

DERM Permit ¹ number: SPDE01850111

Assessment manager reference (if any):	362819 (Project Number) 460640 (Application Number)
Date application received:	27 April 2011
Permit type:	development permit
Date of decision:	24 June 2011
Decision:	The application is approved subject to conditions, and the assessment manager's conditions are stated in this permit, and any concurrence agency conditions are attached to this permit in the exact form given by the concurrence agency named on the attachment.
Relevant laws and policies:	<i>Environmental Protection Act 1994</i> <i>Environmental Regulation 2008</i> <i>Environmental protection (Air) Policy 2008</i> <i>Environmental Protection (Noise) Policy 2008</i> <i>Environmental Protection (Waste Management) Policy 2000</i> <i>Environmental Protection (Waste Management) Regulation 2000</i> <i>Environmental Protection (Water) Policy 2009</i> <i>Sustainable Planning Act 2009</i> <i>Sustainable Planning Regulation 2009</i>
Jurisdiction(s):	Material change of use of premises - For an environmentally relevant activity under the <i>Sustainable Planning Regulation 2009</i> – Schedule 3, Part 1, Table 2, item 1.

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



Development Description(s)

Property/Location		Development
Cnr of Keilamete and Goanna Flat Roads RUBYVALE QLD 4702	Lot 2 on plan MPH21859	ERA 63- Sewage Treatment (2)(a)(i) Operating sewage treatment works, other than no-release works, with a total daily peak design capacity of 21 to 100 EP-if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme.

Reason(s) for inclusion of conditions

In accordance with section 289 of the *Sustainable Planning Act 2009*, the reason(s) for inclusion of conditions stated in this permit required by the assessment management response for the application are as follows.

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



Delegate

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

CONDITIONS

This development permit consists of the following schedules of conditions:

- Schedule A – Activity
- Schedule B – Air
- Schedule C – Water
- Schedule D – Noise
- Schedule E – Land
- Schedule F – Waste
- Schedule G – Social
- Schedule H - Definitions

Schedule A – Activity

Scope of Activity

- A1** This development permits the carrying out of environmentally relevant activity (ERA) 63 2(a)(i) operating sewage treatment works, other than no-release works of 21 to 100EP that is discharged from the works through an irrigation scheme.

Prevent and/or minimise Likelihood of Environmental Harm

- A2** In carrying out the activity to which this permit relates, all reasonable and practicable measures must be taken to prevent and/or to minimise the likelihood of environmental harm being caused.

Display of Development Approval

- A3** A copy of this development approval must be kept in a location readily accessible to persons carrying out the activity.

Site Based Management Plan

- A4** From commencement of the activity to which the approval relates, the holder of this development permit must develop and implement a SBMP. The SBMP must identify all potential 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 the Environmentally Relevant Activity (ERA) carried out at this site.
- A5** The SBMP must address the following matters:
- a) Environmental commitments - a commitment by senior management to achieve environmental goals;
 - b) Identification of environmental issues and potential impacts;
 - c) Control measures for routine operations to minimise the likelihood of environmental harm;
 - d) Control measures for routine operations to minimise likelihood of environmental harm;

- e) Contingency plans and emergency procedures for non-routine situations;
 - f) Organisational structure and responsibility;
 - g) Effective communication;
 - h) Monitoring of the contaminant releases;
 - i) Conducting environmental impact assessments;
 - j) Staff training;
 - k) Record keeping;
 - l) Periodic review of environmental performance and continual improvement;
- A6** The SBMP must not be implemented or amended in a way that contravenes any condition of this permit. If there is a potential conflict between the SBMP and the conditions of this permit, the conditions of this permit take precedent.
- A7** The SBMP must be reviewed every 2 years. Any subsequent revisions must be submitted to the approving body no later than 14 days after revisions are implemented.
- A8** The SBMP must be kept in a location readily accessible to persons carrying out the activity.

Maintenance of Measures, Plant and Equipment

- A9** The holder of this Permit 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.

Monitoring

- A10** An experienced and suitably qualified person(s) must conduct any monitoring required by this permit.

Sample Analysis

- A11** All analyses and tests required to be conducted under this development permit must be carried out by a laboratory that has National Association of Testing Authorities (NATA) certification for such analyses and tests, except as otherwise authorised by the administering authority.
- A12** The registered operator of the ERA to which this development permit relates must ensure that the results of all the monitoring performed in accordance with this development permit for the period covered by the annual return are kept at the premises to which this development relates.

Equipment Calibration

- A13** All instruments, equipment and measuring devices used for measuring and monitoring in accordance with any condition of this approval must be calibrated, appropriately and competently operated and maintained.

Trained/Experienced Operator(s)



- A14** The operation of the sewage treatment plant and pollution control equipment must be carried out by a person(s) with appropriate experience and/or qualifications to ensure the effective operation of the treatment plant and control equipment.
- A15** All persons engaged in the conduct of the ERA, including but not limited to employees and contract staff, must:
- (i) be trained in the procedures and practices necessary to:
 - a) comply with the conditions of this approval; and
 - b) prevent environmental harm during normal operation and emergencies; or
 - (ii) be under the close supervision of such trained person.

Spill Kit

- A16** An appropriate spill kit(s) and relevant operator instructions/emergency procedure guides for the management of wastes and chemicals associated with this permit must be kept at the site.
- A17** Anyone operating with wastes, oils, chemicals or flammable and combustible liquids under this permit must be trained in the use of the spill kit.

Record Keeping

- A18** The holder of this development permit must record, compile and keep all data required by this permit. This data must be made available to the administering authority if requested.
- A19** All records required by this permit must be kept for **five (5) years**.

Notification of Emergencies and Incidents

- A20** Any emergency, incident or event, which results in the release of contaminants not in accordance with, or reasonably expected to be in accordance with the conditions of this permit, must be reported by telephone to the administering authorities' pollution hotline or the administering authorities' district located in the area where the release occurred. Any such release must be reported as soon as practicable, but no later than 24 hours after the holder of the development permit becomes aware of the release.

Information to Follow Notification

- A21** A written notice detailing the following information must be provided to the administering authority within **seven (7) days** of any advice provided in accordance with **A20**:
- a) the name of the operator, including their approval and 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.

Annual Monitoring Report

- A23** An annual report must be prepared each year and presented to the administering authority on the anniversary date (date of approval). This report shall include but not be limited to:
- a) a summary of the previous 12 months monitoring results obtained under any monitoring programs required under this permit and, in graphical form showing relevant limits, a comparison of the previous 12 months monitoring results to both this permits limits and to relevant prior results;
 - b) an evaluation/explanation of the data from any monitoring programs;
 - c) a summary of any record of quantities of releases required to be kept under this permit;
 - d) a summary of the record of equipment failures or events recorded for any site under this permit; and
 - e) an outline of actions taken or proposed to minimise the environmental risk from any deficiency identified by the monitoring or recording programs must be submitted along with the annual monitoring report.

Alterations

- A24** No change, replacement or operation of any plant or equipment is permitted, if the change replacement or operation of the plant or equipment increases, or is likely to substantially increase the risk of environmental harm above that expressly provided for by this approval.

END OF SCHEDULE A CONDITIONS

Schedule B – Air

Odour Nuisance

- B1** The release of noxious or offensive odours or any other noxious or offensive airborne contaminant(s) resulting from the activity must not cause a nuisance at any nuisance sensitive place or commercial place.
- B2** When requested by the administering authority, odour monitoring must be undertaken within a reasonable and practicable timeframe nominated by the administering authority to investigate any complaint (which is neither frivolous nor vexatious nor based on mistaken belief in the opinion of the authorised officer) of environmental nuisance at any nuisance sensitive or commercial place, and the results must be notified within **fourteen (14) days** to the administering authority following completion of monitoring. Monitoring must be carried out at a place(s) relevant to the potentially affected odour sensitive place and at upwind control sites and must:
- a) address the complaint including the use of appropriate dispute resolution if required; and
 - b) immediately implement odour abatement measures so that emissions of odour from the activity do not result in further environmental nuisance.

Dust Nuisance

- B3** The release of dust and/or particulate matter resulting from the activity must not cause an environmental nuisance at any nuisance sensitive or commercial place.
- B4** 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 **seven (7) 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.

END OF SCHEDULE B CONDITIONS

Schedule C – Water

Water Release

- C1** The holder of this development approval is not permitted to release contaminants from the authorised place to any waters or the bed and banks of any waters.

Erosion Protection Measures and Sediment Controls

- C2** Erosion protection measures and sediment control measures must be implemented and maintained to minimise erosion and the release of sediment to any waters, roadside gutter or stormwater drain.

Stormwater Management

- C3** Suitable banks, structures and/or diversion drains must be installed and maintained to exclude stormwater runoff from entering any structures used for the storage of contaminants or wastes.
- C4** There must be no release of stormwater runoff that has been in contact with any contaminants at the site to any waters, the roadside gutter or stormwater drain.

Monitoring of Volume of Sewage

- C5** The daily volume and flow rate of sewage entering the Sewage Treatment Plant must be determined or estimated by an appropriate method with an accuracy of $\pm 5\%$, for example a calibrated flow meter and records kept of such determinations.

Overflow Structures

- C6** Sewage pump stations must be fitted with stand-by pumps and pump-failure alarms as well as high level alarms to warn of imminent sewage pump station overflow.



- C7** Treated effluent must not be used for any other purpose a the place to which this development approval relates other than for irrigation at designated effluent irrigation area consistent with the *Queensland Water Recycling Guidelines 2009* or more recent editions and in accordance with the conditions of this development approval.

END OF SCHEDULE C CONDITIONS

Schedule D – Noise

Nuisance

- D1** Noise from activities must not cause an environmental nuisance at any nuisance sensitive place or any commercial place.
- D2** All noise from activities must not exceed the levels specified in **Schedule D - Table 1** at any nuisance sensitive place or any commercial place.
- D3** In the event of a complaint about noise that constitutes annoyance being made to the administering authority, that the administering authority considers is not frivolous or vexatious, then the emission of noise from the site must not result in levels greater than those specified in **Schedule D – Table 1**.

Schedule D – Table 1 - Noise Limits

Noise level dB(A) measured as	Monday to Saturday			Sundays and public holidays		
	7am - 6pm	6pm - 10pm	10pm - 7am	9am - 6pm	6pm - 10pm	10pm - 9am
	Noise measured at a 'Noise sensitive place'					
	L _{A10} , adj, 10 mins	Bkg + 5	Bkg + 5	Bkg + 0	Bkg + 5	Bkg + 5
L _{A1} , adj, 10 mins	Bkg + 10	Bkg + 10	Bkg + 5	Bkg + 10	Bkg + 10	Bkg + 5
	Noise measured at a 'Commercial place'					
L _{A10} , adj, 10 mins	Bkg + 10	Bkg + 10	Bkg + 5	Bkg + 10	Bkg + 10	Bkg + 5
L _{A1} , adj, 10 mins	Bkg + 15	Bkg + 15	Bkg + 10	Bkg + 15	Bkg + 15	Bkg + 10

Note: Bkg means background

Noise Monitoring

- D4** 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 —
- (a) LA10, adj, 10 mins
 - (b) LA1, adj, 10 mins
 - (c) the level and frequency of occurrence of impulsive or tonal noise;
 - (d) atmospheric conditions including wind speed and direction;
 - (e) effects due to extraneous factors such as traffic noise;
 - (f) location, date and time of recording;
 - (g) details of measurement instrumentation and measurement procedure; and
 - (h) an analysis of monitoring data must be provided in the context of defined limits as stated in Schedule D of this approval.
- D5** The method of measurement and reporting of noise levels must comply with the latest edition of the administering authority's Noise Measurement Manual.

END OF SCHEDULE D CONDITIONS

Schedule E – Land

Protecting Land from Contaminants

- E1** Contaminants must not be released to land, except where otherwise stated in a condition of this approval.
- E2** Activities on site must be conducted in a way that prevents any potential or actual release of contaminants to land that constitutes environmental nuisance or harm.

Description of Contaminants Released to Land

- E3** From commencement of an environmental activity to which this approval relates, the only contaminants permitted to be released to land are treated sewage wastes shown in Christians' Plumbing document entitled, "*On site Sewerage Design, The New Royal Hotel*".
- E4** All treated effluent released from the sewage treatment facilities must be monitored from the treated effluent storage facilities for the parameters stated in **Table 2 – Treated Sewage Waste Quality Characteristics**.
- E5** Treated Effluent Quality Characteristics must be sampled from the treated effluent storage tank prior to irrigation.
- E6** Notwithstanding the quality characteristics limits specified in **Table 2 – Treated Effluent Quality Characteristics**, release of recycled water to land must not have any properties nor contain any organisms or other contaminants in concentrations that are capable of causing environmental harm.
- E7** The daily volume of contaminants as treated effluent released to land must be determined or estimated by an appropriate method with an accuracy of +/- 5%, for example a flow meter, and

records kept of such determinations or estimations.

Table 2 - Treated Effluent Quality Characteristics

Water Quality Parameters	Units	Minimum	Maximum	Monitoring Frequency
pH	pH Scale	6.0	8.5	Weekly
Residual Chlorine	mg/L	1	-	Weekly
Total Nitrogen	as Nitrogen mg/L	-	20	Quarterly
Total Phosphorous	mg/L as Phosphorus	-	10	Quarterly
Total Suspended Solids	mg/L	-	30	Quarterly
Biochemical Oxygen Demand	5 day inhibited, mg/L	-	20	Quarterly

- E8** All treated effluent to be irrigated or transferred must not exceed water quality limits defined in **Table 2- Treated Effluent Quality Characteristics**.
- E9** The daily volume of contaminants as treated effluent released to land must be determined or estimated by an appropriate method with an accuracy of +/-5%, for example a flow meter, and records kept of such determinations or estimations.
- E10** The approved irrigation area is the area identified in Christian's Plumbing document entitled, "*On site Sewerage Design, The New Royal Hotel*".
- E11** 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.
- E12** Notices must be prominently displayed on areas undergoing recycled water irrigation, warning the public that the area is sub-irrigated with treated effluent and not to use or drink the treated effluent water. These notices must be maintained in a visible and legible condition and be in compliance with AS319 – *Safety signs for the occupational environment*.
- E13** Any biomass (grass/vegetation clippings) removed from plants growing on irrigated land must be transported and disposed of in areas other than on the irrigated land.

- E14** Treated effluent must not be used for any other purpose at the place to which this development permit relates other than for irrigation at designated effluent irrigation area or non-potable uses consistent with the *Queensland Water Recycling Guidelines 2009* or more recent editions and in accordance with the conditions of this development permit.

Treated Effluent Irrigation Management Plan

- E15** The registered operator must develop and implement an Irrigation Management Plan (IMP) by **01 December 2011** which details how the effluent irrigation process will be effectively and appropriately managed so as to ensure that the release of effluent to land is carried out in an environmentally sustainable manner.
- E16** The IMP must detail how irrigation will be managed and monitored so that the following occur:
- a) vegetation is not damaged;
 - b) soil erosion and/or soil structure damage are avoided;
 - c) effluent is evenly distributed on the irrigation area;
 - d) infiltration of effluent beyond the plant root zone is minimised;
 - e) the capacity of land to assimilate nitrogen, phosphorous, salts and organic matter is not exceeded;
 - f) the quality of groundwater is not adversely affected;
 - g) how irrigation using 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. soil moisture meters); and
 - h) how irrigation of land will not result in adverse public health issues (i.e. plumbing controls signage).
- E17** A copy of the IMP must be kept at the premises and made available upon request.
- E18** A scaled plan must be kept for the layout of the treated effluent irrigation infrastructure (pipe work, hoses and connections) for each effluent release area.

Wet Weather Storage

- E19** When conditions prevent the application of treated effluent to land, the treated effluent must be directed to wet weather storage.
- E20** A minimum storage capacity of 22000L must be available for wet weather storage of treated effluent.
- E21** Excess effluent beyond the wet weather storage capacity must be removed from site by a licensed liquid waste contractor.

END OF SCHEDULE E CONDITIONS

Schedule F – Waste



- F1** A record of all regulated 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.
- F2** All regulated waste removed from the site must be removed by a person who holds a current Permit to transport such waste under the provisions of the *Environmental Protection Act 1994*.
- F3** All waste generated in carrying out the activity must be disposed of at a facility that can lawfully accept that waste.

END OF SCHEDULE F CONDITIONS

Schedule G - Social

Complaint Response

- G1** The operator of the activity 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) the allegation made by the complainant;
 - c) details of communications with the complainant;
 - d) any investigations undertaken; and
 - e) conclusions formed; and
 - f) any actions taken.
- G2** The operator of the activity must attempt to make contact with any complainant within 24 hours of a complaint being received and initiate complaint resolution measures.

END OF SCHEDULE G CONDITIONS



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 Department of Environment and Resource Management or its successor.
approved plans	means the plans and documents listed in the approved plans section in the notice attached to this development permit.
authorised place	means the place authorised under this development permit for the carrying out of the specified environmentally relevant activities.
appropriately qualified person	means a person who has professional qualifications, training, skills or experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis on performance relative to the subject matter using the relevant protocols, standards, methods or literature.
certification or certified	by a suitably qualified and experienced person in relation to a design plan or an annual report regarding STPs, means that a statutory declaration has been made by that person and, when taken together with any attached or appended documents referenced in that declaration, all of the following aspects are addressed and are sufficient to allow an independent audit at any time: a) exactly what is being certified and the precise nature of that certification. b) the relevant legislative, regulatory and technical criteria on which the certification has been based; c) the relevant data and facts on which the certification has been based, the source of that material, and the efforts made to obtain all relevant data and facts; and d) the reasoning on which the certification has been based using the relevant data and facts, and the relevant criteria.
contaminant	means- a) a gas, liquid or solid; or b) an odour; or c) an organism (whether alive or dead), including a virus; or d) energy, including noise, heat, radioactivity and electromagnetic radiation; or a combination of contaminants
commercial place	means a place used as an office or for business or commercial purposes.
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 nuisance	means unreasonable interference or likely interference with an environmental value caused by: a) noise, dust, odour, light; or b) an unhealthy, offensive or unsightly condition because of contamination; or c) another way prescribed by regulation (e.g. unreasonable noise or dust emissions).
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 of this permit means land excluding waters and the atmosphere.
mg/L	means milligrams per litre.
measure	means an action, system, procedure and infrastructure that is intended as a means to an end (<i>ie to take measures to prevent dust release</i>).
MEDLI	Model for Effluent Disposal using Land Irrigation
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 <i>Nature Conservation Act 1992</i>, the <i>Marine Parks Act 1992</i> 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.
receiving waters	means all groundwater and surface water that are not disturbed areas authorised by this Development Permit
regulated waste	means non-domestic waste mentioned in Schedule 7 of the <i>Environmental Protection Regulation 1998</i> (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.
release	means – a) to deposit, discharge, emit or disturb the contaminant; and b) to cause or allow the contaminant to be deposited, discharged, emitted or disturbed; and c) to allow the contaminant to escape; and d) to fail to prevent the contaminant from escaping.
site	means land or tidal waters on or in which it is proposed to carry out the development

approved under this development permit.

watercourse

the meaning assigned to it in schedule 4 of the *Water Act 2000*

waters

mean –

- a) river, creek, stream in which water flows permanently or intermittently either:
 - i. in a natural channel, whether artificially improved or not; or
 - ii. in an artificial channel that has changed the course of the river, creek or stream; or
- b) lake, lagoon, pond, swamp, wetland, dam; or
- c) unconfined surface water; or
- d) storm water channel, storm water drain, roadside gutter; or
- e) bed and banks and any other element of a river, creek, stream, lake, lagoon, pond, swamp, wetland, storm water channel, storm water drain, roadside gutter or dam confining or containing water; or
- f) groundwater; or
- g) non-tidal or tidal waters (including the sea); or
- h) any part-thereof.

works or operation

means the development approved under this development permit.

END OF SCHEDULE H CONDITIONS

END OF CONDITIONS

