Permit

Environmental Protection Act 1994

Environmental authority EPPR00973013

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

Environmental authority number: EPPR00973013

Environmental authority takes effect on 17-06-2020

Environmental authority holder(s)

Name(s)	Registered address
NRG GLADSTONE OPERATING SERVICES PTY LTD	Gladstone Power Station 353 Hanson Road GLADSTONE QLD 4680

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
ERA 07 - Chemical Manufacturing 6: Manufacturing, in a year, the following quantities of inorganic chemicals, other than inorganic chemicals to which items 1 to 4 apply (b) more than 1000t but not more than 10,000t	Lot 3/CP818822 Lot 1/CP818823
ERA 08 - Chemical Storage 3: Storing more than 500 cubic metres of chemicals of class C1 or C2 combustible liquids under AS 1940 or dangerous goods class 3 under subsection (1)(c)	Lot 1/CP818823
ERA 08 - Chemical Storage 5: storing 200 cubic metres or more of chemicals that are liquids, other than chemicals mentioned in items 1 to 3, under subsection (1)(d)	Lot 1/CP818823
ERA 14 - Electricity Generation 2: Generating electricity by using a fuel, other than gas, at a rated capacity of (b) more than 150MW electrical	Lot 4/CP818822 Lot 1/CP818823 Lot 18/CP894092 Lot 20/CP818826 Lot 21/CP818826
ERA 16 - Extraction and Screening 1: Dredging, in a year, the following quantity of material (b) more than 10,000t but not more than 100,000t	Lot 4/CP818822 Lot 1/CP818823 Lot 18/CP894092 Lot 21/CP818826 Lot 20/CP818826

ABN 46 640 294 485

Queensland Government

Environmentally relevant activity/activities	Location(s)
ERA 33 - Crushing, milling, grinding or screening Crushing, grinding, milling or screening more than 5000t of material in a year	Lot 1/CP818823 Lot 1/SP257853
ERA 60 - Waste disposal 1: Operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection (1)(a) (d) more than 200,000t	Lot 110/SP238409 Lot 5/SP200840 Lot 4/SP200842 Lot 211/SP174655 Lot 109/SP238409 Lot 3/CP818822 Lot 4/CP818822 Lot 1/CP818823 Lot 18/CP894092 Lot 21/CP818826 Lot 1/SP257853 Lot 20/CP818826

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.

Clancy Mackaway
Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

Date issued: 17 June 2020

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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)

Legislative Requirements and Conditions of Environmental Authority

General

G1 In carrying out the environmentally relevant activities, you must take all reasonable and practicable measures to prevent and / or to minimise the likelihood of environmental harm being caused. Any environmentally relevant activity, that, if carried out incompetently, or negligently, may cause environmental harm, in a manner that could have been prevented, shall be carried out in a proper manner in accordance with the conditions of this authority.

NOTE: This authority authorises the environmentally relevant activity. It does not authorise environmental harm unless a condition contained within this authority explicitly authorises that harm. Where there is no condition or the authority is silent on a matter, the lack of a condition or silence shall not be construed as authorising harm.

G2 The holder must:

a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this environmental authority; 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 Prior to the commencement of any environmentally relevant activity ('the activities') under this environmental authority, the holder of this environmental authority must:

a) develop an Integrated Environmental Management System (IEMS) which provides for the effective management by the holder of the actual and potential environmental impacts resulting from the carrying out of the activities; and
b) implement and maintain the IEMS from the commencement of carrying out the activities.

G4 The IEMS must provide for at least the following functions:

a) Training staff in the awareness of environmental issues related to carrying out the activities, which must include at least:
    i) The environmental policy of the holder, so that all persons that carry out the activities are aware of all relevant commitments to environmental management; and
    ii) Any relevant environmental objectives and targets, so that all staff are aware of the relevant performance objectives and can work towards these; and
    iii) Control procedures to be implemented for routine operations for day to day activities to minimise likelihood of environmental harm, however occasioned or caused; and
    iv) Contingency plans and emergency procedures to be implemented for non-routine situations to deal with foreseeable risks and hazards including corrective responses to prevent and mitigate environmental harm (including any necessary site rehabilitation); and
    v) Organisational structure and responsibility to ensure that roles, responsibilities and authorities are appropriately defined to manage environmental issues effectively; and
    vi) Effective communication to ensure two-way communication on environmental matters between operational staff and higher management;

vii) Their obligations in respect of monitoring, notification and record keeping obligations under the IEMS and relevant environmental authorities and/or development approvals; and

d) Monitoring of the release of contaminants into the environment including procedures, methods, record keeping and notification of results;

e) Conducting assessment of the environmental impact of any release of contaminants into the environment;

f) Periodic conduct of energy audits and review of environmental performance and procedures adopted, not less frequently than five years; and

g) Waste prevention, treatment and disposal; and

h) A program for continuous improvement.

G5 The holder of this environmental authority must not implement or amend an IEMS (including any environmental management plan) that contravenes any condition of this environmental authority or any development condition applicable to carrying out the activities.

G6 Record, compile and keep all monitoring results required by this document and present this information to the administering authority when requested, in a specified format.

G7 All complaints received must be recorded including investigations undertaken, conclusions formed and action taken. This information must be made available to the administering authority on request.

G8 The holder of this environmental authority must ensure that the results of all monitoring performed in accordance with the requirements of this environmental authority for the period covered by the annual return are recorded and made available to the administering authority upon request.

G9 A record must be maintained at events including but not limited to:

a) the time, date and duration of equipment malfunctions

b) any shut downs of the:

i) Fabric Filters

ii) Opacity monitors

iii) NOX monitors

iv) Oil Skimmers

v) Cenosphere traps

vi) Settlement Basins

c) the hours of operation of the plant;

d) The downtime hours of the critical pollution control equipment.

e) Any consequences of the incident.

Air

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 odour sensitive place.

A2 The release of dust and/or particulate matter resulting from the activity must not cause an environmental nuisance at any dust sensitive place.

A3 Exceedance of any of the following levels when measured at any dust sensitive place is an environmental nuisance for the purposes of condition (A2).

a) Dust deposition of 120 milligrams per square metre per day, when monitored in accordance with Australian Standard AS 3580.10 of 1991; OR

b) A concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (pm) (PM10) suspended in the atmosphere of 150 micrograms per cubic metre over a 24 hour averaging time, at a dust sensitive place downwind of the site, when monitored in accordance with:

i) Australian Standard AS 3580.9.6 'Ambient air - Particulate matter - Determination of suspended particulate PM10 high-volume sampler with size-selective inlet - Gravimetric method'; or

ii) any alternative method of monitoring PM10 which may be permitted by the 'Air Quality Sampling Manual' as published from time to time by the administering authority.

A4 When requested by the Administering Authority, dust and particulate monitoring must be undertaken to investigate any complaint of environmental nuisance caused by dust and/or particulate matter, and the results notified within 14 days to the administering authority following completion of monitoring. Monitoring must be carried out at a place(s) relevant to the potentially affected dust sensitive place and at upwind control sites and must include:

a) for a complaint alleging dust nuisance, dust deposition; and

b) for a complaint alleging adverse health effects caused by dust, the concentration per cubic metre of particulate matter with an aerodynamic diameter of less than 10 micrometre (pm) (PM10) suspended in the atmosphere over a 24hr averaging time.

A5 The standards, parameters, conditions and requirements in respect of emissions of air impurities shall comply with the Gladstone Power Station Agreement Act 1993, Second Schedule, Part B Air Emissions.

A6 Solid particles must not be released from the dry ash system dust collector(s) in excess of a concentration that would cause visible air emissions.

A7 The standards, parameters conditions and requirements which shall apply in respect of monitoring of the release of contaminants to the atmosphere from the Gladstone Power Station shall comply with the Gladstone Power Station Agreement Act 1993, Second Schedule, Part B - Air Emissions.

Water

WT1 Other than as permitted within this environmental authority, contaminants must not be released to any waters other than designed containment ponds.

WT2 Stormwater contaminated by the activity must be managed to minimise or prevent any adverse impacts on the values of the receiving environment.

WT3 The standards, parameters, conditions and requirements in respect of all aqueous and liquid waste discharges from the Gladstone Power Station and related areas to waters shall comply with the Gladstone Power Station Agreement Act 1993, Second Schedule, Part C - Water Emissions.

WT4 Contaminated areas shall not be cleaned with water where it is more practicable to handle waste ash and or coal using mechanical means.

WT5 A Stormwater Management Strategy must be maintained and implemented by the holder of this environmental authority.

WT6 The standards, parameters conditions and requirements which shall apply in respect of monitoring of the release of contaminants to waters from the Gladstone Power Station shall comply with the Gladstone Power Station Agreement Act 1993, Second Schedule, Part C - Water Emissions.

Acoustic

N1 Noise from activities must not cause an environmental nuisance at any noise-affected premises.

N2 The standards, parameters conditions and requirements which shall apply in respect of noise emissions and effects from the Gladstone Power Station shall comply with the Gladstone Power Station Agreement Act 1993, Second Schedule, Part D - Noise Emissions.

N3 The standards, parameters conditions and requirements which shall apply in respect of monitoring of noise from the Gladstone Power Station shall comply with the Gladstone Power Station Agreement Act 1993, Second Schedule Part D - Noise Emissions.

N4 The holder of this environmental authority must monitor and record the noise levels as often as is necessary to check compliance with the conditions of this authority but not less frequently than every 5 years.

N5 In addition to monitoring at the frequency prescribed in condition N4, monitoring must also be undertaken to investigate any complaint of noise nuisance upon receipt of a request from the administering authority to carry out such monitoring.

N6 Records must be kept of the results of all monitoring of noise levels and other information required to be recorded in conjunction with such monitoring for a period of at least 10 years.

Land

L1 Contaminants must not be released to land.

L2 The standards, parameters conditions and requirements in respect of monitoring of ash composition and leachate levels in respect of ash and slurry from the Gladstone Power Station shall comply with the Gladstone Power Station Agreement Act 1993, Second Schedule, Part E Ash Disposal.

L3 Records of monitoring for condition L2 shall be kept for a period of 10 years.

L4 The holder of this environmental authority shall monitor the boiler chemical waste solutions in accordance with the NRG Gladstone Operating Services Pty Ltd Environmental Method 28, "Environmental Monitoring for the Disposal of Boiler Chemical Clean Wastes" or Method 36, "Storage and Disposal of Boiler Chemical Clean Wastes".

L5 Coal Combustion Products (CCPS) must only be disposed to the ash disposal areas identified in the Ash Management Agreement or reused in accordance with a beneficial use approval.

Waste

W1 All regulated waste removed from the site must be removed by a person who holds a current authority to transport such waste under the provisions of the Environmental Protection Act 1994.

W2 Waste must not be burnt or allowed to burn on any licensed site or removed and burnt elsewhere unless specifically permitted by an environmental authority.

W3 Records of trade waste agreements must be made available for inspection on request.

W4 An area must be set aside for the segregation and storage of recyclable solid wastes.

W5 Where a no-cost recycling service is available, recyclable waste must not be deposited in the general waste stream.

W6 Drum storage of waste or processed materials must be within roofed areas provided with impervious concrete bases and bund walls.

W7 The base and walls of all bunded areas must be maintained free from gaps or cracks.

W8 All loading/unloading of bulk materials must take place only within designated vehicle loading/unloading areas.

W9 Used ion exchange resin, used diatomaceous earth oil absorbent and spent demineralisation plant carbon granules, used oil filter cartridges (including cartridges from off-site), silica gel (up to 150 Kg/year) and oily rags may be burnt in the boiler furnaces. Other wastes may be burnt in the boiler furnaces, following approval in writing by the administering authority.

W10 The holder of this environmental authority must conduct, in consultation with the administering authority, an impact monitoring assessment:

a) To quantify the extent of environmental harm which is likely to be caused to the receiving environment as a result of burning the used oil filter cartridges and/or other approved wastes;

b) To determine the appropriate parameter or suite of parameters, (including applicable feed rates) which assists this quantification;

c) To determine the appropriate release limits of these agreed parameters and the quantified extent of environmental harm in the receiving environment.

d) This impact monitoring assessment report is to be submitted to the administering authority within 12 months of commencement of the trail burning of these wastes.

W11 Low concentration acids and alkalis from the laboratory may be disposed of by initially passing through a neutralising basin and then transferring to the Gladstone Regional Council waste treatment facility.

W12 Boiler chemical clean waste solutions must be transferred to an on-site storage tank for treatment and then injected into an operating boiler furnace.

W12A Boiler chemical clean waste solids must be removed to a facility that can lawfully accept the waste.

W13 Demineralisation effluent wastes may be disposed of by neutralisation with seawater and discharged into the Cooling Water Intake canal.

Definitions

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

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

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

ash means the residue after the burning of coal.

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

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

coal Combustion Products (CCPs) means flyash, furnace bottom ash and cenospheres produced primarily from the combustion of pulverised black coal within the coal fired power stations.

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

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

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

dwelling means any of the following structures or vehicles that is principally used as a residence-
- a house, unit, motel, nursing home or other building or part of a building;
- a caravan, mobile home or other vehicle or structure on land;
- a water craft in a marina.

Gladstone Power Station Agreement Act 1993 means an Act authorising the making of an agreement about the sale of the Gladstone Power Station.

GPS means the Gladstone Power Station.

intrusive noise means noise that, because of its frequency, duration, level, tonal characteristics, impulsiveness or vibration -
- is clearly audible to, or can be felt by, an individual; and
- annoys the individual.

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

LA 10, adj, 10 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.

LA 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.

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

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

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

mg/L means milligrams per litre.

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

noise sensitive place means -
- a dwelling, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or
- a kindergarten, school, university or other educational institution; or
- a medical centre or hospital; or
- a protected area; or
- a park or gardens; and
- includes the curtilage of such place.

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.

NTU means nephelometric turbidity units

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

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

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

regulated waste means non-domestic waste mentioned in Schedule 7 of the Environmental Protection Regulation 1998 (whether or not it has been treated or immobilised), and includes:
- for an element - any chemical compound containing the element; and
- anything that has contained the waste.

registered vehicle means "licensed vehicle"

site means the place to which this environmental authority relates or the premises to which this development approval relates.

this authority means this environmental authority/development approval.

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.

you means the holder of this Environmental Authority or owner / occupier of the land which is the subject of this Development Approval.

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

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