frequency of occurrence of impulsive or tonal noise; (d) atmospheric conditions including wind speed and direction; and (e) location, date and time of measurements.																											
N3	For the purposes of condition N1, the ERA will not cause environmental nuisance where noise from the ERA does not exceed the limits specified in <i>Table 2 — Noise limits</i>. Table 2 Noise limits <table><tr><th rowspan="2">Noise level dB (A) measured as</th><th colspan="3">Monday to Saturday</th><th colspan="3">Sundays and public holidays</th></tr><tr><th>7am-6pm</th><th>6pm-10pm</th><th>10pm-7am</th><th>9am-6pm</th><th>6pm-10pm</th><th>10pm-9am</th></tr><tr><td></td><td colspan="6">Noise measured at a 'nuisance sensitive place'</td></tr><tr><td>$L_{A10, \text{adj}}$, 10 mins</td><td>Bkg + 5</td><td>Bkg + 5</td><td>Bkg + 0</td><td>Bkg + 5</td><td>Bkg + 5</td><td>Bkg + 0</td></tr></table>	Noise level dB (A) measured as	Monday to Saturday			Sundays and public holidays			7am-6pm	6pm-10pm	10pm-7am	9am-6pm	6pm-10pm	10pm-9am		Noise measured at a 'nuisance sensitive place'						$L_{A10, \text{adj}}$, 10 mins	Bkg + 5	Bkg + 5	Bkg + 0	Bkg + 5	Bkg + 5	Bkg + 0
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N4	If an authorised person's opinion is that monitoring results indicate environmental nuisance is being caused by noise from the ERA, the holder must: (a) address the complaint including the use of appropriate dispute resolution if required; or (b) immediately implement noise abatement measures so that emissions of noise from the ERA do not result in further environmental nuisance.																												
N5	Dredging must be restricted to between 9:00am and 3:00pm — Monday to Friday.																												
N6	Dredging must occur during the winter months, over a three-week period.																												
Agency interest: Land																													
Condition number	Condition																												
L1	Comply with the latest edition of the <i>Instructions for The Treatment And Management Of Acid Sulfate Soils, 2001</i> , by the Queensland Administering Authority in conjunction with the Department of Resources and the Department of Agriculture, Fisheries and Forestry (former Department of Primary industries).																												
L2	Acid sulfate soils must be managed such that contaminants are not directly or Indirectly released to any waters or to the bed and banks of any waters.																												

Environmentally relevant activity	Location
ERA 63 - Sewage Treatment 1: Operating sewage treatment works, other than no-release works, with a total daily peak design capacity of (b)-(ii) more than 100 but not more than 1500EP, (i) if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme.	Couran Cove Island Resort South Stradbroke Island. Lot 10 Plan MCP106985

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	Condition

Environmental authority

number	
G1	In carrying out an ERA to which this approval relates, all reasonable and practicable measures must be taken to prevent and / or minimise the likelihood of environmental harm being caused.
G2	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.
G3	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.
G4	A copy of the SBMP must be kept at the site to which this approval relates.
G5	The SBMP must not be implemented or amended in a way that contravenes any condition of this approval.
G6	An annual monitoring report must be prepared each year and presented to the administering authority when requested. This report shall include but not be limited to: (a) a summary of the previous twelve (12) months monitoring results obtained under any monitoring programs required under this approval and, in graphical form showing relevant limits, a comparison of the previous twelve (12) months monitoring results to both this approvals limits and to relevant prior results; (b) an evaluation/ explanation of the data from any monitoring programs; (c) a summary of any record of quantities of releases required to be kept under this approval;

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	(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 identified by the monitoring or recording programs.
G7	The operation of the sewage treatment system and associated 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.
G8	All determinations of the quality of contaminants released must be performed by a person or body possessing appropriate experience and qualifications to perform the required measurements.
G9	All instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of this approval must be calibrated, and appropriately operated and maintained.
G10	Record, compile and keep all monitoring results required by this approval and present this information to the administering authority when requested.
G11	All records required by this approval must be kept for 5 years.
G12	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
G13	The registered operator must notify the administering authority in writing of any monitoring result that indicates a contravention of any release limit provided in this approval within 14 days of completion of the analysis.
G14	The written notification required by condition G13 above must include: (a) the full analysis results; and (b) details of all investigative and corrective actions undertaken; and (c) details and results for any subsequent analysis.
G15	As soon as practicable after becoming aware of any emergency or incident which results in the release of contaminants not in accordance, or reasonably expected to be not in accordance with the conditions of this approval, the registered operator must notify the administering authority of the release by phone or facsimile.
Agency interest: Air	
Condition number	Condition
A1	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.
A2	The release of dust and/or particulate matter resulting from the ERA must not cause an environmental nuisance at any nuisance sensitive or commercial place.

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A3	Dust and particulate matter must not exceed the following levels when measured at any nuisance sensitive or commercial place: (a) Dust deposition of 120 milligrams per square metre per day, when monitored in accordance with Australian Standard AS 3580.10.1 of 2003 (or more recent editions); OR (b) A concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (μm) (PM_{10}) suspended in the atmosphere of 150 micrograms per cubic metre over a 24 hour averaging time, at a nuisance sensitive or commercial place downwind of the site, when monitored in accordance with: Australian Standard AS 3580.9.6 of 2003 (or more recent editions) '<i>Ambient air - Particulate matter - Determination of suspended particulate PM_{10} high-volume sampler with size-selective inlet - Gravimetric method</i>'; or any alternative method of monitoring PM_{10} which may be permitted by the '<i>Air Quality Sampling Manual</i>' as published from time to time by the administering authority.
Agency interest: Water	
Condition number	Condition
W1	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.
W2	All ponds used for the storage or treatment of contaminants, sewage or wastes at or on the authorised place must be constructed, installed and maintained: (a) so as to minimise the likelihood of any release of effluent through the bed or banks of the pond to any waters (including ground water); (b) so that a freeboard of not less than 0.5 metres is maintained at all times, except in emergencies; and (c) so as to ensure the stability of the ponds' construction.
W3	Suitable banks and/or diversion drains must be installed and maintained to exclude stormwater runoff from entering any ponds or other structures used for the storage or treatment of contaminants or wastes.
W4	The release of contaminants to groundwater must not cause environmental harm.
W5	The registered operator must design and conduct an on-going Groundwater Monitoring Program (GMP) to monitor the quality of groundwater potentially impacted by any indirect release of treated effluent to groundwater in the vicinity of the designated effluent irrigation area, as referred to in condition L1 of this approval. The GMP must provide for monitoring of groundwater quality as often as necessary but not less frequently than annually.
W6	The GMP must be developed by a person possessing appropriate qualifications and experience in the fields of hydrogeology and groundwater sampling design.

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W7	Groundwater sampling undertaken as part of the GMP must be done at a sufficient number of groundwater bores installed at locations and depths that provide representative groundwater samples from the uppermost aquifer and that establish: (a) groundwater quality hydraulically up-gradient of the designated effluent irrigation areas at locations which have not been affected by any release of contaminants from the premises to which this approval relates (background); and (b) groundwater quality within or adjacent to the designated effluent irrigation areas at the premises to which this approval relates.				
W8	Groundwater samples taken as part of the GMP must be analysed for at least the following water quality parameters: (e) pH (pH scale); (f) Electrical conductivity ($\mu\text{S}/\text{cm}$); (g) Total Nitrogen (as Nitrogen, mg/L); (h) Nitrite Nitrogen (as Nitrogen, mg/L); (i) Nitrate Nitrogen (as Nitrogen, mg/L); (j) Total Phosphorus (as Phosphorus, mg/L); (k) E.Coli (colony forming units /100 mL); and (l) Biochemical oxygen demand (5-day inhibited, mg/L).				
W9	All determinations of groundwater quality and the evaluation/explanation of data for the purposes of the annual monitoring report, as required by condition G6 of this approval, must be performed by a person or body possessing appropriate experience and qualifications to perform the required determinations and must include an assessment as to whether there is any groundwater contamination and, if so, the level of environmental harm caused as a result of such contamination.				
W10	All groundwater monitoring bores must be maintained in an operative condition and be reasonably accessible at all times to any authorised person representing the administering authority.				
Agency interest: Noise					
Condition number	Condition				
N1	Noise from the ERA must not cause an environmental nuisance at any nuisance sensitive place or commercial place.				
N2	All noise from activities must not exceed the levels specified in <i>Table 1 - Noise limits</i> at any nuisance sensitive or commercial place. Table 1- Noise limits at any nuisance sensitive or commercial place <table border="1" style="margin: 10px auto; border-collapse: collapse;"> <thead> <tr> <th style="padding: 5px;">Time Period</th><th style="padding: 5px;">Noise level at a 'noise sensitive place" measured as the Adjusted Maximum Sound Pressure Level $L_{Amax, adj, 10mins}$</th></tr> </thead> <tbody> <tr> <td style="height: 40px;"></td><td></td></tr> </tbody> </table>	Time Period	Noise level at a 'noise sensitive place" measured as the Adjusted Maximum Sound Pressure Level $L_{Amax, adj, 10mins}$		
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	<table><tr><td>7 am - 6 pm</td><td>Background plus 5 dB(A)</td></tr><tr><td>6 pm - 10 pm</td><td>Background plus 5 dB(A)</td></tr><tr><td>10 pm - 7 am</td><td>Background plus 3 dB(A)</td></tr><tr><td>Time Period</td><td>Noise level at a ‘commercial place’ measured as the Adjusted Maximum Sound Pressure Level $L_{Amax, adj, 10mins}$</td></tr><tr><td>7 am - 6 pm</td><td>Background plus 10 dB(A)</td></tr><tr><td>6 pm - 10 pm</td><td>Background plus 10 dB(A)</td></tr><tr><td>10 pm - 7 am</td><td>Background plus 8 dB(A)</td></tr></table>	7 am - 6 pm	Background plus 5 dB(A)	6 pm - 10 pm	Background plus 5 dB(A)	10 pm - 7 am	Background plus 3 dB(A)	Time Period	Noise level at a ‘commercial place’ measured as the Adjusted Maximum Sound Pressure Level $L_{Amax, adj, 10mins}$	7 am - 6 pm	Background plus 10 dB(A)	6 pm - 10 pm	Background plus 10 dB(A)	10 pm - 7 am	Background plus 8 dB(A)			
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N3	When requested by the administering authority, noise monitoring must be undertaken to investigate any complaint of noise nuisance, and the results notified within 14 days to the administering authority. Monitoring must include: (a) L_A Max, adj, T, (b) L_A 10, adj, 10 mins, (c) L_A 1, adj, 10 mins, (d) the level and frequency of occurrence of impulsive or tonal noise; (e) atmospheric conditions including wind speed and direction; (f) effects due to extraneous factors such as traffic noise; and (g) location, date and time of recording.																	
N4	The method of measurement and reporting of noise levels must comply with the latest edition of the administering authority's Noise Measurement Manual.																	
Agency interest: Land																		
Condition number	Condition																	
L1	The only contaminants permitted to be released to land is treated sewage effluent, to the area shown in <i>Schedule 1 - Effluent Irrigation Area</i>, and in compliance with the limits specified in <i>Table 2 -Contaminant release limits to land</i>, and the conditions of this approval. Table 2 – contaminant release limits to land <table><tr><th rowspan="2">Quality characteristics</th><th rowspan="2">Units</th><th colspan="3">Release limits</th><th rowspan="2">Monitoring Point</th><th rowspan="2">Monitoring Frequency</th></tr><tr><th>Minimum</th><th>50th percentile</th><th>Maximum</th></tr><tr><td>5-day biochemical Oxygen Demand (inhibited)</td><td>mg/L</td><td>-</td><td>-</td><td>20</td><td>Effluent post disinfection and prior to irrigation storage tank.</td><td>Monthly</td></tr></table>	Quality characteristics	Units	Release limits			Monitoring Point	Monitoring Frequency	Minimum	50 th percentile	Maximum	5-day biochemical Oxygen Demand (inhibited)	mg/L	-	-	20	Effluent post disinfection and prior to irrigation storage tank.	Monthly
Quality characteristics	Units			Release limits					Monitoring Point	Monitoring Frequency								
		Minimum	50 th percentile	Maximum														
5-day biochemical Oxygen Demand (inhibited)	mg/L	-	-	20	Effluent post disinfection and prior to irrigation storage tank.	Monthly												

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	Dissolved oxygen	mg/L	2.0	-	-	Effluent post disinfection and prior to irrigation storage tank.	Monthly
	Suspended Solids	mg/L	-	-	10	Effluent post disinfection and prior to irrigation storage tank.	Monthly
	pH	pH scale	6.0	-	8.5	Effluent post disinfection and prior to irrigation storage tank.	Monthly
	Total Nitrogen	mg/L (as Nitrogen)	-	8	10	Irrigation storage tank.	Monthly
	Total Phosphorus		-	1	2	Irrigation storage tank.	Monthly
	Electrical conductivity	µS/cm	-	-	1600	Irrigation storage tank.	Monthly
	Free chlorine residual	mg/L (range)	0.3	-	0.7	Irrigation storage tank.	Monthly
	E. Coli	Colony forming units/100 mL	-	-	10	Effluent post disinfection and prior to irrigation storage tank.	Monthly
L2	Notwithstanding the quality characteristics limits specified in <i>Table 2 – Contaminant release limits to land</i> , releases of treated sewage effluent must not have any properties nor contain any organisms or other contaminants in concentrations that are capable of causing environmental harm.						
L3	Monitoring must be undertaken, and records kept of a monitoring program of contaminant releases to the irrigation areas at the frequency, and for the parameters specified in <i>Table 2 - Contaminant release limits to land</i> .						

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L4	The irrigation of effluent must be carried out in a manner such that: (a) vegetation is not damaged; (b) soil erosion and soil structure damage are avoided; (c) there is no surface ponding of effluent; (d) percolation of effluent beyond the plant root zone is minimised; (e) the capacity of the land to assimilate nitrogen, phosphorus, salts, organic matter, as measured by biochemical oxygen demand, and water is not exceeded; and (f) the quality of groundwater is not adversely affected.
L5	Effluent must be irrigated by subsurface means only.
L6	A minimum area of 9 hectares of land, excluding any necessary buffer zones, must be utilised for the irrigation of effluent.
L7	When conditions prevent the irrigation of effluent to land (such as during or following rain events), the effluent must be directed to a wet-weather storage, or alternative measures must be taken to store or lawfully dispose of effluent (such as wet-weather storage or tanking off-site to another treatment plant or sewer). A record must be kept of any removal or discharge off site, including destination, name of transporter, dates and volumes.
L8	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 and estimates.
L9	Notices must be prominently displayed on areas undergoing effluent irrigation, warning the public that the area is irrigated with treated sewage effluent and not to use or drink the treated sewage effluent. These notices must be maintained in a visible and legible condition.
L10	Pipelines and fittings associated with the effluent irrigation system must be clearly identified. Lockable valves or removable handles must be fitted to all release pipes situated in public access areas.
L11	There must be sufficient backup power available to operate essential units of sewage treatment plant and any instrumentation associated with the sewage treatment plant and disinfection process.
L12	Any sewage pump stations associated with the carrying out of the ERA must be fitted with standby pumps and pump failure alarms and/or telemetry as well as high-level alarms to warn of imminent pump station overflow.
L13	All alarms and telemetry systems referred to in condition L12 must be able to raise an alarm should mains power failure occur at a sewage pump station. When triggered, the alarm must be promptly reported to the appropriate person to respond to the failure.
L14	Implement and maintain an irrigation monitoring program (IMP) for the release of contaminants to the designated effluent irrigation areas. As a minimum, the IMP must include: (a) soil and sub-soil analysis, including assessment of the soils with respect to types, structure, phosphorus adsorption capacity, nutrient status, salinity and sodicity, cation

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	exchange capacity and sodium adsorption ratio of the effluent being irrigated, to be carried out at no less than five representative sites on a biennial basis (every two years); (b) plant analysis to assess nutrient export at a frequency no less than biennially; (c) the ongoing determination of the quantity and quality of contaminants applied to the designated effluent irrigation areas; (d) periodic re-assessment of the designated effluent irrigation areas to ensure that irrigation is occurring in a sustainable manner, involving (at the very least) modelling of water, nutrient and salt balances and irrigation rate; and (e) reporting of monitoring results to the administering authority, and an assessment of any impact of effluent irrigation on the designated effluent irrigation areas.
L15	The IMP referred to in condition L14 must commence within one year from the date that this approval takes effect.
L16	If the registered operator supplies treated sewage wastes (recycled water) to another person or organisation ("third party"), a recycled water agreement must be entered into, in accordance with the provisions of the administering authority's 2005 Queensland Water Recycling Guidelines (or more recent editions). Any recycled water agreement must, at the very least, include: (a) a clear description of the respective obligations and responsibilities with respect to the supply and use of recycled water; and (b) disclosure by the registered operator of relevant information about recycled water quality to enable the third party to make an informed decision about the suitability of using the recycled water for the intended uses, and to ensure that environmental risks are appropriately managed; and (c) a commitment from the third party utilising the recycled water to use the recycled water in such a way as to prevent environmental harm, and must specifically make the third party aware of the general environmental duty as provided in section 319 of the <i>Environmental Protection Act 1994</i>, the environmental sustainability of their recycled water disposal activity and their obligation to protect the environmental values of potentially impacted waters, as provided in the <i>Environmental Protection (Water) Policy 1997</i>. Or more recent editions. NOTE: The administering authority's document, <i>Manual for recycled water use agreements in Queensland</i>, should be referred to when preparing recycled water use agreements.
L17	Upon being notified or otherwise becoming aware that a third party is using recycled water in a manner that is causing or threatens the causation of environmental harm, or is posing a human health risk, the registered operator must immediately cease supplying effluent to the third party.
L18	All chemicals and fuels stored at the authorised place must be contained within an onsite containment system and controlled in a manner that prevents environmental harm. NOTE: All petroleum product storage's must be designed, constructed and maintained in accordance with AS 1940 — 2004 <i>Storage and Handling of Flammable and Combustible Liquids</i>. Or more recent editions.

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Agency interest: Waste	
Condition number	Condition
W1	All regulated waste removal from the site must be removed by a person who holds a current approval to transport such waste under the provisions of the <i>Environmental Protection Act 1994</i> .
W2	Where regulated waste is removed from site (other than by a release as permitted under another schedule of this environmental authority), the registered operator must monitor and keep records of the following: (a) the date, quantity and type of waste removed; and (b) name of the waste transporter and/or disposal operator that removed the waste; (c) and the intended treatment/disposal destination of the waste.
Agency interest: Social	
Condition number	Condition
S1	The registered operator must record the following details for all complaints received in relation to the ERA and provide this information to the administering authority on request: (a) time, date, name and contact details of the complainant; (b) reasons for the complaint; (c) any investigations undertaken by the registered operator; (d) conclusions formed; and (e) any actions taken.

Definitions

Key terms and/or phrases used in this document are defined in this section. 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.

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

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

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

"coastal dune" means a ridge or hillock of sand or other material on the coast and built up by the wind.

"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 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 watercraft in a marina.

"effluent" means aqueous waste flowing from sewage treatment plants.

"environmental harm" means any adverse effect, or potential adverse effect (whether temporary or permanent and of whatever magnitude, duration or frequency) on an environmental value, and includes environmental nuisance.

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

- noise, dust, odour, light; or
- an unhealthy, offensive or unsightly condition because of contamination; or another way prescribed by regulation.

"erosion prone area" means an area declared to be an erosion prone area under section 70(1) of the *Coastal Protection and Management Act 1995*.

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

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

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

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

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

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

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

"**nuisance sensitive place**" includes —

a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or

- a motel, hotel or hostel; or
- a kindergarten, school, university or other educational institution; or
- a medical centre or hospital; or
- a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 1992* or a World Heritage Area; or
- a public thoroughfare, park or gardens; or
- a place used as a workplace, an office or for business or commercial purposes and includes a place, within the curtilage of such a place reasonably used by persons at that place.

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

"**protected' area**" means-

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

"**regulated waste**" means non-domestic waste mentioned in Schedule 7 of the Environmental Protection Regulation 2008 (whether or not it has been treated or immobilised), and includes-

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

"**site**" means land or tidal waters on **or in** which it is proposed to carry out the environmentally relevant activity under this environmental authority. '

"**sodium adsorption ratio**" (SAR) means the relative concentration of sodium (Na) to calcium (Ca) and magnesium (Mg) in the soil solution.

"**total Nitrogen**" means the sum of Organic Nitrogen, Ammonia Nitrogen, Nitrite plus Nitrate Nitrogen, which must be reported separately, expressed as mg/L as Nitrogen.

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

"**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.

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"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 environmental authority.

"you" means the holder of this environmental authority or owner or occupier of the land which is the subject of this environmental authority.

Schedule 1—Effluent Irrigation Area

