

## Registration certificate

*Environmental Protection Act 1994*

## Registration certificate

**No: ENRE00872809**

This registration certificate is issued by the administering authority and takes effect from: 17-OCT-2011.

The anniversary day for the purposes of the Annual Return remains: 5 January.

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:**

Kimberley College Ltd  
C/- Dickensons  
54 Bryants Road,  
LOGANHOLME QLD 4129

**Development Approval Number:** SPDE02633311

**Place:**

Lot 1 Plan SP157751

**Located at:**

35-41 Kruger RD, CARBROOK QLD 4130

**Registered Activity:**

ERA 63 Sewage treatment Threshold 2(a) - operating sewage treatment works, other than no-release works, with a total daily peak design capacity of 21 to 100 EP (i) with treated effluent is discharged to an infiltration trench or through an irrigation scheme



Delegate

Department of Environment and Resource Management  
Environmental Protection Act 1994

17-OCT-2011

## Change to a development approval

*This notice is issued by the Department of Environment and Resource Management pursuant to section 376 of the Sustainable Planning Act 2009 ("the Act").*

Kimberley College Ltd  
41 Kruger Road  
CARBROOK QLD 4130  
Attention: James Somerville

Our reference: 332407

### Re: Request to change a development approval

1. The Chief Executive, Department of Environment and Resource Management (DERM) as assessment manager received a request to change a development approval on 25 August 2011.

2. **Details of the development approval for the original application**

Assessment Manager ref.: SPDE02633311

Date original application made or referred to DERM:

25 August 2011

Development approval applied for:

Development Permit

Aspect(s) of development:

|                                                                                  |                                                                               |
|----------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Material change of use of premises – For<br>an environmentally relevant activity | Sustainable Planning Regulation 2009 -<br>Schedule 3, Part 1, Table 2, item 1 |
|----------------------------------------------------------------------------------|-------------------------------------------------------------------------------|

Property/Location description:

Lot 1 SP157751  
35-41 Kruger Road, Carbrook, QLD, 4130

Date of decision for the original application and development approval:

21 September 2011

**Notice**  
**Change to a development approval**

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3. The decision for the request to change a development approval made on 25 August 2011 is to approve the request with conditions.
4. Attached is a copy of the decision notice for the original application showing the changes.
5. If this notice is given to the person who made the request, or to an entity that gave DERM as the responsible entity a notice under section 373 of the Act or a pre-request response notice, or if this notice is given by DERM as a concurrence agency and the concurrence agency's decision is to refuse the request or approve the request on conditions, such person or entity may appeal against the decision and the attached extract from the Act states how the person or entity may appeal.



**Delegate**  
Mike Thomas  
Delegate, Chief Executive administering the  
*Environmental Protection Act 1994*  
Department of Environment and Resource Management

21 September 2011

**Enquiries:**

Amanda Gray  
Department of Environment and Resource  
Management  
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Streets, Woolloongabba  
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Phone: 3896 3878  
Fax: 3406 2578  
Email: amanda.gray@derm.qld.gov.au

**Attachments**

Information Sheet – Appeals – Sustainable Planning Act 2009 (extract from the Sustainable Planning Act 2009)

Copy of the decision notice, if any, for the original application showing the changes

**DERM Permit <sup>1</sup> number: SPDE02633311**

|                                               |                                                                                                                       |                                                                                   |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| <b>Assessment manager reference (if any):</b> | SPDE02633311                                                                                                          |                                                                                   |
| <b>Date application received:</b>             | 25 August 2011                                                                                                        |                                                                                   |
| <b>Permit type:</b>                           | Development Permit                                                                                                    |                                                                                   |
| <b>Date of decision:</b>                      | 21 September 2011                                                                                                     |                                                                                   |
| <b>Decision:</b>                              | The application is approved subject to conditions, and the assessment manager's conditions are stated in this permit. |                                                                                   |
| <b>Relevant laws and policies:</b>            | <i>Environmental Protection Act 1994</i> and any subordinate legislation                                              |                                                                                   |
| <b>Jurisdiction(s):</b>                       | Material change of use of premises –<br>For an environmentally relevant activity                                      | <i>Sustainable Planning Regulation 2009</i> - Schedule 3, Part 1, Table 2, item 1 |

**Development Description(s)**

| Property/Location                       |                     | Development                                                                                                                                                                  |
|-----------------------------------------|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 35-41 Kruger Road,<br>Carbrook QLD 4130 | Lot 1 Plan SP157751 | ERA 63 Sewage Treatment Threshold 2 (a)(i) –<br>operating sewage treatment works, other than<br>no-release works, with a total daily peak design<br>capacity of 21 to 100 EP |

<sup>1</sup> Permit includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation administered by the Department of Environment and Resource Management.

**Reason(s) for inclusion of conditions**

The conditions are included pursuant to section 73B of the *Environmental Protection Act 1994*.



21 September 2011

**Delegate**

Mike Thomas

Delegate, Chief Executive administering the  
*Environmental Protection Act 1994*,

Department of Environment and Resource Management

## CONDITIONS

### Conditions of the development approval

This development approval consists of the following schedules of conditions relevant to various issues:

This development approval consists of the following schedules.

- Schedule A - Activity
- Schedule B - Air
- Schedule C - Water
- Schedule D - Noise
- Schedule E - Waste
- Schedule F - Land
- Schedule G - Community
- Schedule H - Definitions
- Schedule I - Maps / Plans

#### Schedule A - Activity

##### Prevent and /or minimise likelihood of environmental harm

- (A1) 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 approval.

##### Maintenance of measures, plant and equipment

- (A2) The registered operator of this development approval must:
- (i) install all measures, plant and equipment necessary to ensure compliance with the conditions of this development approval; and
  - (ii) maintain such measures, plant and equipment in a proper and efficient condition; and
  - (iii) operate such measures, plant and equipment in a proper and efficient manner.

##### Minimise Infiltration

- (A3) All reasonable and practicable measures must be taken to minimise the infiltration of stormwater and / or groundwater to sewer.
- (A4) For the purposes of demonstrating compliance with condition A3, the registered operator must establish and maintain a system which addresses the following matters:
- (i) the estimated level of infiltration; and
  - (ii) the reasonable and practicable measures intended to minimise infiltration; and
  - (iii) the actions taken to minimise infiltration; and
  - (iv) periodic re-estimations of the level of infiltration and, by comparison with previous infiltration estimates and connected population, an assessment of the effectiveness of the actions taken to minimise infiltration; and
  - (v) where infiltration has been identified as a cause for overflows from sewerage infrastructure; and
  - (vi) details of the system must be provided to the administering authority upon request.

 21/1/11

### Site Based Management Plan

- (A5) From commencement of the activity, 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 Environmentally Relevant Activities that are carried out.

The SBMP must address the following matters:

- (i) Environmental commitments - a commitment by senior management to achieve environmental goals.
- (ii) Identification of environmental issues and potential impacts.
- (iii) Control measures for routine operations to minimise likelihood of environmental harm.
- (iv) Contingency plans and emergency procedures for non-routine situations.
- (v) Organisational structure and responsibility.
- (vi) Effective communication.
- (vii) Monitoring of the contaminant releases.
- (viii) Conducting environmental impact assessments.
- (ix) Staff training.
- (x) Record keeping.
- (xi) Periodic review of environmental performance and continual improvement.

- (A6) A copy of the SBMP and any amendment of the SBMP must be kept in a location readily accessible to personnel carrying out the activity and must be forwarded to the administering authority upon request.

- (A7) You must not implement or amend a SBMP in a manner that contravenes any condition of this development permit.

### Records

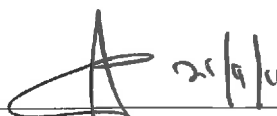
- (A8) Record, compile and keep all monitoring results required by this document and present this information to the administering authority when requested, in a specified format.

### Annual monitoring report (Sewage treatment)

- (A9) An annual monitoring report must be provided to the administering authority with the annual return upon request. This report shall include but not be limited to:
- (i) A summary of the previous twelve (12) months' monitoring results obtained under any monitoring programs required under this authority and, in graphical form showing relevant limits, a comparison of the previous twelve (12) month's monitoring results to both this authority limits and to relevant prior results;
  - (ii) An evaluation/explanation of the data from any monitoring programs; and
  - (iii) A summary of any record of quantities of releases required to be kept under this authority; and
  - (iv) A summary of the record of equipment failures or events recorded for any site under this authority; and
  - (v) An outline of actions taken or proposed to minimise the environmental risk from any deficiency identified by the monitoring or recording programs.

### Calibration

- (A10) All instruments and devices used for the measurement or monitoring of any parameter under any condition of this development approval must be calibrated, and appropriately operated and maintained.



**Trained Operators**

- (A11) The registered operator must ensure that the operation and maintenance of the environmentally relevant activities are carried out by or under the supervision of a person who is competent to operate and maintain the facility(ies).

**Display of development approval**

- (A12) A copy of this development approval must be kept in a location readily accessible to personnel carrying out the activity.

**Responsible contact person**

- (A13) The holder of this development approval shall ensure that a person is designated with the responsibility for:
- (i) Monitoring and recording the operation and performance of the sewage treatment plant and effluent disposal areas in accordance with the conditions of this development approval;
  - (ii) Reporting to the administering authority in the event of circumstances indicating that conditions of this development approval may be contravened; and
  - (iii) Reporting to the service agent of the sewage treatment plant in event of equipment malfunction which may cause conditions of this development approval to be contravened.
- (A14) The holder of this development approval shall provide contact details of the person designated in condition (A13) of this development approval to the administering authority:
- (i) Before the plant commences operating (i.e. discharges effluent to land); and
  - (ii) If a new designated contact person is appointed.
- (Note: Contact details should include full name, residential address and telephone number.)
- (A15) A current operators manual relating to the operation of the wastewater treatment plant system is to be provided on site.
- (A16) The holder of this development approval must ensure that the operation and maintenance of the environmentally relevant activity is carried out by or under the supervision of a person who is competent to operate and maintain the facility(ies).

**Notification of emergencies and incidents**

- (A17) As soon as practicable after becoming aware of any emergency or incident that results in the release of contaminants not in accordance with the conditions of this development approval, the holder of this development approval must notify the administering authority of the release by telephone or facsimile.
- (A18) The notification of emergencies or incidents as required by condition (A15) must include but not be limited to the following:
- (i) The holder of the development approval;
  - (ii) The location of the emergency or incident;
  - (iii) The number of the development approval;
  - (iv) The name and telephone number of the designated contact person;
  - (v) The time of the release;

- (vi) The time the holder of the development approval became aware of the release;
  - (vii) The suspected cause of the release;
  - (viii) The environmental harm caused, threatened or suspected to be caused by the release; and
  - (ix) Actions taken to prevent any further release and mitigate any environmental harm caused by the release.
- (A19) Not more than 14 days following the initial notification of an emergency or incident, the holder of the development approval must provide written advice of the information supplied in accordance with condition (A18) in addition to:
- (i) Proposed actions to prevent a recurrence of the emergency or incident; and
  - (ii) Outcomes of actions taken at the time to prevent or minimise environmental harm.

#### Infrastructure Requirements

- (A20) Continuous on-line real time monitoring for turbidity must be undertaken and recorded for treated wastewater prior to disinfection.
- (A21) Maintain the disinfection system as per manufacturers specifications, in particular including as a minimum:
- (i) Daily visual inspection and recording of disinfection indicators (e.g. UV intensity, chlorine residual (if applicable), turbidity);
  - (ii) Regular lamp cleaning and inspection; and
  - (iii) Lamp changes when required as per manufacturers specifications.
- (A22) Suitable infrastructure must be incorporated into the treatment system to allow effluent not in accordance with effluent quality criteria specified in Schedule F Table One to be automatically diverted into the start of the treatment system typically in situations due to plant failure.
- (A23) The UV disinfection system associated with the sewage treatment plant must have a dose of at least 140 mJ/cm<sup>2</sup> to treat 100,000 litres per day of secondary effluent.
- (A24) The UV disinfection system must have an auto-sleeve cleaning system, intensity indicator reading in mw/cm<sup>2</sup> and lamp failure detection.

#### END OF CONDITIONS FOR SCHEDULE A

#### Schedule B - Air

##### Nuisance

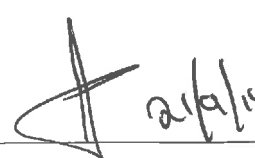
- (B1) The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any odour sensitive place.

#### END OF CONDITIONS FOR SCHEDULE B

#### Schedule C - Water

##### Release to waters

- (C1) Contaminants must not be released from the site to any waters or the bed and banks of any waters.



**Stormwater management**

- (C2) There must be no release of stormwater runoff that has been in contact with any contaminants at the site to any waters, roadside gutter or stormwater drain.
- (C3) Suitable banks and/or diversion drains must be installed and maintained to exclude stormwater runoff from entering any structures used for the storage or treatment of contaminants or wastes.

**Contaminant and sewage pump station**

- (C4) Contaminant pumping stations must be fitted with stand-by pumps and pump-failure alarms as well as high-level alarms to warn of imminent pump station overflow. All alarms must be able to operate without mains power.

**Contaminant Releases Caused by Rainfall**

- (C5) Erosion and sediment controls that minimise off-site removal of sediments and divert other stormwater from entering the site, must be provided and maintained during site clearing and construction works. Such measures must include, but not be limited to, diversion drainage works, siltation fences and temporary sediment traps.

**Recycled Water**

- (C6) Scouring, cleaning or flushing of the recycled water pipeline(s) is to be undertaken in a manner that will not result in environmental harm.
- (C7) Notices warning persons not to use or drink or have contact with the recycled water must be prominently displayed and must be maintained in a clearly visible and legible condition. The signs must:
- (i) be displayed at places where persons can gain access to, or have contact with the recycled water (eg. at taps, cocks, valves and contaminant release area(s); and
  - (ii) be distinctively colour coded (deep purple) and marked with the words: WARNING RECYCLED WATER DO NOT DRINK and are to include an appropriate warning symbol as well as text; and
  - (iii) be in compliance with AS1319 – Safety Signs for the occupational environment.
- (C8) Lockable valves or removable handles must be fitted to recycled water pipelines where there is public access to the pipelines and any part of the recycled water distribution system.
- (C9) Recycled water distribution systems other than for domestic and residual buildings should be clearly identified in accordance with *AZ/NZS 1345 – Identification of the contents of pipes, conduits and ducts*.

**END OF CONDITIONS FOR SCHEDULE C**

 25/9/14

**Schedule D - Noise and vibration****Noise nuisance**

- (D1) Noise from activities must not cause an environmental nuisance at any noise affected premises.
- (D2) All noise from activities must not exceed the levels specified in Schedule D – Table 1 at any noise affected premises.

**Schedule D – Table 1 (Noise limits)**

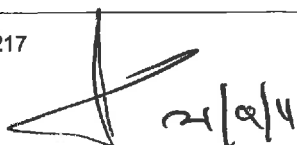
| Time period | Noise level at a 'Noise sensitive place' measured as the Adjusted Maximum Sound Pressure Level LA <sub>10</sub> adj, 10 mins |
|-------------|------------------------------------------------------------------------------------------------------------------------------|
| 7am - 6pm   | Background noise level plus 5 dB(A)                                                                                          |
| 6pm - 10pm  | Background noise level plus 5 dB(A)                                                                                          |
| 10pm - 7am  | Background noise level plus 3 dB(A)                                                                                          |
| Time period | Noise level at a 'Commercial place' measured as the Adjusted Maximum Sound Pressure Level LA <sub>10</sub> adj, 10 mins      |
| 7am - 6pm   | Background noise level plus 10 dB(A)                                                                                         |
| 6pm - 10pm  | Background noise level plus 10 dB(A)                                                                                         |
| 10pm - 7am  | Background noise level plus 8 dB(A)                                                                                          |

**Noise monitoring**

- (D3) 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:
- (i) background noise level;
  - (ii) LA, max adj, T
  - (iii) LA 10, adj, 10 mins
  - (iv) LA 1, adj, 10 mins
  - (v) the level and frequency of occurrence of impulsive or tonal noise;
  - (vi) atmospheric conditions including wind speed and direction;
  - (vii) effects due to extraneous factors such as traffic noise; and
  - (viii) location, date and time of recording.
- (D4) The method of measurement and reporting of noise levels must comply with the latest edition of the Environmental Protection Agency's *Noise Measurement Manual*.

**END OF CONDITIONS FOR SCHEDULE D****Schedule E - Waste****Waste handling**

- (E1) All regulated waste removed from the site must be removed by a person who holds a current approval to transport such waste under the provisions of the *Environmental Protection Act 1994*.

**END OF CONDITIONS FOR SCHEDULE E**


**Schedule F - Land****Land disposal**

- (F1) The only contaminants permitted to be released to land are treated sewage effluent to the areas defined in Schedule I of this development approval, drawing titled "Figure 1 Irrigation Areas" in compliance with the limits stated in Schedule F - Table 1.
- (F2) Prior to irrigation of recycled water or reuse on the site, a "commissioning" phase must be undertaken. This will consist of the taking of at least 1 sample per business day for 4 consecutive weeks. Irrigation and/or reuse is not to occur until 5 consecutive samples (taken at not less than 30 minutes apart) are taken that meet both the median and maximum criteria in Schedule F - Table 1 (Effluent quality limits). Following this 'commissioning' phase, testing for E.coli is required on a weekly basis as a single sample.
- (F3) For the initial "commissioning" phase when the system is first installed, the sampling regime will include 5 samples on day 1 followed by 1 sample per day thereafter for the duration of the "commissioning" phase.
- (F4) During any sampling for E.coli, should a single sample return a result greater than the maximum value in Schedule F - Table 1 (Effluent quality limits), a follow up sample must be taken immediately. Should this follow up sample return a value greater than the median criteria value in Schedule F - Table 1 (Effluent quality limits), the 'commissioning' phase referred to in condition F2 will begin again and irrigation will not commence until 5 consecutive samples meet the criteria from Schedule F - Table 1 (Effluent quality limits).

**Monitoring and Effluent Quality**

- (F5) Monitoring must be undertaken and records kept of contaminant releases to land for the parameters and not less frequently than specified in Schedule F - Table 1. All determinations of the quality of contaminants released must be:
- made in accordance with methods prescribed in the latest edition of the Environment Protection Agency Water Quality Sampling Manual; and
  - carried out on samples that are representative of the discharge.

**Schedule F - Table 1 (Effluent quality limits)**

| Quality Characteristic                      | Units                      | Release limit |                  |                 |      |         | Monitoring frequency |
|---------------------------------------------|----------------------------|---------------|------------------|-----------------|------|---------|----------------------|
|                                             |                            | Minimum       | Median           | 95th Percentile | Mean | Maximum |                      |
| 5-day Biochemical Oxygen Demand (inhibited) | mg/L                       |               | 20               |                 |      | 40      | Monthly              |
| Total Suspended Solids                      | mg/L                       |               | 5                |                 |      | 10      | Monthly              |
| Dissolved Oxygen                            | mg/L                       | 2.0           |                  |                 |      |         | Monthly              |
| Turbidity                                   | NTU                        |               |                  | 2               |      | 5       | Continuous           |
| pH                                          | scale                      | 6.0           |                  |                 |      | 8.5     | Monthly              |
| Total Nitrogen                              | mg/L as Nitrogen           |               |                  |                 | 90   | 135     | Monthly              |
| Total Phosphorus                            | mg/L as Phosphorus         |               |                  |                 |      | 15      | Monthly              |
| Electrical Conductivity                     | microSiemens per cm        |               |                  |                 |      |         | Monthly              |
| <i>E. coli</i>                              | colony forming units/100mL |               | <10 <sup>1</sup> |                 |      | 15      | Weekly               |

1 means rolling median of the last five consecutive samples taken at no less than 30 minute intervals.

< indicates less than

### Sampling and *In Situ* Monitoring Point Details

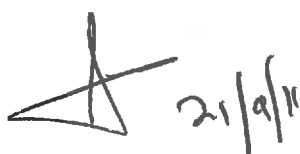
- (F6) Determinations of the quality of contaminants released to check conformity with the release quality characteristics specified in Schedule F – Table 1 of this development approval must be undertaken at the sampling and *in-situ* measurement points described as:
- (i) the outlet of the recycled water storage tank for all parameters except for turbidity and *E. coli*; and
  - (ii) for *E. coli*, at the furthest point practical after the final disinfection point within the recycled water distribution system; and
  - (iii) for continuous turbidity monitoring, treated wastewater stream prior to disinfection.

### Quantity of Contaminants Released from the Sewage Treatment Plant

- (F7) 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.
- (F8) The hydraulic flow rate of contaminants released to land must be recorded daily.

### Treated Effluent Irrigation.

- (F9) A minimum area of 0.80 hectares of land, excluding any necessary buffer zones, must be utilised for the irrigation of treated effluent.
- (F10) Soil moisture metres must be used to detect the soil water deficit trigger for treated effluent irrigation within the contaminant release areas.
- (F11) All grass/vegetation clippings must be removed from the contaminant release area upon harvesting.
- (F12) The irrigation of treated effluent must be carried out in a manner such that:
- (i) vegetation is not damaged;
  - (ii) soil erosion and soil structure damage is avoided;
  - (iii) there is no surface ponding and/or runoff of treated effluent;
  - (iv) percolation of treated effluent beyond the plant root zone is minimised;
  - (v) the capacity of the land to assimilate nitrogen, phosphorus, salts, organic matter as measured by biochemical oxygen demand and water is not exceeded;
  - (vi) the quality of groundwater is not adversely affected;
  - (vii) there is no spray drift, overspray or contaminated runoff outside the designated irrigation area; and
  - (viii) the risk of exposure of public to the treated effluent is minimised.
- (F13) Notices must be prominently displayed on areas undergoing effluent irrigation, warning the public that the area is irrigated with treated effluent and not to use or drink the treated effluent. These notices must be maintained in a visible and legible condition.
- (F14) Pipelines and fittings associated with the effluent irrigation system must be clearly identified. Lockable valves or removable handles must be fitted to all release pipes situated in public access areas.



- (F15) When conditions prevent the irrigation of treated effluent to land (such as during or following rain events), the contaminants must be directed to a 90 kiloLitre wet weather storage or alternative measures must be taken to store/lawfully dispose of the treated effluent (such as tanking off site to another treatment plant or sewer). A record must be kept of any removal or discharge off site, including destination, transporter, dates and volumes.

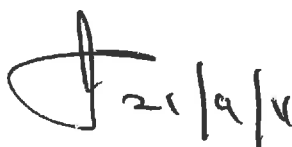
**Preventing contaminant release to land**

- (F16) Spillage of all chemicals and fuels must be contained within an on-site containment system and controlled in a manner that prevents environmental harm.

NOTE: All petroleum product storage's must be designed, constructed and maintained in accordance with AS 1940 - *Storage and Handling of Flammable and Combustible Liquids*.

**Effluent Irrigation Management Plan**

- (F17) Within three (3) months of the date of issue of this development approval, the registered operator of this development approval must develop and implement an Irrigation Management Plan (IMP) which details how the registered operator of this development approval will effectively and appropriately manage the effluent irrigation process so as to ensure that the release of effluent to land is carried out in an environmentally sustainable manner.
- (F18) The IMP must detail how irrigation will be managed and monitored so that the following occur:
- (i) vegetation is not damaged; and
  - (ii) soil erosion and soil structure damage is avoided; and
  - (iii) there is no surface ponding or runoff of effluent; and
  - (iv) effluent is evenly distributed on the irrigation area; and
  - (v) infiltration of effluent beyond the plant root zone is minimised; and
  - (vi) the capacity of the land to assimilate nitrogen, phosphorous, salts and organic matter is not exceeded; and
  - (vii) the quality of groundwater is not adversely affected; and
  - (viii) how irrigation using treated effluent to land will be carried out if soil moisture conditions are such that surface runoff, ponding or pooling beyond the property boundary is likely to occur and how this will be managed (e.g. use of soil moisture meters); and
  - (ix) how irrigation using treated effluent to land will not result in adverse public health issues (i.e. plumbing controls, signage); and
  - (x) procedures for educating and training students and staff about public health issues associated with using treated effluent onsite are developed.
- (F19) A copy of the Irrigation Management Plan must be kept at the premises to which this development approval relates and be available to an officer authorised under the *Environmental Protection Act 1994* upon request.

 21/9/18

**Contaminant Release Area Monitoring Program**

- (F20) The registered operator of this development approval must develop and implement a Contaminant Release Area Monitoring Program to effectively monitor the condition of the land to which contaminants are released.
- (F21) Monitoring required by condition (F20) must include the taking of topsoil and sub-soil samples from representative sites for the quality characteristics and at the frequency specified in Schedule F - Table 2.
- (F22) Not more than six (6) calendar months after the date of issue of this development approval, the registered operator of this development approval must submit a proposal for the Contaminant Release Area Monitoring Program to the administering authority.
- (F23) The proposal for the Contaminant Release Area Monitoring Program must include but not be limited to the following:
- (i) the locations of monitoring stations including soil moisture and soil types, and depths; and
  - (ii) the proposed vegetation characteristics to be monitored; and
  - (iii) harvesting practice to ensure the proper maintenance of the irrigation area.
- (F24) The registered operator of this development approval must prepare a report on the Contaminant Release Area Monitoring Program within two months of each sampling event including an assessment of the impact and sustainability of the application of treated effluent to the contaminant release area. This report must include an interpretation of the results and conclusions by an expert in the field of effluent land disposal.

Schedule F - Table 2 (Soil impact monitoring)

| Quality Characteristics                               | Units            | Monitoring Frequency                      |
|-------------------------------------------------------|------------------|-------------------------------------------|
| pH                                                    | pH scale         | On commencement and biennially thereafter |
| Specific Conductance or electrical conductivity (1:5) | $\mu\text{S/cm}$ | On commencement and biennially thereafter |
| Calcium                                               | mg/kg            | On commencement and biennially thereafter |
| Magnesium                                             | mg/kg            | On commencement and biennially thereafter |
| Potassium                                             | mg/kg            | On commencement and biennially thereafter |
| Cation Exchange capacity                              | meq/100g         | On commencement and biennially thereafter |
| Exchangeable calcium                                  | meq/100g         | On commencement and biennially thereafter |
| Exchangeable magnesium                                | meq/100g         | On commencement and biennially thereafter |
| Exchangeable sodium                                   | meq/100g         | On commencement and biennially thereafter |
| Exchangeable potassium                                | meq/100g         | On commencement and biennially thereafter |
| Exchangeable aluminium                                | meq/100g         | On commencement and biennially thereafter |
| Sodium Adsorption Ratio                               |                  | On commencement and biennially thereafter |
| Total Nitrogen as N                                   | mg/kg            | On commencement and biennially thereafter |
| Extractable Phosphorus                                | mg/kg            | On commencement and biennially thereafter |
| Boron                                                 | mg/kg            | On commencement and biennially thereafter |

END OF CONDITIONS FOR SCHEDULE F

**Schedule G - Community****Complaint response**

- (G1) 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.

END OF CONDITIONS FOR SCHEDULE G

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## DEFINITIONS

Words and phrases used throughout this permit<sup>1</sup> are defined below. Where a definition for a term used in this permit<sup>1</sup> is sought and the term is not defined within this permit<sup>1</sup> the definitions provided in the relevant legislation shall be used.

**"administering authority"** means the Department of Environment and Resource Management 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.

**"artificial waterway"** means an artificial channel, lake or other body of water. Artificial waterway includes –

- an artificial channel that is formed because the land has been reclaimed from tidal water and is intended to allow boating access to allotments on subdivided land;
- other artificial channels subject to the ebb and flow of the tide; and
- any additions or alterations to an artificial waterway.

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

**"canal"** means an artificial waterway surrendered to the State. A canal is an artificial waterway connected, or intended to be connected, to tidal water; and from which boating access to the tidal water is not hindered by a lock, weir or similar structure.

**"clinical waste"** means waste that has the potential to cause disease including, for example, the following:

- animal waste;
- discarded sharps;
- human tissue waste;
- laboratory waste.

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

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

**"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*.

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

**"high water mark"** means the ordinary high water mark at spring tides.

**"infectious waste"** means waste containing viable micro-organisms or their toxins which are known or suspected to cause disease in animals or humans.

**"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<sub>A</sub> 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<sub>A</sub> 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<sub>A</sub>, 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.

"**ponded pasture**" means a permanent or periodic pondage of water in which the dominant plant species are pasture species used for grazing or harvesting.

"**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.

"**quarry material**" means material on State coastal land, other than a mineral within the meaning of any Act relating to mining. Material includes for example stone, gravel, sand, rock, clay, mud, silt and soil, unless it is removed from a culvert, stormwater drain or other drainage infrastructure as waste material.

"**regulated waste**" means waste mentioned in Chapter 5, Part 1 of the *Environmental Protection Regulation 2009 IB*.

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

"**tidal water**" means the sea and any part of a harbour or watercourse ordinarily within the ebb and flow of the tide at spring tides.

"**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.

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

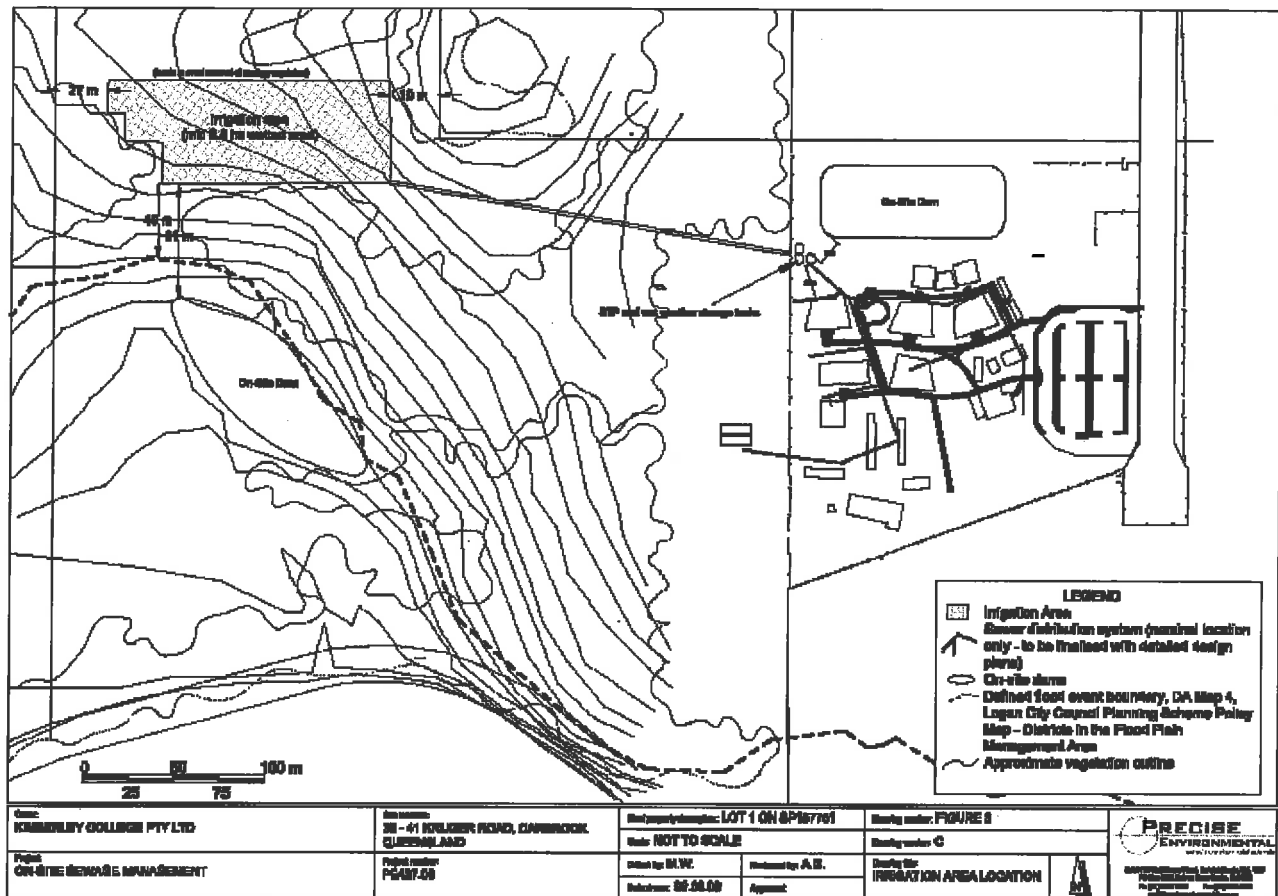
**"you"** means the holder of this development approval or owner / occupier of the land which is the subject of this development approval.

**"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

**END OF CONDITIONS**

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