# Permit

***Environmental Protection Act 1994***

## Environmental authority BRID0059

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

### Environmental authority number: BRID0059

**Environmental authority takes effect on** the day it is signed by the delegate.

### Environmental authority holder

| Name | Registered address |
|---|---|
| United Petroleum Pty Ltd | 200 Hoddle Street<br>ABBOSFORD VIC 3067 |

### Environmentally relevant activity and location details

| Environmentally relevant activitie | Location |
|---|---|
| 63-(1a) Operating sewage treatment works >21EP but <100EP (i) IR or IT | 2618 Bruce Highway GUNALDA QLD 4570<br>Lot 1 Plan RP212272 |

**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



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- 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- one 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.

CMooney

Signature

13/6/18

Date

Chris Mooney
Department of Environment and Science
Delegate of the administering authority
*Environmental Protection Act 1994*

**Enquiries:**
Government Organisations and Utilities Assessment
Department of Environment and Science
GPO Box 2454
BRISBANE QLD 4001
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 and Mines (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.dnrm.qld.gov.au, or phone 13 QGOV ( 13 74 68 ) or your local Mines Inspectorate Office.

### Development Approval

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

## Conditions of environmental authority

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

| **Environmentally relevant activitie** | **Location** |
|---|---|
| 63-(1a) Operating sewage treatment works >21EP but <100EP (i) IR or IT | 2618 Bruce Highway GUNALDA QLD 4570<br>Lot 1 Plan RP212272 |

| **Agency interest: General** | |
|---|---|
| **Condition number** | **Condition** |
| G1 | **Activity** conducted under this environmental authority must not be conducted contrary to any of the following limitations:<br>1. The treatment capacity must not exceed 12,000L/day. |
| G2 | All reasonable and practicable **measures** must be taken to minimise the likelihood of environmental harm being caused. |
| G3 | Any breach of a condition of this environmental authority must be reported to the **administering authority** as soon as practicable, or at most, within 24 hours of **you** becoming aware of the breach. Records must be kept including full details of the breach and any subsequent actions undertaken. |
| 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 | 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 to the **administering authority, or nominated delegate, within the required timeframe and in the specified format** upon request. |
| G7 | The **activity** must be undertaken in accordance with written procedures that:<br>a) identify potential risks to the environment from the **activity** during routine operations, closure and an emergency;<br>b) establish and maintain control **measures** that minimise the potential for environmental harm;<br>c) ensure plant, equipment and **measures** are maintained in a proper and effective condition;<br>d) ensure plant, equipment and **measures** are operated in a proper and effective manner;<br>e) ensure that staff are trained and aware of their obligations under the *Environmental Protection Act 1994;* and<br>f) ensure that reviews of environmental performance are undertaken at least annually. |
| G8 | Chemicals and fuels in containers of greater than 15 litres must be stored within a **secondary containment system.** |
| G9 | 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. |

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| G10 | 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 the in-situ monitoring of pH, Dissolved Oxygen and Turbidity. |
| G11 | An annual monitoring report must be prepared and submitted to the **administering authority** by 30 November each year, for the preceding financial year. |
| G12 | **You** must record the following details for all environmental **complaints** received:<br>a) date and time complaint was received;<br>b) name and contact details of the complainant;<br>c) nature of the complaint;<br>d) investigations undertaken;<br>e) conclusions formed; and<br>f) actions taken. |
| **Agency interest: Air** | |
| **Condition number** | **Condition** |
| A1 | Odours or airborne contaminants must not cause **environmental nuisance** at a **sensitive place** or **commercial place**. |
| **Agency interest: Noise** | |
| **Condition number** | **Condition** |
| N1 | Noise generated by the **activity** must not cause **environmental nuisance** to any **sensitive place** or **commercial place**. |
| N2 | 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:<br>**a)** $L_{A\ 10,\ adj,\ 10\ mins}$<br>**b)** $L_{A\ 1,\ adj,\ 10\ mins}$<br>c) the level and frequency of occurrence of impulsive or tonal noise<br>d) atmospheric conditions including wind speed and direction<br>e) effects due to extraneous factors such as traffic noise; and<br>f) location, date and time of recording. |
| N3 | Monitoring must be in accordance with the **administering authority's** *Noise Measurement Manual*. |
| **Agency interest: Land** | |
| **Condition number** | **Condition** |
| L1 | The only contaminants to be released to land are treated sewage effluent in accordance with the release limits specified in *Table 1 – Treated effluent release limits to irrigation area* and the associated requirements.<br>**Table 1 - Treated effluent release limits to irrigation area** |

| | |
|---|---|
| | <table><tr><th>Monitoring Point</th><th>Quality Characteristic</th><th>Unit</th><th colspan="2">Release Limit</th><th>Monitoring Frequency</th></tr><tr><td>MP1</td><td>Total Nitrogen</td><td>mg/L</td><td>50</td><td>Maximum</td><td>Monthly</td></tr><tr><td>MP1</td><td>Total Phosphorus</td><td>mg/L</td><td>15</td><td>Maximum</td><td>Monthly</td></tr><tr><td>MP1</td><td>pH</td><td>pH units</td><td>6.0 to 8.5</td><td>Range</td><td>Monthly</td></tr><tr><td>MP1</td><td>Biological Oxygen Demand</td><td>mg/L</td><td>30</td><td>Maximum</td><td>Monthly</td></tr><tr><td>MP1</td><td>Total Suspended Solids</td><td>mg/L</td><td>40</td><td>Maximum</td><td>Monthly</td></tr><tr><td>MP1</td><td>Faecal Coliforms</td><td>cfu/100mL</td><td>1000</td><td>Maximum</td><td>Monthly</td></tr><tr><td>MP1</td><td>Total Dissolved Solids</td><td>mg/L</td><td>1500</td><td>Maximum</td><td>Monthly</td></tr></table><br>*Note: MP1 monitoring point samples must be taken from a designated sampling point on the effluent discharge line, immediately downstream of the disinfection system.*<br><br>**Associated requirements**<br>1. Monitoring must be in accordance with the **administering authority's** *Water Quality Sampling Manual* and all monitoring devices must be effectively calibrated and maintained. |
| L2 | Designated effluent irrigation areas must only be located within previously cleared or disturbed areas. |
| L3 | The irrigation of effluent must only occur via subsurface irrigation and be carried out in a manner such that:<br>a. vegetation is not damaged;<br>b. soil erosion and soil structure damage is avoided;<br>c. there is no surface ponding of effluent;<br>d. percolation of effluent beyond the plant root zone is minimised;<br>e. the capacity of the land to assimilate nitrogen, phosphorus, salts and water is not exceeded; and<br>f. the quality of ground water is not adversely affected. |
| L4 | 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. |
| L5 | The flow to each irrigation area must be monitored and recorded on at least a quarterly basis over a 7 day period. At least one quarterly monitoring period each year must occur during a period in which several days of peak flow from the development would be expected to occur (i.e. Christmas, Easter or School Holidays). |
| L6 | Effluent irrigation area(s) must be permanently provided at the site, with an overall area available to sustainably receive treated effluent of no less than 1,000m$^2$. |
| L7 | The effluent distribution system must not be operated at times when the potential for direct contact with persons within or immediately adjacent to the effluent disposal areas is likely. |
| L8 | An Irrigation Area Management and Monitoring Program (IAMMP), must be developed and implemented to effectively monitor the condition of the land to which contaminants are released within 12 months of commissioning of the sewage treatment plant. As a minimum, the IAMMP must include:<br>a. procedures to ensure that effluent is evenly distributed across the effluent irrigation areas and is not distributed beyond the boundary of the effluent irrigation areas;<br>b. designs of all effluent disposal areas, which confirms buffer distances between the areas of irrigation and environmentally sensitive areas (including wetlands);<br>c. procedures to review the daily influent volumes (at least annually) using actual flow data and appropriate modelling to ensure that suitably sized irrigation areas are afforded for effluent |

<table>
<tr><td></td><td>irrigation.<br>d. procedures for the management of harvesting of vegetation within the effluent irrigation area to ensure the required level of nutrient removal is achieved;<br>e. procedures to ensure that vehicle traffic (excluding pedestrian controlled lawnmower) in effluent irrigation areas is kept to a minimum to prevent compaction of soils;<br>f. soil and sub-soil analysis, including assessment of the soils including types, structure, phosphorus adsorption capacity, nutrient status, salinity and sodicity, cation exchange capacity and sodium absorption ratio (SAR) of the contaminant release area(s), to be carried out no less than biennially (once every two years);<br>g. determination of the quantity and quality of contaminants applied;<br>h. an assessment of effluent quality monitoring results and the impact of the irrigation of effluent on the contaminant release areas.</td></tr>
<tr><td>L9</td><td>Monitoring required by condition L8 shall include the taking of top soil and sub-soil samples from at least 1 site within each irrigation area for the quality characteristics and at the frequency specified in Table 2 — Soil Impact Monitoring.<br><br>Table 2 - Soil Impact Monitoring<table><tr><th>Parameter</th><th>Frequency</th></tr><tr><td>Total Nitrogen</td><td>1 Yearly</td></tr><tr><td>Total Phosphorus</td><td>1 Yearly</td></tr><tr><td>Electrical Conductivity</td><td>1 Yearly</td></tr><tr><td>pH</td><td>1 Yearly</td></tr><tr><td>Sodium Adsorption Ratio (SAR)</td><td>1 Yearly</td></tr><tr><td>Exchangeable Cations</td><td>1 Yearly</td></tr></table></td></tr>
<tr><td>L10</td><td>When weather conditions or soil conditions preclude the release of treated sewage effluent to land, effluent must not be irrigated to land.</td></tr>
<tr><td>L11</td><td>A sufficient volume of wet weather storage must be provided to prevent overflows of effluent generated by the sewage treatment plant that is the subject of this approval during prolonged periods of wet weather. A minimum wet weather storage volume of 36,000 litres must be provided.</td></tr>
<tr><td colspan="2">Agency interest: Water</td></tr>
<tr><td>Condition number</td><td>Condition</td></tr>
<tr><td>WT1</td><td>Contaminants must not be released from the activity to any waters or to the bed and banks of any waters.</td></tr>
<tr><td>WT2</td><td>The registered operator must develop and implement a ground water monitoring program to identify any impacts from effluent irrigation, and to demonstrate contaminants are not adversely affecting groundwater.<br>The quality characteristics to be monitored for groundwater, and the minimum frequency at which samples must be collected for analysis, are specified in Table 3 - Parameters for Groundwater Monitoring Program. Samples must be collected at monitoring points that are representative of potentially affected groundwater hydraulically downgradient, and unaffected groundwater hydraulically upgradient of the effluent distribution area.</td></tr>
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**Table 3 - Parameters for Groundwater Monitoring Program**

| Parameters | Minimum Monitoring Frequency |
|---|---|
| Standing Water Level | Annually (once every year) |
| pH | Annually (once every year) |
| Electrical Conductivity | Annually (once every year) |
| Chloride* | Annually (once every year) |
| **Total Nitrogen** | Annually (once every year) |
| Nitrate | Annually (once every year) |
| Ammonia (as Nitrogen) | Annually (once every year) |
| **Total Phosphorous** | Annually (once every year) |
| Faecal Coliforms | Annually (once every year) |

*Note: * Chlorine must be monitored in accordance with Table 3 — Parameters for Groundwater Monitoring Program where chlorine is used in the disinfection process.*

| | |
|---|---|
| WT3 | Results obtained from sampling of groundwater must be kept and supplied to the **administering authority** on request, in accordance with condition G5 of this approval |
| WT4 | In addition to the frequency identified in *Table 3 - Parameters for Groundwater Monitoring Program*, groundwater shall be monitored for the parameters listed in Table 3 twice prior to the commencement of the **activity**, with each sample being collected at least 4 weeks apart, and again within 4 weeks following commencement of the **activity**. |
| WT5 | On an annual basis, the holder of this development approval must determine whether or not there has been any significant increase over background values at locations hydraulically downgradient of the release area for any water quality characteristic required to be monitored as referred to in *Table 3 - Parameters for Groundwater Monitoring Program*. |
| WT6 | The groundwater monitoring program must be developed by a suitably qualified and competent person having experience in the fields of hydrogeology and groundwater monitoring program design. |
| **Agency interest: Waste** | |
| **Condition number** | **Condition** |
| W1 | 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. 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 and Heritage Protection or its successor or predecessors.

**Appropriately qualified person(s)** means a person or persons who has professional qualifications, training, skills or experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis to performance relative to the subject matter 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.*

$L_{A\ 10,\ adj,\ 10\ mins}$ 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.

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

**NATA** means National Association of Testing Authorities.

**Release of a contaminant into the environment** means to:
- deposit, discharge, emit or disturb the contaminant
- cause or allow the contaminant to be deposited, discharged, emitted or disturbed
- fail to prevent the contaminant from being deposited, discharged emitted or disturbed
- allow the contaminant to escape
- fail to prevent the contaminant from escaping.

**Sensitive place** includes the following and includes a place within the curtilage of such a place reasonably used by persons at that place:
- 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 2004* or a World Heritage Area; or
- a public thoroughfare, park or gardens; or
- for noise, a place defined as a sensitive receptor for the purposes of the *Environmental Protection (Noise) Policy 2008*.

**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.

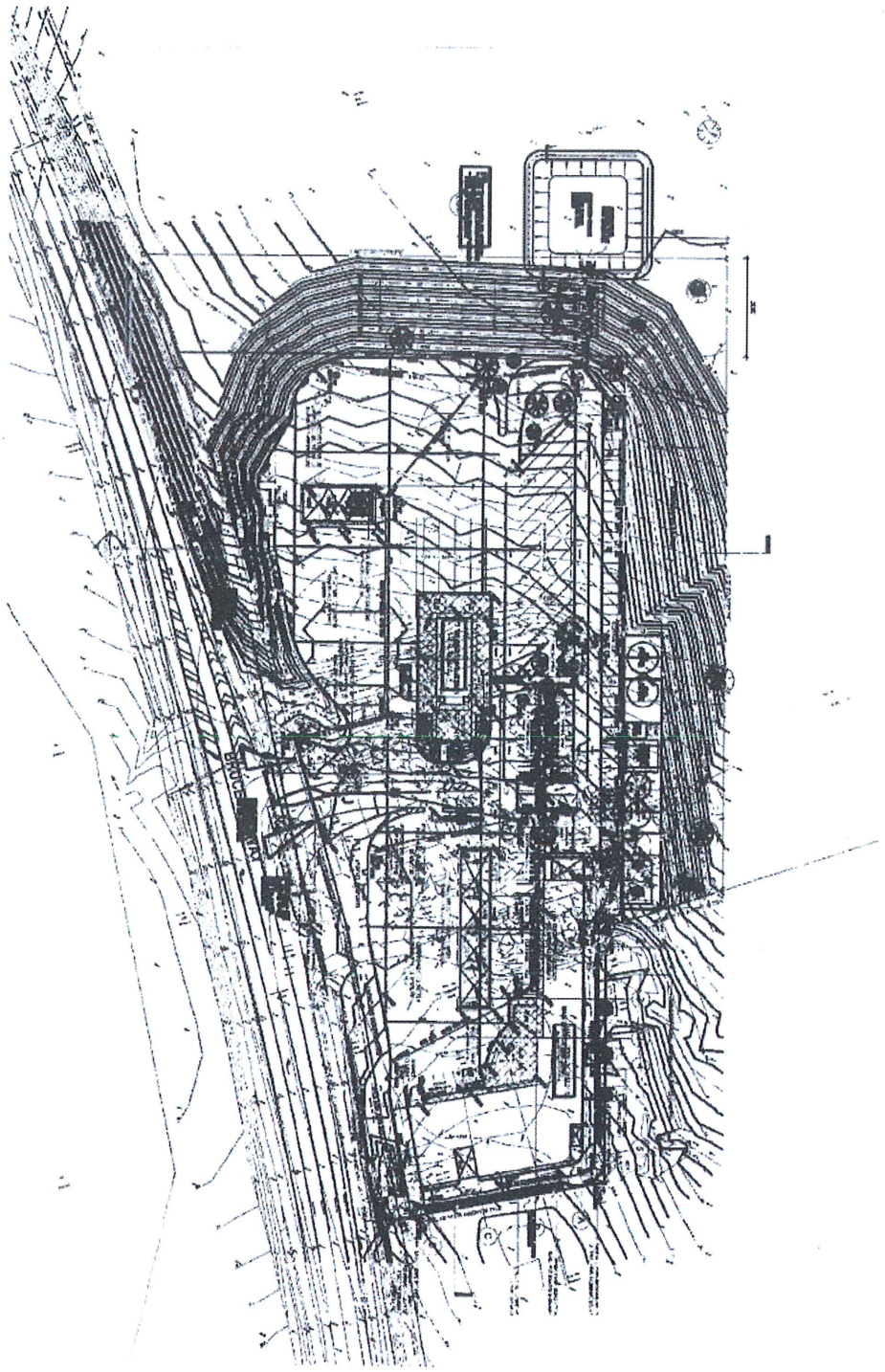
**Total Phosphorus (TP)** means the sum of the reactive phosphorus, acid-hydrolysable phosphorus and organic phosphorus, as mg/L of Phosphorus. This includes both the inorganic and organic fraction of phosphorus.

**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.

**You** means the holder of the environmental authority.

## Appendices

Attachment 1 – Site Plan Model (including irrigation areas indicated by fine box)



**END OF PERMIT**