

Permit

Environmental Protection Act 1994

Environmental authority EA0002209

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

Environmental authority number: EA0002209

Environmental authority takes effect on the day the authority is issued.

The anniversary date of this environmental authority is 26 March each year.

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

Environmental authority holder

Name	Registered address
ADANI MINING PTY LTD	Level 9 120 Edward Street BRISBANE CITY QLD 4000

Environmentally relevant activity and location details

Environmentally relevant activity	Location
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	662/SP316209

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 land give written notice to the administering authority if they become aware of the following:

- the presence of, or happening of an event involving, a hazardous contaminant on the land that is causing, or is reasonably likely to cause, serious or material environmental harm (notice must be given within 24 hours); or
- if the land is contaminated land – a change in the condition of the land that is causing, or is reasonably likely to cause, serious or material environmental harm (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 land (notice must be given within 20 business days).

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.

The anniversary day of this environmental authority is the same day each year as the effective date. The payment of the annual fee will be due each year on this day. An annual return will be due each year on 01 April.

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

20/08/2024

Date

Claire Atkins

Department of Environment, Science and Innovation

Delegate of the administering authority

Environmental Protection Act 1994

Enquiries:

Utilities and Government Organisations
Assessment

Department of Environment, Science and
Innovation

Phone: 1300 130 372

Email:
industryanddevelopment.assessment@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 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, Science and Innovation to ensure that you have the most current version of the environmental authority relating to this site.

Conditions of environmental authority

Environmentally relevant activity	Location
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	662/SP316209

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

Agency Interest: General	
Condition Number	Condition
G1	Activities conducted under this environmental authority must not be conducted contrary to any of the following limitations: a) inflows to the sewage treatment plant must not exceed 87,500L on any day .
G2	All reasonable and practicable measures must be taken to prevent or minimise environmental harm caused by the activities .
G3	Any breach of a condition of this environmental authority must be reported to the administering authority as soon as practicable within 24 hours of becoming aware of the breach. Records must be kept including full details of the breach and any subsequent actions taken.
G4	Other than as permitted by this environmental authority, the release of a contaminant into the environment must not occur.
G5	All information and records required by the conditions of this environmental authority must be kept for a minimum of five years with the exception of environmental monitoring results which must be kept until surrender of this environmental authority. All information and records required by the conditions of this environmental authority must be provided to the administering authority upon request and in the format requested.
G6	An appropriately qualified person(s) must monitor, record and interpret all parameters that are required to be monitored by this environmental authority and in the manner specified by this environmental authority.
G7	All analyses required under this environmental authority must be carried out by a laboratory that has National Association of Testing Authorities (NATA) certification, or an equivalent certification, for such analyses. The only exception to this condition is for <i>in situ</i> monitoring of pH, Total Chlorine and electrical conductivity.
G8	An annual monitoring report must be prepared and submitted to the administering authority by 30 November each year, for the preceding financial year.
G9	You must record the following details for all environmental complaints received: a) date and time complaint was received;

	b) name and contact details of the complainant when provided and authorised by the complainant; c) nature of the complaint; d) investigations undertaken; e) conclusions formed; and f) actions taken.
G10	When required by the administering authority , monitoring must be undertaken in the manner prescribed by the administering authority to investigate a complaint of environmental nuisance arising from the activity . The monitoring results must be provided within 10 business days to the administering authority upon its request.
G11	The activity must be undertaken in accordance with written procedures that: a) identify potential risks to the environment from the activity during routine operations, closure and an emergency; b) establish and maintain control measures that minimise the potential for environmental harm; c) ensure plant, equipment and measures are maintained in a proper and effective condition; d) ensure plant, equipment and measures are operated in a proper and effective manner; e) ensure that staff are trained in and aware of their obligations under the Environmental Protection Act 1994; and f) ensure that reviews of environmental performance are undertaken at least annually.
G12	You must install and maintain wet weather storage with a volume of at least 400,000L for storage of treated wastewater.
G13	Chemicals and fuels in containers of greater than 15 litres must be stored within a secondary containment system
Agency Interest: Air	
Condition Number	Condition
A1	Other than as permitted within this environmental authority, odours or airborne contaminants must not cause environmental nuisance at a sensitive place or commercial place .
Agency Interest: Water	
Condition Number	Condition
W1	Contaminants must not be released to waters.
W2	Storm water contaminated by the activity must be managed to minimise or prevent any adverse effect on the environmental values of the receiving environment.
Agency Interest: Land	
Condition Number	Condition

L1	The only contaminants permitted to be released to land shown in Appendix 1 — Wastewater Irrigation Area is treated sewage effluent in accordance with Table 1 – Contaminant Release Limits to Land and the associated requirements.																																																		
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	<table><tr><th>Quality Characteristic (units)</th><th>Minimum</th><th>Median</th><th>Maximum</th><th>Minimum frequency</th></tr><tr><td>Volume sewage treated (L/day)</td><td>-</td><td>57,000</td><td>-</td><td>Daily</td></tr><tr><td>Irrigation Rate (mm/day)</td><td>-</td><td>2</td><td>-</td><td>Daily</td></tr><tr><td>Total Nitrogen (mg/L as N)</td><td>-</td><td>30</td><td>-</td><td>Quarterly</td></tr><tr><td>Total Phosphorus (mg/L as P)</td><td>-</td><td>10</td><td>-</td><td>Quarterly</td></tr><tr><td>pH (pH units)</td><td>6</td><td>-</td><td>8.5</td><td>Weekly</td></tr><tr><td>E.coli (cfu/100mL)</td><td>-</td><td>-</td><td>10</td><td>Monthly</td></tr><tr><td>Electrical Conductivity (µS/cm)</td><td>-</td><td>-</td><td>1,600</td><td>Weekly</td></tr><tr><td>Total Chlorine (mg/L)</td><td>-</td><td>-</td><td>2</td><td>Weekly</td></tr><tr><td>Total Suspended Solids (mg/L)</td><td>-</td><td>-</td><td>5</td><td>Monthly</td></tr></table>	Quality Characteristic (units)	Minimum	Median	Maximum	Minimum frequency	Volume sewage treated (L/day)	-	57,000	-	Daily	Irrigation Rate (mm/day)	-	2	-	Daily	Total Nitrogen (mg/L as N)	-	30	-	Quarterly	Total Phosphorus (mg/L as P)	-	10	-	Quarterly	pH (pH units)	6	-	8.5	Weekly	E.coli (cfu/100mL)	-	-	10	Monthly	Electrical Conductivity (µS/cm)	-	-	1,600	Weekly	Total Chlorine (mg/L)	-	-	2	Weekly	Total Suspended Solids (mg/L)	-	-	5	Monthly
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Associated requirements																																																			
1. Monitoring must be in accordance with the administering authority’s latest Water Quality Sampling Manual.																																																			
2. Monitoring must be undertaken when treated sewage effluent is being irrigated, unless irrigation has ceased for longer than the relevant parameters specified minimum frequency (e.g. if TSS was only required to be monitored once a week, then a TSS sample would not be required after the first week following cessation of the release).																																																			
3. Indicators for TN and TP are recommended to be done as grab samples.																																																			
4. Samples must be representative of the release.																																																			
5. Monitoring must be in accordance with the sample point at the outlet of the sewage treatment plant.																																																			
6. Medians are to be taken as a Long Term Rolling (limit) , meaning a limit applied to consecutive samples taken over <u>a 3 month period</u> (on a rolling basis for limit calculations) where consecutive samples are taken at the minimum frequency specified in Table 1 – Contaminant Release Limits to Land .																																																			
L2	The release of contaminants to land is permitted only within the treated sewage irrigation area shown in Appendix 1 — Wastewater Irrigation Area , and areas used for dust suppression and earth works.																																																		
L3	The treated sewage irrigation area must be at least 3.6 ha in area and located in accordance with Appendix 1 — Wastewater Irrigation Area .																																																		
L4	Treated effluent released to land must be done in accordance with documentation that ensures: a) drainage to groundwater and subsurface flows of contaminants to surface waters are prevented; b) surface pondage and run-off of treated sewage is prevented;																																																		

	c) treated wastewater must be distributed evenly within the land application area; d) degradation of soil structure is minimised; e) soil sodicity and the build-up of nutrients and heavy metals in the soil and subsoil are minimised; f) spray drift or overspray do not carry beyond treated sewage irrigation areas; g) sufficient buffer zones are maintained between irrigation sites and sensitive environmental receptors; and h) treated sewage irrigation areas are maintained with an appropriate crop in a viable state for transpiration and nutrient uptake.
L5	When weather conditions or soil conditions preclude the release of treated sewage effluent to land, effluent must not be irrigated to land.
Agency Interest: Noise	
Condition Number	Condition
N1	Noise generated by the activity must not cause environmental nuisance to any sensitive place or commercial place .
Agency Interest: Waste	
Condition Number	Condition
WT1	All waste generated in carrying out the activity must be lawfully reused, recycled or removed to a facility that can lawfully accept the waste.

Definitions

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

Activity means the environmentally relevant activities, whether resource activities or prescribed activities, to which the environmental authority relates.

Administering authority means the Department of Environment, Science and Innovation or its successor or predecessors.

Approval means environmental authority.

Appropriately qualified person(s) means a person or persons who has professional qualifications, training, skills and experience relevant to the environmental authority (EA) requirements and can give authoritative assessment, advice and analysis in relation to the EA requirements using the relevant protocols, standards, methods or literature.

Commercial place means a place used as a workplace, an office or for business or commercial purposes and includes a place within the curtilage of such a place reasonably used by persons at that place.

Environmental nuisance as defined under Chapter 1 of the *Environmental Protection Act 1994*.

Day means any 24 hour period.

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

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

Long Term Rolling (limit) means a limit applied to consecutive samples taken over a 6 month period (on a rolling basis for limit calculations) where consecutive samples are taken at the minimum frequency specified in **Table 1** of approximately equal periods.

Measures has the broadest interpretation and includes plant, equipment, physical objects, monitoring, procedures, actions, directions and competency.

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

mg/L means milligrams per litre.

Minimise by taking all reasonable and practical measures to minimise the adverse effect having regard to the following matters:

- a) the nature of the harm or potential harm;
- b) the sensitivity of the receiving environment;
- c) the current state of technical knowledge for the activity;
- d) the likelihood of successful application of different measures that might be taken to **minimise** the
- e) adverse effects;
- f) the financial implications of the different measures as they would relate to the type of activity; and
- g) if the adverse effect is caused by the location of the activity being carrying out, whether it is feasible to carry out the activity at another location.

N.A.T.A or NATA means National Association of Testing Authorities.

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

Release of a contaminant into the environment means to:

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

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

Sensitive place includes the following and includes a place within the curtilage of such a place reasonably used by persons at that place:

- (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 garden for noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise) Policy 20019.

Total Nitrogen (TN) means the sum of Organic Nitrogen, Ammonia Nitrogen, Nitrite plus Nitrate Nitrogen, expressed as **mg/L** as Nitrogen. This includes both the inorganic and organic fraction of nitrogen.

Total Phosphorus (TP) means the sum of the reactive phosphorus, acid-hydrolysable phosphorus and organic phosphorus, as **mg/L** of Phosphorus. This includes both the inorganic and organic fraction of phosphorus.

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 activity approved under environmental authority.

You means the holder of the environmental authority.

Appendix 1

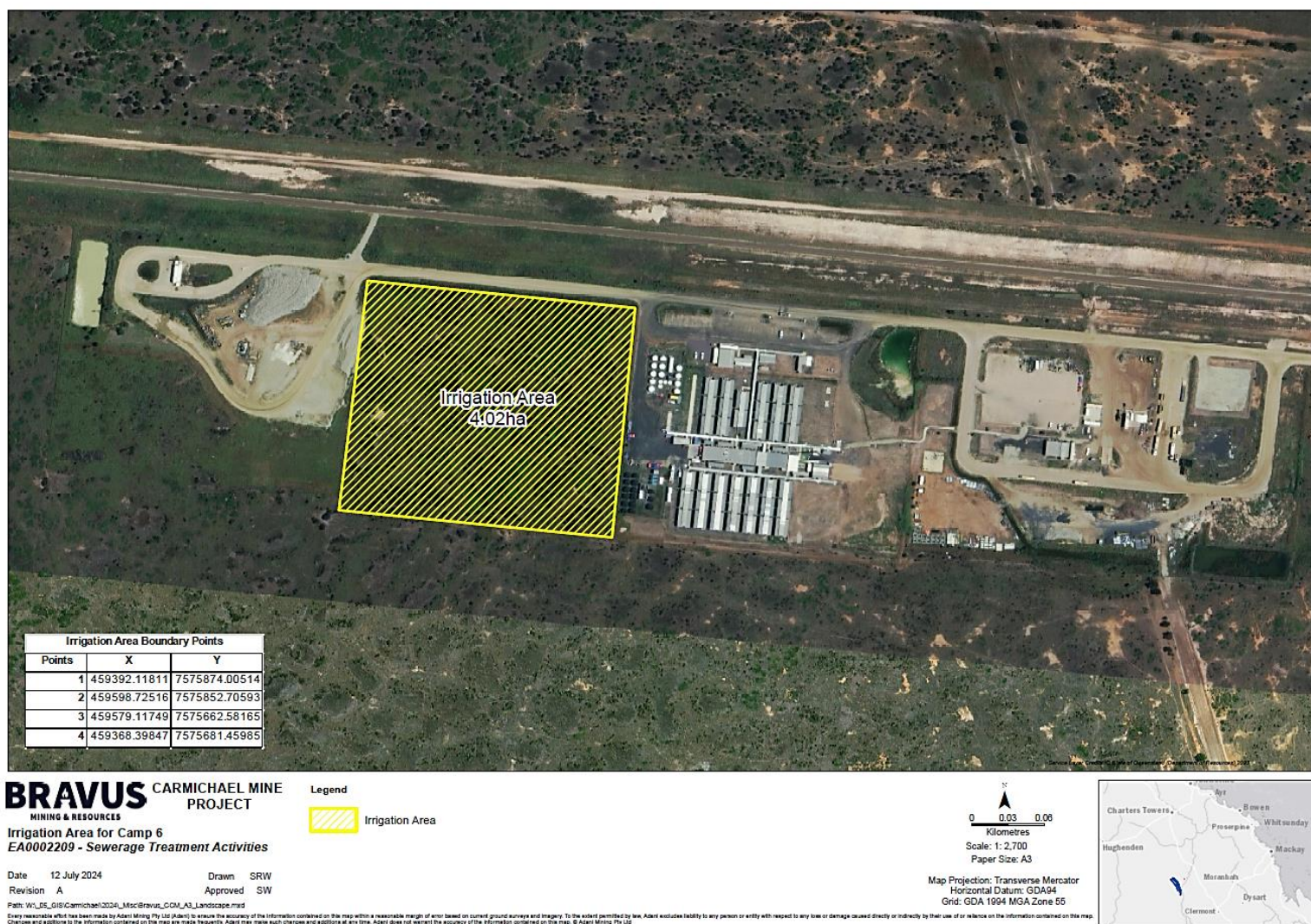


Figure 1: Wastewater Irrigation Area for effluent disposal as part of sewage treatment activities at Carmichael Mine Project Camp 6

END OF ENVIRONMENTAL AUTHORITY