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Certificate of Registration

No: ENRE00927109

This registration certificate is issued by the Environmental Protection Agency and takes effect from 19 May 2009

The anniversary day for the purposes of the Annual Return is 19 May

This registration certificate is a requirement of section 73F of the *Environmental Protection Act 1994* and authorises the registered operator to undertake the activity listed below at the following place subject to the conditions set out in a development approval attached to the premises, or the relevant code of environmental compliance.

Registered Operator:-

Downer Edi Works Pty Ltd
Trading as Works Infrastructure
Level 11, 468 St Kilda Road
MELBOURNE VIC 3004

Place:-

Lot 17 Plan RP74928

Located at:-

150 Boniface Street Archerfield Qld 4108.

Registered Activity/ies: -

ERA 15 Fuel burning - using fuel burning equipment that is capable of burning at least 500kg of fuel in an hour

ERA 6 Asphalt manufacturing Threshold (b) - manufacturing in a year 1000t or more of asphalt

ERA 8 Chemical storage Threshold 3(a) - storing 10m3 to 500m3 of chemicals of class C1 or C2 combustible liquids under AS 1940 or dangerous goods class 3


Derek Robson

Delegate

Environmental Protection Agency

19 May 2009



Section 3.3.16 and 3.3.18 *Integrated Planning Act 1997*EPA Permit¹ number: IPCE00966908

EPA Permit ¹ number:	IPCE00966908
Assessment Manager reference:	A001902081
Date application received by EPA:	30 October 2007
Permit ¹ Type:	Concurrence Response for a MCU involving an ERA
Date of Decision:	25 March 2008
Relevant Laws and Policies:	<i>Environmental Protection Act 1994</i> and any subordinate legislation
Jurisdiction:	Item 1 in Table 2 of Schedule 2 of the <i>Integrated Planning Regulation 1998</i>

Development Description

Property	Lot/Plan	Aspect of Development
	Lot 17 Plan RP74928	<p>ERA 11(a) Crude oil or petroleum product storing – storing crude oil or petroleum product in tanks or containers having a combined total storage capacity of 10 000 L or more but less than 500 000 L.</p> <p>ERA 17 Fuel burning - any process involving the use of fuel burning equipment (including for example, a standby power generator) that is capable of burning (whether alone or in total) 500 kg or more of fuel an hour.</p> <p>ERA 59 Asphalt manufacturing - manufacturing asphalt.</p>

Reasons for inclusion of development conditions

In accordance with section 3.3.18(8) of the *Integrated Planning Act 1997* and section 27B of the *Acts Interpretation Act 1954*, the reasons for the inclusion of development conditions are:

- 1) The Environmental Protection Agency is a concurrence agency under the *Integrated Planning Regulation 1998* for the purposes of the *Environmental Protection Act 1994*.

¹ Permit includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation administered by the Environmental Protection Agency and the Queensland Parks and Wildlife Service

2) Any development conditions placed on this permit¹ for an environmentally relevant activity are in accordance with section 73B of the *Environmental Protection Act 1994*.

Additional comments or advice about the application

Nil

Additional information for applicants

Contaminated Land

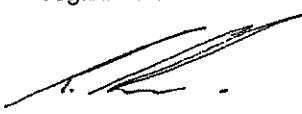
It is a requirement of the *Environmental Protection Act 1994* that if an owner or occupier of land becomes aware a Notifiable Activity (as defined by Schedule 2 of the *Environmental Protection Act 1994*) is being carried out on the land or that the land has been affected by a hazardous contaminant, they must, within 30 days after becoming so aware, give notice to the Environmental Protection Agency.

Environmentally Relevant Activities

The aforementioned description of any environmentally relevant activity (ERA) for which this permit is issued is simply a restatement of the ERA as prescribed in the legislation at the time of issuing this permit. Where there is any conflict between the abovementioned description of the ERA for which this permit is issued and the conditions specified herein as to the scale, intensity or manner of carrying out of the ERA, then such conditions prevail to the extent of the inconsistency.

This permit authorises the ERA. It does not authorise environmental harm unless a condition within this permit explicitly authorises that harm. Where there is no such condition, or the permit is silent on a matter, the lack of a condition or silence shall not be construed as authorising harm.

In addition to this permit, the person to carry out the ERA must be a registered operator under the *Environmental Protection Act 1994*. For the person to become a registered operator, they must apply for a registration certificate under section 73F of the *Environmental Protection Act 1994*.



Paul Neilson
Delegate
Environmental Protection Agency
25 March 2008

CONDITIONS OF APPROVAL

Conditions for:

ERA 11(a) Crude oil or petroleum product storing – storing crude oil or petroleum product in tanks or containers having a combined total storage capacity of 10 000 L or more but less than 500 000 L; and

ERA 17 Fuel burning - any process involving the use of fuel burning equipment (including for example, a standby power generator) that is capable of burning (whether alone or in total) 500 kg or more of fuel an hour; and

ERA 59 Asphalt manufacturing - manufacturing asphalt.

Agency Interest: General

A1G1 Prevent and / or minimise likelihood of environmental harm.

In carrying out an ERA to which this approval relates, all reasonable and practicable measures must be taken to prevent and / or to minimise the likelihood of environmental harm being caused.

A1G2 Maintenance Of Measures, Plant and Equipment.

The operator of an ERA to which this approval relates must:

- (a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval; and
- (b) maintain such measures, plant and equipment in a proper and efficient condition; and
- (c) operate such measures, plant and equipment in a proper and efficient manner.

A1G3 Site Based Management Plan.

From commencement of an ERA to which this approval relates, a site based management plan (SBMP) must be implemented. The SBMP must identify all sources of environmental harm, including but not limited to the actual and potential release of all contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused. The SBMP must also provide for the review and 'continual improvement' in the overall environmental performance of all ERAs that are carried out.

The SBMP must address the following matters:

- (a) Environmental commitments - a commitment by senior management to achieve specified and relevant environmental goals.
- (b) Identification of environmental issues and potential impacts.
- (c) Control measures for routine operations to minimise likelihood of environmental harm.
- (d) Contingency plans and emergency procedures for non-routine situations.
- (e) Organisational structure and responsibility.
- (f) Effective communication.
- (g) Monitoring of contaminant releases.
- (h) Conducting environmental impact assessments.
- (i) Staff training.
- (j) Record keeping.
- (k) Periodic review of environmental performance and continual improvement.

A1G4 The site based management plan must not be implemented or amended in a way that contravenes any condition of this approval.

A1G5 Records.

Record, compile and keep all monitoring results required by this approval and present this information to the administering authority when requested.

A1G6 All records required by this approval must be kept for 5 years.

A1G7 Exception Reporting.

The operator of an ERA to which this approval relates must notify the administering authority in writing of any monitoring result which indicates an exceedance of any licence limit within twenty eight (28) days of the completion of the analysis.

A1G8 Waste Records.

A record of all waste must be kept detailing the following information:

- a) date of pickup of waste;
- b) description of waste;
- c) quantity of waste;
- d) origin of the waste; and
- e) destination of the waste.

Note: Trackable wastes as listed in Schedule 1 of the *Environmental Protection (Waste Management) Regulation 2000* are not covered by this condition. Trackable wastes have similar recording requirements to this condition in accordance with a waste tracking system established under the above Regulation

A1G9 Notification.

The operator of an ERA to which this approval relates must telephone the EPA's Pollution Hotline or local office as soon as practicable after becoming aware of any release of contaminants not in accordance with the conditions of this approval.

A1G10 Information About Spills.

A written notice detailing the following information must be provided to the EPA within 14 days of any advice provided in accordance with condition A1G9:

- a) the name of the operator, including their approval / registration number;
- b) the name and telephone number of a designated contact person;
- c) quantity and substance released;
- d) vehicle and registration details;
- e) person/s involved (driver and any others);
- f) the location and time of the release;
- g) the suspected cause of the release;
- h) a description of the effects of the release;

- i) the results of any sampling performed in relation to the release,
- j) actions taken to mitigate any environmental harm caused by the release; and
- k) proposed actions to prevent a recurrence of the release.

A1G11 Monitoring.

A competent person(s) must conduct any monitoring required by this approval.

A1G12 Equipment Calibration.

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.

A1G13 Spill Kit.

An appropriate spill kit, personal protective equipment and relevant operator instructions/emergency procedure guides for the management of wastes and chemicals associated with the ERA must be kept at the site.

A1G14 Spill Kit Training.

Anyone operating under this approval must be trained in the use of the spill kit.

A1G15 Emergency Response / Contingency Plan.

The registered operator must develop and implement an Emergency / Contingency Plan to manage the environmental impacts of uncontrolled release of contaminants to the environment.

A1G16 The Emergency Response / Contingency Plan must address at least the following matters:

- a) response procedures to be implemented to reduce the likelihood of any release of contaminants to the environment;
- b) response procedures to prevent any further release or if such is not practicable, minimise the extent and duration of any release to the greatest practicable extent;
- c) the practices and procedures to be employed to restore the environment, or if such is not practicable, mitigate any environmental impacts of the release;
- d) a description of the resources to be used in response to a release;
- e) the training of staff that will be called upon to respond to a release;
- f) procedures to investigate the cause of any release, and where necessary, implement remedial actions to reduce the likelihood of recurrence of a similar event;
- g) the provision and availability of documented procedures to staff attending any release to enable them to effectively respond; and
- h) timely and accurate reporting of the circumstance and nature of release events to the administering authority.

A1G17 A copy of the Emergency Response / Contingency Plan and any subsequent amendment of the Emergency Response / Contingency Plan must be kept at the approved place and be available for examination by Emergency Services Personnel or an authorised person on request.

A1G18 Overfill Protection

The fill point of all bulk storage tanks shall be fitted with an overfill-protection device.

A1G19

Alarm / Isolation system

An integrated alarm and fuel closure system shall be provided and shall be activated in the following situations:

- a) When any emergency stop device is activated; and / or
- b) When any leak or loss of integrity is detected.

A1G20

Bitumen Storage Tanks

Vents associated with the bitumen storage tank(s) are to be fitted with activated carbon odour filtering devices.

A1G20

All filler silos, hot bitumen tanks, hot aggregate bins, and hot asphalt bins must be fitted with high level alarms which are capable of providing the operator in charge of the materials transfer with an audible and visible warning the maximum operative vessel capacity has been reached.

Agency Interest: Air

A1A1

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 (μm) (PM10) suspended in the atmosphere over a 24hr averaging time.

A1A2

The Release Of Contaminants To The Atmosphere.

The release of contaminants to the atmosphere from a point source must only occur from those release points identified in Table 1 - Contaminant release limits to air and must be directed vertically upwards without any impedance or hindrance.

A1A3

Contaminants must be released to the atmosphere from a release point at a height and a flow rate not less than the corresponding height and velocity stated for that release point in Table 1 - Contaminant release limits to air.

A1A4

Contaminants must not be released to the atmosphere from a release point at a mass emission rate / concentration, as measured at a monitoring point, in excess of that stated in Table 1 - Contaminant release limits to air.

A1A5

Contaminants must be monitored not less frequently than specified in Table 2 - Required Release Point Determinations.

A1A6

The only type of fuel to be burnt in the boiler under normal operating conditions is natural gas.

Table 1 – Contaminant Release Limits to Air

Release point number	Minimum release height (metres)	Minimum velocity (m/sec)	Contaminant release	Maximum release limit
A1 - Baghouse Filter Stack A2 - Wet Scrubber Stack	12	16.3	Particulates (TSP)	50 mg/N m ³ (dry)
			PM10	25 mg/N m ³ (dry)
			CO	150 mg/N m ³ (dry)
			H ₂ S	5 mg/N m ³ (dry)
			NO _x	50 mg/N m ³ (dry)
			Volatile organic compounds	50 mg/N m ³ (dry)
			Odour	1600 ou
			PAH (BaP)	1 µg/N m ³ (dry)
			Total metals	100 µg/N m ³ (dry)

A1A7

When requested by the administering authority, monitoring must be undertaken to investigate any complaint of environmental nuisance caused by a release to the atmosphere from a release point at the site, and the results thereof notified to the administering authority within 14 days following completion of monitoring.

A1A8

Monitoring of any releases to the atmosphere required by a condition of this approval must be carried out in accordance with the following requirements:

- a) Monitoring provisions for the release points listed in Table 2 - Required Release Point Determinations must comply with the Australian Standard AS 4323.1 - 1995 'Stationary source emissions Method 1: Selection of sampling positions' (or more recent editions).
- b) The following tests must be performed for each required determination specified in Table 2 - Required Release Point Determinations:
 - i. gas velocity and volume flow rate;
 - ii. temperature;
 - iii. water vapour concentration (moisture content).
- c) Where practicable, samples must be taken when emissions are expected to be at maximum rates.
- d) During the sampling period the following additional information must be gathered:
 - i. production rate at the time of sampling;
 - ii. raw materials used;
 - iii. number of equipment and mixing vessels operating;
 - iv. operating or mixing temperature;
 - v. product made; and
 - vi. reference to the actual test methods and accuracy of the methods.

Table 2 - Required Release Point Determinations

Determination Required	Release Point Numbers	Frequency
Total suspended particulates (TSP)	A1 - Baghouse Filter Stack A2 - Wet Scrubber Stack	All stacks must be monitored during commissioning (see Note1) of the facility and annually thereafter.
Particulate matter less than 10 micrometre (PM10)		
Carbon monoxide (CO)		
Hydrogen Sulphide (H ₂ S)		
Oxides of nitrogen (NO _x)		
Volatile organic compounds (VOC)		
Odour		
Polycyclic aromatic hydrocarbons (PAH) as Benzo(a)pyrene equivalent (see Note 2)		
Total Metals (total of antimony, arsenic, cadmium, lead, mercury and vanadium and their respective compounds).		

Note 1: Within 3 months of commissioning the facility, the holder of this authority must conduct air emission monitoring to demonstrate compliance with air emission limits listed in Table 1.

Note 2: The above PAH limit is for total of the 16 priority PAH pollutants listed by the United States EPA, namely, Naphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, Anthracene, Fluoranthene, Pyrene, Benz(a) anthracene, Chrysene, Benzo(β)fluoranthene, Benzo(κ)fluoranthene, Benzo(a)pyrene, Indeno[123cd] pyrene, Dibenz[ah]anthracene and Benzo[ghi] perylene, expressed as Benzo(a)pyrene equivalents using the potency equivalence factors specified by the World Health Organisation.

A1A9 All release points referred to in Table 1 - Contaminant release limits to air must be conspicuously marked with the corresponding release point number.

A1A10 Nuisance.

The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any nuisance sensitive or commercial place.

A1A11 Dust Nuisance.

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.

A1A12 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) (PM10) 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) 'Ambient air - Particulate matter - Determination of suspended particulate PM10 high-volume sampler with size-selective inlet -Gravimetric method'; or

- 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.

A1A13 Drier exhaust.

The exhaust gas from the asphalt plant drier must pass through either a wet scrubber or a baghouse filter prior to discharge to atmosphere.

A1A14 Where a bag house is used, a device which is capable of detecting filter medium breakthrough must be installed in the outlet of the Fabric Filter Dust Collector.

A1A15 Where a wet scrubber is used, a device which is capable of detecting water supply failure must be installed on the scrubber.

A1A16 An alarm system must warn the operator of the rotary drum mixer of the possibility that filter medium breakthrough or scrubber failure has occurred.

A1A17 Replacement bags for all Fabric Filter Dust Collectors must be held on site at all times.

A1A18 All collected material removed from a fabric filter dust collector or a wet scrubber must be removed and disposed of to a facility that can lawfully accept such wastes.

A1A19 Dust Control - Loading, Transfer and Unloading of Materials.

The registered operator must take all reasonable and practicable measures necessary to minimise the release of windblown dust and particulate matter emission to the atmosphere during the loading, transfer and unloading of materials. Reasonable and practicable measures may include but are not limited to

- ii) Use of water sprays at transfer points.
- ii) Use of shielding and windbreaks.
- iii) Transfer of material in a moist state.
- iv) Use of dust collection and treatment systems

Agency Interest: Land

A1L1 Preventing Contaminant Release To Land.

Contaminants must not be released to land.

A1L2 Spillage of all chemicals and fuels must be contained within an on-site containment system and controlled in a manner that prevents environmental harm.

A1L3 Bunding

All liquid chemical and waste tank storages must be bunded such that the capacity of the bund is sufficient to contain at least 100% of the largest storage tank plus 10% of the second largest storage tank within the bund.

A1L4 All chemical and waste drum storages must be bunded so that the capacity of the bund is sufficient to contain at least 25% of the maximum design storage volume within the bund.

A1L5 All bunding must be constructed of materials which are impervious to the materials stored and transferred therein and must be roofed where practicable.

A1L6 A collection sump must be provided in the floor of the bunding to facilitate the removal of liquids. The

- bund floor must be graded so that the fall is towards the collection sump.
- A1L7 All pipework to and from the bunded areas must be directed over the bund walls and not through them.
- A1L8 Where vehicle access to a bunded area is required, the access must be by way of a rollover bund.
- A1L9 All empty drums must be stored on a concrete hardstand area with their closures in place.
- A1L10 Where a collection sump and drainage outlet are provided to facilitate removal of liquid collected within the bunded area, that outlet must be kept closed and secured at all times.
- A1L11 All tanker loading/unloading areas must be bunded so that the capacity of the bund is sufficient to contain 100% of the largest compartment of any tanker using the area.
- A1L12 Unless otherwise stated all petroleum product storages must be designed, constructed and maintained in accordance with AS 1940 – Storage and Handling of Flammable and Combustible Liquids.

Agency Interest: Noise**A1N1 Noise Nuisance.**

Noise from the ERA must not cause an environmental nuisance at any nuisance sensitive place or commercial place.

- A1N2 All noise from activities must not exceed the levels specified in Table 3 - Noise limits at any nuisance sensitive or commercial place.

Table 3 - Noise limits

Sound pressure level dB(A) measured at 2.5m	Monday to Saturday			Sundays and public holidays		
	7am - 6pm	6pm - 10pm	10pm - 7am	9am - 6pm	6pm - 10pm	10pm - 9am
<i>Noise measured at a 'Noise sensitive place'</i>						
$L_{A, \max \text{ adj, T}}$	BG + 5 dB(A)	BG + 5 dB(A)	BG + 3 dB(A)	BG + 3 dB(A)	Not audible	Not audible
<i>Noise measured at a 'Commercial place'</i>						
$L_{A, \max \text{ adj, T}}$	BG + 10 dB(A)	BG + 10 dB(A)	BG + 5 dB(A)	BG + 5 dB(A)	Not audible	Not audible

A1N3 Noise Monitoring.

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:

- $L_{A, \max \text{ adj, T}}$
- Where T is 10 minutes
- the level and frequency of occurrence of impulsive or tonal noise;
- atmospheric conditions including wind speed and direction;

- effects due to extraneous factors such as traffic noise; and
- location, date and time of recording.

A1N4 The method of measurement and reporting of noise levels must comply with the latest edition of the Environmental Protection Agency's Noise Measurement Manual.

Agency Interest: Social

A1S1 Complaint Response.

The operator of the ERA must record the following details for all complaints received and provide this information to the administering authority on request:

- a) Time, date, name and contact details of the complainant;
- b) reasons for the complaint;
- c) any investigations undertaken;
- d) conclusions formed; and
- e) any actions taken.

Agency Interest: Water

A1WA1 Contaminants must not be directly or indirectly released from the site to any waters, including groundwater, except as permitted in this Part of the development approval (Agency Interest: Water), or to a sewer as permitted or otherwise agreed from time to time by the relevant Government Authority, to an extent that would cause environmental harm.

A1WA2 From the date that this development approval is granted, the registered operator of an ERA to which this approval relates must not cause or allow any stormwater, other than clean water, to be released from the land located at 150 Boniface Street, Archerfield, QLD 4108 more particularly described as Lot 17 on RP74928.

A1WA3 Fabric Filter Dust Collector.

All collected material removed from the Fabric Filter Dust Collector must be removed and disposed of in a manner that will not cause the release of contaminants to waters.

A1WA4 Water Quality Monitoring

All water quality monitoring conducted in accordance with this development approval must comply with the following requirements:

- (a) All determinations of the quality of contaminants released to waters must be made in accordance with, but are not limited to, methods prescribed in the *Queensland Environmental Protection Agency Water Quality Sampling Manual, 3rd Edition, December 1999*, or more recent editions or supplements to that document as such become available; and
- (b) Carried out on samples that are representative of the discharge.

A1WA5 Monitoring of Groundwater Quality

The registered operator of an ERA to which this approval relates must implement an on-going Groundwater Monitoring Program (GMP), including the development of a suitable groundwater monitoring network, to monitor the quality of groundwater potentially impacted by any direct or indirect release of contaminants associated with any ongoing operations and / or any ERAs and / or Notifiable Activities.

A1WA6 The groundwater monitoring network referred to in condition WA6 must:

- (a) be installed and maintained by a suitably qualified and experienced person; and

- (b) be constructed in accordance with the Agriculture and Resource Management Council of Australia and New Zealand manual titled *Minimum Construction Requirements for Water Bores in Australia, Edition 2, Revised September 2003*, or more recent editions or supplements to that document as such become available.

- A1WA7 The registered operator of an ERA to which this approval relates must conduct a GMP which complies with the following requirements:
- (a) All determinations of the quality of contaminants released to waters must be made in accordance with, but are not limited to, methods prescribed in:
 - (i) AS/NZS 5667:11:1998 – *Water Quality – Sampling – Guidance on sampling of groundwaters*, or more recent editions or supplements to that document as such become available; and/or
 - (ii) the “*Queensland Environmental Protection Agency Water Quality Sampling Manual, 3rd Edition, December 1999*”, or more recent editions or supplements to that document as such become available.
 - (b) Groundwater samples taken from the bores must be analysed for, but are not limited to, the water quality parameters required in Table 4 - Groundwater Water Quality Parameters and Sampling Frequencies.
 - (c) Standing water levels and total well depths in metres must be measured and recorded on during each sampling event relative to the Australian Height Datum. Such measurements must be undertaken prior to any disturbance by sampling activities and must be reported as the depth in metres from the top edge of the highest point of the casing collar to the water surface within the bore.
 - (d) Groundwater samples taken from the bores must be representative of the aquifer(s).
 - (e) Groundwater quality must be monitored as often as necessary, but not less frequently than required in Table 4 - Groundwater Water Quality Parameters and Sampling Frequencies.
 - (f) Groundwater samples must be taken from each of the bores before commencement of the ERA(s) and / or Notifiable Activities and during each sampling event.
- A1WA8 Any record made of the results of groundwater quality monitoring made in accordance with condition WA7 must be kept for not less than fifteen (15) years from the date the record was made.
- A1WA9 **Groundwater Monitoring Analysis Reporting**
 The registered operator of an ERA to which this approval relates must ensure that the groundwater monitoring data gathered in accordance with this development approval is analysed and interpreted to assess the nature and extent of any environmental harm of the ERA(s) and / or Notifiable Activities. The assessment must also include; but not be limited to, the location, nature (confined, unconfined etc.) and quality of each aquifer, define groundwater contours, and indicate direction of flow. The data collation, analysis and assessment must be conducted by a suitably qualified and experienced person and must be submitted to the administering authority upon request.

Table 4 – Groundwater Water Quality Parameters and Sampling Frequencies
As per A1WA7

ERA	Water Quality Parameter	Monitoring Frequency
Physiochemical Analysis	pH (pH scale)	Every 12 months from the date of issuing this development approval to accompany the annual return.
	Electrical Conductivity (mS/cm)	
	Total Dissolved Oxygen (mg/L)	
Laboratory Analysis	BTEX (µg/L)	
	Total Petroleum Hydrocarbons (µg/L)	
	Total Polyaromatic Hydrocarbons (µg/L)	
	Phenolic Compounds (µg/L)	
	Dissolved Metals (mg/L) - antimony, arsenic, cadmium, lead, mercury and vanadium and their respective compounds	

DEFINITIONS

Words and phrases used throughout this permit¹ are defined below. Where a definition for a term used in this permit¹ is sought and the term is not defined within this permit¹ the definitions provided in the relevant legislation shall be used.

"administering authority" means the Environmental Protection Agency 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 73F registration certificate 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*.

"approved plans" means the plans and documents listed in the approved plans section in the notice attached to this development approval.

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

"BG" means background sound pressure level measured in accordance with the latest edition of the Environmental Protection Agency *Noise Measurement Manual*; and Where the measured or adopted background at noise sensitive location is not less than 30dBA; and Where "T" is 10 minutes.

"clean water" means water where the concentration of any contaminants present in it does not exceed the Australian and New Zealand Environment and Conservation Council (ANZECC) 2000 Guidelines for 95% species protection ecosystem values for such contaminants.

"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.

"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.

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

"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 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.

"NTU" means nephelometric turbidity units.

"nuisance sensitive place" includes –

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

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

"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.

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

"watercourse" means a river, creek or stream in which water flows permanently or intermittently-

- in a natural channel, whether artificially improved or not; or
- in an artificial channel that has changed the course of the watercourse.

"waters" includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water natural or artificial watercourse, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and groundwater and any part thereof.

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

"you" means the holder of this development approval or owner / occupier of the land which is the subject of this development approval.

END OF CONDITIONS