eco access
licences and permits

Registration certificate

Environmental Protection Act 1994

Certificate of Registration

No: ENRE00127105

This registration certificate is issued by the administering authority and takes effect from: 23-August-2009.

The anniversary day for the purposes of the Annual Return remains: 21 July.

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:-
The University of Qld
Gatton College Campus
Warrego Highway,
GATTON QLD 4343

Place:-
Lot 184 Plan CC3374

Located at:-
UQ Gatton College Campus,GATTON QLD 4343

Registered Activity:-
ERA 63 Sewage treatment Threshold 2(c) - operating sewage treatment works, other than no-release works, with a total daily peak design capacity of more than 1500 to 4000EP

Richard Oakley
Delegate of the Chief Executive
Department of Environment and Resource Management
24-AUG-2010

Replacement Development Approval
Section 621(4) *Environmental Protection Act 1994*

EPA Development Application (Converted Environmental Authority) number:	ENDC00127305
Relevant Laws and Policies:	*Environmental Protection Act 1994* and subordinate legislation

Under the provisions of the Environmental Protection Act 1994 this development approval is issued to:

The University of Queensland
Properties and Facilities Division
Gatton College Campus
Warrego Highway
GATTON QLD 4343

Development Description:

Carrying out of Environmentally Relevant Activity (ERA):

15(c) Sewage treatment - Operating a standard sewage treatment works having a peak design capacity to treat sewage of 1500 or more equivalent persons but less than 4000 equivalent persons

at the following place(s):

Lot 184 Plan CC3374, County of Churchill, Parish of Blenheim

located at:

University of Queensland
Gatton College Campus
Warrego Highway
LAWES QLD 4505

The environmentally relevant activity must be constructed, operated and maintained in accordance with the conditions as set out in the attached schedule of conditions.

Further development permits required

Nil

Additional information for applicants

This approval pursuant to the *Environmental Protection Act 1994* does not remove the need to obtain any further approval for this development which might be required by other State and/or Commonwealth legislation. Applicants are advised to check with all relevant statutory authorities. Applicants also should comply with all relevant legislation.

It is a requirement of the *Environmental Protection Act 1994* that if the owner or occupier of this site becomes aware a Notifiable Activity (as defined under schedule 2 of the *Environmental Protection Act 1994*) is being

carried out on this land or that the land has been affected by a hazardous contaminant, they must, within 30 days after becoming aware the activity is being carried out, give notice to the Environmental Protection Agency. A list of Notifiable Activities is provided within Schedule 2 of the *Environmental Protection Act 1994*.

Appeal

This development approval is issued pursuant to section 621 of the Environmental Protection Act 1994. The rights of review and appeal are attached to this notice.

This development approval takes effect 10 Business days after you receive this notice, or if there is an appeal from the day the appeal is finally decided or is otherwise ended.

Signed

7/1/05
Date

Sarah Fenaughty
Acting Manager (Licensing)
Delegate of Administering Authority
Environmental Protection Act 1994

Conditions of the development approval

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

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

This Authority incorporates the following schedules of conditions relevant to various issues:

- Schedule A - General Conditions
- Schedule B - Air
- Schedule C - Water
- Schedule D - Stormwater Management
- Schedule E - Land Application
- Schedule F - Noise
- Schedule G - Waste Management
- Schedule H - Self Monitoring and Reporting
- Schedule I - Definitions

Schedule A – General Conditions

Maintenance of Plant and Equipment

(A1) The holder of this environmental authority must:

(i) install all plant and equipment necessary to ensure compliance with the conditions of this environmental authority; and
(ii) maintain such plant and equipment in a proper and efficient condition; and
(iii) operate such plant and equipment in a proper and efficient manner.

In this condition, "plant and equipment" includes:
(i) plant and equipment used to prevent and/or minimise the likelihood of environmental harm being caused;
(ii) devices and structures to contain foreseeable escapes of contaminants and waste;
(iii) vehicles used to transport waste;
(iv) devices and structures used to store, handle, treat and dispose of waste;
(v) monitoring equipment and associated alarms; and
(vi) backup systems that act in the event of failure of the primary system.

Display of Environmental Authority

(A2) A copy of this environmental authority must be kept in a location readily accessible to personnel carrying out the activity.

Trained Operators

(A3) All persons engaged in the conduct of the activity, including but not limited to employees and contract staff, must be:

(i) trained in the procedures and practices necessary to:
  (a) comply with the conditions of this environmental authority, and
  (b) prevent environmental harm during normal operation and emergencies; or
(ii) under the close supervision of such a trained person.

Records

(A4) Any record or document required to be kept by a condition of this environmental authority must be kept at the licensed place for a period of at least five years and be available for examination by an authorised person. The record retention requirements of this condition will be satisfied if any daily and weekly records are kept for a period of at least three (3) years and these records are then kept in the form of annual summaries after that period.

Alterations

(A5) 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 by this environmental authority.

An example of a substantial increase in the risk of environmental harm is an increase of 10% or more in the quantity of the contaminant to be released into the environment.

Calibration

(A6) All instruments and devices used for the measurement or monitoring of any parameter under any condition of this environmental authority must be calibrated, and appropriately operated and maintained.

Site-Based Management Plan

(A7) By 1 July 1998, the holder of this environmental authority, must develop and implement an effective and appropriate Site-based Management Plan which details how the holder of this environmental authority will manage the actual and potential environmental impacts resulting from the carrying out of the environmentally relevant activity.

(A8) The Site-based Management Plan must address at least the following matters:

(i) Routine operating procedures to prevent or minimise environmental harm, however occasioned or caused during normal operations;
(ii) Maintenance practices and procedures;
(iii) Contingency plans and emergency procedures to deal with foreseeable risks and hazards including corrective responses to prevent and mitigate environmental harm (including any necessary site rehabilitation);
(iv) Monitoring of the release of contaminants into the environment including procedures, methods, record keeping and notification of results;
(v) Assessment of the environmental impact of any releases of contaminants into the environment including procedures, methods, record keeping and notification of results;
(vi) Handling of environmental complaints;
(vii) Keeping and production of environmental records and reports;
(viii) Lines and methods of communication to be utilised for communication of procedures, plans, incidents, potential environmental problems and results, including a feedback mechanism to ensure that management is made aware of potential environmental problems and any failure of procedures adopted; and

(ix) Staff training and awareness of environmental issues related to the operation of the environmentally relevant activities, including responsibilities under the Environmental Protection Act.

(A9) A copy of the Site-based Management Plan and any subsequent amendment of the Site-based Management Plan must be kept at the licensed place and be available for examination by an authorised person on request.

END OF CONDITIONS FOR SCHEDULE A

Schedule B - Air

Noxious or Offensive Odour

(B1) Notwithstanding any other condition of this environmental authority, no release of contaminants from the licensed place is to cause a noxious or offensive odour beyond the boundaries of the licensed place.

END OF CONDITIONS FOR SCHEDULE B

Schedule C - Water

Release of Contaminants to Waters

(C1) Contaminants that will or may cause environmental harm must not be directly or indirectly released from the licensed place to any waters or the bed and banks of any waters except:

(i) as permitted under the water schedule; or
(ii) as permitted under the stormwater management schedule; or
(iii) to a sewer as permitted or otherwise agreed from time to time by the relevant Local Government.

Pump Stations

(C2) Any pump station whose failure will result in a direct or indirect release of contaminants to waters must be fitted with a stand-by pump and pump-failure alarm. The pump failure alarm must be able to operate without mains power.

(C3) No release of contaminants from the pump stations or other ancillary works shall occur except as a result of power failure, excessive rainfall, accidental damage or other emergency.

(C4) By 1 July 1998, the holder of this environmental authority must develop and implement an effective and appropriate Emergency Response/Contingency Plan to manage the environmental impacts of any release of contaminants from pump stations and other ancillary equipment.

(C5) The Emergency Response/Contingency Plan required by condition C4 must address at least the following matters:

(i) the location of the pump stations and overflows;
(ii) procedures to be implemented to reduce the likelihood of any pump station failure and likelihood of any release of contaminants;
(iii) response procedures to prevent any further release, or if such is not practicable, minimise the extent and duration of any release to the greatest practicable extent;

(iv) the practices and procedures to be employed to restore the environment, or if such is not practicable, mitigate any environmental impacts of the release (including in both dry and wet conditions);
(v) a description of the resources to be used in response to a release;
(vi) the training of staff that will be called upon to respond to a release;
(vii) procedures to investigate the cause of any release, and where necessary, implement remedial actions to reduce the likelihood of recurrence of a similar event;
(viii) the provision and availability of documented procedures to staff attending any release to enable them to effectively respond;
(ix) timely and accurate reporting of the circumstances and nature of release events to the administering authority;
(x) periodic estimation of the catchment population serviced by each pump station and hence daily dry weather flow to minimise any likelihood of the design capacity of the pump station being exceeded; and
(xi) the need to install screens be investigated and screens installed where appropriate and beneficial.

(C6) A copy of the Emergency Response/Contingency Plan and any subsequent amendment of the Emergency Response/Contingency Plan must be kept at the licensed place and be available for examination by an authorised person on request.

(C7) An updated list of all pump stations connected to the sewage treatment plant must be forwarded to the administering authority with each Annual Return.

END OF CONDITIONS FOR SCHEDULE C

Schedule D – Stormwater Management

Contaminant Releases Caused by Rainfall

(D1) Except as otherwise provided by the conditions of the stormwater management schedule and the water schedule of this environmental authority, the environmentally relevant activity must be carried out by such practicable means necessary to prevent and/or minimise the release or likelihood of release of contaminated runoff from the licensed place to any stormwater drain or waters or the bed or banks of any such waters. "Contaminated runoff" for the purposes of this condition means stormwater and/or stormwater runoff that contains contaminants that may cause environmental harm.

Stormwater Management Plan

(D2) The holder of this environmental authority must:

(i) develop and implement a stormwater management plan which provides for the following functions:
  (a) avoidance or minimisation of contaminated stormwater; and
  (b) reuse, treatment and disposal of contaminated stormwater; and
(ii) on or before 1 July 1998, have completed and implemented the stormwater management plan.

(D3) A copy of the Stormwater Management Plan must be kept at the licensed place.

Spillage and Cleanup

(D4) Any spillage of wastes, contaminants or other materials must be cleaned up as quickly as practicable. Such spillages must not be cleaned up by hosing, sweeping or otherwise releasing such wastes, contaminants or material to any stormwater drainage system, roadside gutter or waters.

Pond conditions

(D5) All ponds used for the storage or treatment of contaminants or wastes must be installed and maintained to prevent any discharge through the bed or banks of the pond from causing environmental harm in any waters (including groundwaters).

(D6) All ponds used for the storage or treatment of contaminants or wastes must be constructed and maintained to ensure the stability of the ponds' construction.

(D7) Ponds or other structures used for the storage or treatment of contaminants or wastes, including any associated pumps and control equipment, must not be located in any area below the one in ten year flood level.

(D8) Suitable banks and/or diversion drains must be installed and maintained to exclude stormwater runoff from any ponds or other structures used for the storage or treatment of contaminants or wastes.

Chemical Storage

(D9) All chemicals must be stored within roofed areas.

END OF CONDITIONS FOR SCHEDULE D

Schedule E – Land Application

Release of Contaminants to Land

(E1) The only contaminants to be released to land are treated sewage effluents from the Wet Weather Storage Dam and dried sludge from the treatment plant.

Contaminant Release Location

(E2) The defined contaminant release areas are described as Irrigated Areas in Appendix 1 of additional information supplied in support of the application and titled "Map of Irrigation Area" and sludge storage area of the licensed place.

(E3) A minimum of 33 hectares of land must be provided for the treated sewage effluent contaminant release area.

Quality of Contaminants Released from the Sewage Treatment Plant

(E4) The contaminants released from the sewage treatment plant to the Wet Weather Storage Dam must comply, at the sampling and in-situ measurement point/s specified in Schedule H, with each of the release limits specified in Schedule E Table 1 for each quality characteristic.

SCHEDULE E TABLE 1 - RELEASE QUALITY CHARACTERISTIC LIMITS

QUALITY CHARACTERISTICS	RELEASE LIMIT	LIMIT TYPE
5-day Biochemical Oxygen Demand (inhibited)	20 mg/L	80 percentile compliance
5-day Biochemical Oxygen Demand (inhibited)	40 mg/L	maximum
Suspended Solids	30 mg/L	80 percentile compliance
Suspended Solids	60 mg/L	maximum
pH	6.5 to 8.5	range
Dissolved Oxygen	2.0 mg/L	minimum
Free Chlorine Residual	0.7 mg/L	maximum
Faecal Coliforms	1000 organisms per 100 mL as a median value (minimum of 5 samples taken at not less than half-hourly intervals in any one day, with 4 out of the 5 samples containing less than 4000 organisms per 100 mL)	

(E5) Notwithstanding the quality characteristic limits specified in Table 1 of the Land Application Schedule the contaminants released must also comply with the following qualitative characteristics:

(i) The release must not have any properties nor contain any organisms or contaminants in concentrations or which are capable of causing environmental harm.

Wet Weather Storage

(E6) When weather conditions or soil conditions preclude the release of contaminants, the contaminants must be directed to a wet weather storage.

(E7) The wet weather storage must be designed to hold a volume equivalent to approximately 18 days storage based on 350 cubic metres per day average wastewater generation rate.

(E8) The wet weather storage must be designed and operated to have a total excess capacity of at least 2.7 megalitres at all times, except in the period after wet weather and provided all reasonable and practicable measures are taken to dispose of the excess effluent by irrigation.

Contaminant Release Precautions

(E9) The contaminant release area must not be used for recreational activities or as a traffic thoroughfare.

(E10) The release of contaminants to land must not be carried out if soil moisture conditions are such that surface runoff or ponding is likely to occur.

(E11) The contaminant release area must be maintained in a proper and efficient condition so as to provide adequate assimilation, percolation, evaporation and transpiration of the released contaminants.

(E12) Spray from any release of contaminants to land must not drift beyond the boundaries of the licensed place.

(E13) Public access to any contaminant release area must be denied during the release of contaminants to land and until the release area has dried.

(E14) Notices warning the public not to use or drink the release of contaminants to land must be prominently displayed and must be maintained in a visible and legible condition.

(E15) Pipelines and fittings for the release of contaminants to land must be clearly identified. Standard water taps, hoses and cocks must not be fitted to contaminant release pipelines, and the contaminant release system must not be connected to other service pipelines. Lockable valves or removable handles must be fitted to the contaminant release pipelines where there is public access to the contaminant release areas.

Effluent Irrigation Management Plan

(E16) By 1 July 1998, the holder of this environmental authority must develop and implement an Irrigation Management Plan which details how the holder of this environmental authority will effectively and appropriately manage the effluent irrigation process so as to sustainably comply with all conditions of this environmental authority.

(E17) The Irrigation Management Plan must detail how irrigation is to be managed and scheduled having regard to at least the following:

(i) soil moisture results;
(ii) weather forecasts and climate monitoring results;
(iii) irrigation records for each effluent disposal area;
(iv) characteristics and quantity of contaminants which are applied, including biochemical oxygen demand, suspended solids, total nitrogen, total phosphorus, conductivity, dissolved oxygen, pH, total dissolved salts, sodium, calcium, magnesium, potassium, chloride, sulphate, alkalinity, boron, heavy metals;
(v) characteristics of the soil in the contaminated release area, including pH, salinity, total dissolved salts, total nitrogen, total phosphorus, total potassium, sodium, calcium, magnesium , calculated Sodium Absorption Ratio, exchangeable cations, heavy metals;
(vi) type of vegetation intended to be grown in the contaminant release area;
(vii) effluent quality results;
(viii) soil quality results for the effluent disposal area(s);
(ix) groundwater level results;
(x) cropping practice for each effluent disposal area;
(xi) sustainable hydraulic loadings for the contaminant release area;
(xii) sustainable biological oxygen demand loadings for the contaminant release area;
(xiii) sustainable nitrogen loadings for the contaminant release area;
(xiv) sustainable phosphorous loadings for the contaminant release area;
(xv) sustainable salt loadings for the contaminant release area; and
(xvi) production of appropriate records and reporting of results and environmental issues.

(E18) A copy of the Irrigation Management Plan must be provided to the administering authority by 1 July 1998.

(E19) A copy of the Irrigation Management Plan must be kept at the licensed place.

(E20) The holder of this environmental authority must not implement an Irrigation Management Plan or amend an Irrigation Management Plan where such implementation or amendment would result in a contravention of any condition of this environmental authority.

(E21) The holder of this environmental authority must submit details of any amendment to the Irrigation Management Plan to the administering authority with the Annual Return which immediately follows the enactment of any such amendment.

(E22) The wet weather storage must not overflow except in the case of events greater than a 1 in 10 year 24 hour rainfall period.

END OF CONDITIONS FOR SCHEDULE E

Schedule F - Noise

Emission of Noise

(F1) 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 licensed place must not result in levels greater than those specified in Schedule F, Table 1.

SCHEDULE F TABLE 1

NOISE LIMITS AT A NOISE SENSITIVE PLACE	
Period	***Noise Level at a Noise Sensitive Place Measured as the Adjusted Maximum Sound Pressure Level*** $L_{Amax\ adj,\ T}$
7 am - 6 pm	Background noise level plus 5 dB(A)
6 pm - 10 pm	Background noise level plus 5 dB(A)
10 pm - 7 am	Background noise level plus 3 dB(A)
NOISE LIMITS AT A COMMERCIAL PLACE	
Period	***Noise Level at a Commercial Place measured as the Adjusted Maximum Sound Pressure Level*** $L_{Amax\ adj,\ T}$
7 am - 6 pm	Background noise level plus 10 dB(A)
6 pm - 10 pm	Background noise level plus 10 dB(A)
10 pm - 7 am	Background noise level plus 8 dB(A)

END OF CONDITIONS FOR SCHEDULE F

Schedule G – Waste Management

General

(G1) The holder of this environmental authority must not:

(i) allow waste to burn or be burnt at or on the licensed place; nor
(ii) remove waste from the licensed place and burn such waste elsewhere.

Waste Management Plan (WMP)

(G2) By 1 July 1998, the holder of this environmental authority must develop and implement an effective and appropriate Waste Management Plan which details how the holder of this environmental authority will manage the actual and potential environmental impacts resulting from all wastes produced at the licensed place.

(G3) The Waste Management Plan must address at least the following matters:

(i) the quantity and nature of each waste produced;
(ii) the current method of disposal;
(iii) proposed methods of pre-treatment or disposal;
(iv) expected reduction in quantity of waste produced through waste minimisation and cleaner production;
(v) investigation and evaluation of alternative treatment options which shall include at least the following:
  (a) cleaner production technologies; and
  (b) disposal and/or reuse of sludge; and
  (c) reporting the results of any investigation and evaluation to the administering authority; and
(vi) provisions for carrying out and submitting to the administering authority a waste audit by 12 months from the date of issue of this environmental authority and thereafter every 5 years; and
(vii) sludge management with reference to the principles as outlined in the Department of Environment's "Environmental Guidelines - Sludge Disposal E86" or any update of this reference.

(G4) A copy of the Waste Management Plan and any subsequent amendment of the Waste Management Plan must be kept at the licensed place and be available for examination by an authorised person on request.

Off Site Movement

(G5) Where regulated waste is removed from the licensed place (other than by a release as permitted under another schedule of this environmental authority), the holder of this environmental authority must monitor and keep records of the following:

(i) the date, quantity and type of waste removed; and
(ii) name of the waste transporter and/or disposal operator that removed the waste; and
(iii) the intended treatment/disposal destination of the waste.

(NOTE: Records of documents maintained in compliance with a waste tracking system established under the Environmental Protection Act 1994 or any other law for regulated waste will be deemed to satisfy this condition).

Notification of Improper Disposal Of Regulated Waste

(G6) If the holder of this environmental authority becomes aware that a person has removed regulated waste from the licensed place and disposed of the regulated waste in a manner which is not authorised by this environmental authority or improper or unlawful, then the holder of this environmental authority must, as soon as practicable, notify the administering authority of all relevant facts, matters and circumstances known concerning the disposal.

END OF CONDITIONS FOR SCHEDULE G

Schedule H – Self Monitoring and Reporting

Complaint Recording

(H1) All complaints received by the holder of this environmental authority relating to releases of contaminants from operations at the licensed place must be recorded and kept in a log with the following details:

(i) time, date and nature of complaint;
(ii) type of communication (telephone, letter, personal etc.);
(iii) name, contact address and contact telephone number of complainant (Note: if the complainant does not wish to be identified then "Not identified" is to be recorded);
(iv) response and investigation undertaken as a result of the complaint;
(v) name of person responsible for investigating complaint; and
(vi) action taken as a result of the complaint investigation and signature of responsible person.

Monitoring of Contaminant Releases from the Sewage Treatment Plant to the Wet Weather Storage Dam

(H2) The holder of this environmental authority is responsible for the making of determinations and keeping of records of the quality of the contaminants released from the sewage treatment plant for the quality characteristics and at the frequency specified in Schedule H Table 1:

Schedule H - Table 1

QUALITY CHARACTERISTICS	UNITS	MONITORING FREQUENCY
5-day Biochemical Oxygen Demand (inhibited)	mg/L	Monthly
Suspended Solids	mg/L	Monthly
pH	pH scale	Monthly
Dissolved Oxygen	mg/L	Monthly
Ammonia (as Nitrogen)	mg/L	Monthly
Total Nitrogen (as Nitrogen)	mg/L	Monthly
Total Phosphorus (as Phosphorus)	mg/L	Monthly
Free Chlorine Residual	mg/L	Monthly
Faecal Coliforms	cfu/100 mL	Monthly

Sampling and In-situ Monitoring Points Details

(H3) Determinations of the quality of contaminants released to check conformity with the release quality characteristics specified in the E Schedule Table 1 of this environmental authority must be undertaken at the sampling and in-situ measurement point described as the tap on top of the chlorine contact tank.

Monitoring of Contaminants Released to Land from the Wet Weather Storage Dam

(H4) The holder of this environmental authority is responsible for the making of determinations and keeping of records of the quality of the contaminants released from the Wet Weather Storage Dam for the quality characteristics, and at the frequency specified in Schedule H Table 2:

Schedule H - Table 2

QUALITY CHARACTERISTICS	UNITS	MONITORING FREQUENCY
5-day Biochemical Oxygen Demand (inhibited)	mg/L	Six monthly
Suspended Solids	mg/L	Six monthly
pH	pH scale	Six monthly
Faecal Coliforms (geometric mean[log])	cfu/100 mL	Six monthly
Total Nitrogen (as Nitrogen)	mg/L	Six monthly
Total Phosphorus (as Phosphorus)	mg/L	Six monthly
Sodium Adsorption Ratio	calculated	Six monthly
Dissolved Solids	mg/L	Six monthly
Total Dissolved Salts (calculated)	mg/L	Six monthly
Specific Conductance or electrical conductivity	µS/cm	Six monthly
Exchangeable cations	mEq/L	Six monthly
Total Aluminium	mg/L	Six monthly
Total Arsenic	mg/L	Six monthly
Total Beryllium	mg/L	Six monthly
Boron	mg/L	Six monthly
Total Cadmium	mg/L	Six monthly
Total Chromium	mg/L	Six monthly
Total Cobalt	mg/L	Six monthly
Total Copper	mg/L	Six monthly
Potassium	mg/L	Six monthly
Total Calcium	mg/L	Six monthly
Total Chloride	mg/L	Six monthly
Total Magnesium	mg/L	Six monthly
Total Sodium	mg/L	Six monthly
Total Sulphate	mg/L	Six monthly

Sampling and In-situ Monitoring Points Details

(H5) Determinations of the quality of contaminants released with the release quality characteristics specified in the H Schedule Table 2 of this environmental authority must be undertaken at the sampling and in-situ measurement point described as at the outlet of the irrigation pump.

Quality Determinations

(H6) All determinations of the quality of contaminants released to land must be made in accordance with methods prescribed in the Department of Environment and Heritage's Water Quality Sampling Manual, 2nd Edition, February 1995, or more recent additions or supplements to that document as such become available.

(H7) All determinations of the quality of contaminants released must be performed by a person or body possessing appropriate experience and qualifications to perform the required measurements.

Monitoring of Volume of Release

(H8) The volume of any release on any day of a release event must be determined or estimated by an appropriate measuring device or via a documented calculation method.

(H9) Records must be kept of the results of all determinations of the quantity of contaminants released to waters on any day.

Contaminant Release Area Monitoring Program

(H10) The holder of this environmental authority must develop and implement a Contaminant Release Area Monitoring Program to effectively monitor the condition of the land to which contaminants are released.

(H11) Monitoring required by condition H10 shall include the taking of top soil and sub-soil samples from at least five (5) representative sites for the quality characteristics and at the frequency specified in Schedule H Table 3.

Schedule H Table 3

QUALITY CHARACTERISTICS	UNITS	FREQUENCY
pH	pH scale	Every 2 years
Sodium Adsorption Ratio (1:5 Soil/water mix)	calculated	Every 2 years
Calcium/Magnesium Ratio (1:5 Soil/water mix)	calculated	Every 2 years
Exchangeable Cations	mEq/L	Every 2 years
Total Cations	mg/L	Every 2 years
Specific Conductance or electrical conductivity	µS/cm	Every 2 years
Total Aluminium	mg/L	Every 2 years
Total Arsenic	mg/L	Every 2 years
Total Barium	mg/L	Every 2 years
Boron	mg/L	Every 2 years
Total Cadmium	mg/L	Every 2 years
Total Chromium	mg/L	Every 2 years
Hexavalent Chromium	mg/L	Every 2 years
Total Cobalt	mg/L	Every 2 years
Total Copper	mg/L	Every 2 years
Total Iron	mg/L	Every 2 years
Total Lead	mg/L	Every 2 years
Total Lithium	mg/L	Every 2 years
Total Manganese	mg/L	Every 2 years
Total Molybdenum	mg/L	Every 2 years
Total Nickel	mg/L	Every 2 years
Total Nitrogen	mg/L	Every 2 years
Phosphorus (extractable)	mg/L	Every 2 years
Potassium (available)	mg/L	Every 2 years
Potassium (extractable)	mg/L	Every 2 years
Total Silver	mg/L	Every 2 years
Total Strontium	mg/L	Every 2 years
Total Zinc	mg/L	Every 2 years
Total Calcium (exchangeable)	mg/L	Every 2 years
Total Chloride	mg/L	Every 2 years
Total Magnesium (exchangeable)	mg/L	Every 2 years
Total Sodium (exchangeable)	mg/L	Every 2 years

(H12) By 1 July 1998, the holder of this environmental authority must submit a proposal for the Contaminant Release Area Monitoring Program for the approval of the administering authority.

(H13) 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 types and depths; and
(ii) the proposed vegetation characteristics to be monitored.

(H14) Within 30 days or such other period as advised in writing by the administering authority of the date of issue of written advice by the administering authority of approval of the Contaminant Release Area Monitoring Program, the applicant must commence carrying out the Contaminant Release Monitoring Program according to the terms specified in the written advice of approval.

(H15) The holder of this environmental authority must submit with each annual return a report on the Contaminant Release Area Monitoring Program including an assessment of the impact and sustainability of the application of treated sewage wastes to the contaminant release area. This report shall include an interpretation of the results and conclusions by a qualified and experienced person in the field of effluent land disposal.

(H16) The holder of this environmental authority must ensure that the results of all monitoring performed in accordance with this environmental authority for the period covered by the return are submitted with the Annual Return.

(H17) All determinations of the condition of the contaminant release area must be made by a person or body registered by the National Association of Testing Authorities (NATA) for the required determinations, or by the Toowoomba City Council Analytical Laboratories or by the University of Queensland laboratories.

(H18) Records must be kept of the results of all monitoring carried out under the Contaminant Release Area Monitoring Program for a period of at least five (5) years.

Noise Monitoring

(H19) For the purposes of investigating any complaint made about noise annoyance and also of checking compliance with condition F1, monitoring and recording of the noise levels from the activity/activities must be undertaken for the following descriptions, characteristics and conditions:

(i) $L_{Amax,\ Adj\ T}$
(ii) $L_{Abg,\ T}$ (or $L_{A90,\ T}$);
(iii) $L_{AN,\ T}$ (where N equals statistical levels of 1, 10, 50, 90 and 99);
(iv) Max $L_{pA\ T}$;
(v) $L_{Aeq,\ T}$,
(vi) the level and frequency of occurrence of impulsive or tonal noise;
(vii) atmospheric conditions including temperature, relative humidity and wind speed and direction; and
(viii) effects due to extraneous factors such as traffic noise.

(H20) The method of measurement and reporting of noise levels must comply with the Department of Environment and Heritage Noise Measurement Manual, second edition, March 1995, or more recent additions or supplements to that document as become available.

(H21) The measurement and reporting of noise levels must be undertaken by a person or body possessing appropriate experience and qualifications to perform the required measurements.

(H22) In conjunction with the measurement and recording of the noise, the following parameters and conditions must be recorded

(i) location, date and time of recording

(H23) Monitoring must also be undertaken to investigate any complaint of noise annoyance upon receipt of a written request from the administering authority to carry out such monitoring.

Incident Recording

(H24) A record must be maintained of events including but not limited to:

(i) the time, date and duration of equipment malfunctions, that may affect the environmental performance of the licensed place; and
(ii) any shut-downs of equipment upon which the environmental performance of the licensed place depends.

Notification of Emergencies and Incidents

(H25) As soon as practicable after becoming aware of any emergency or incident which results in the release of contaminants not in accordance, or reasonably expected to be not in accordance with the conditions of this environmental authority, the holder of this environmental authority must notify the administering authority of the release by telephone or facsimile.

(H26) The notification of emergencies or incidents as required by condition H25 must include but not be limited to the following:

(i) The holder of the environmental authority;
(ii) the location of the emergency or incident;
(iii) the number of the environmental authority;
(iv) the name and telephone number of the designated contact person;
(v) the time of the release;
(vi) the time the holder of the environmental authority 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 further any release and mitigate any environmental harm caused by the release.

(H27) Not more than 14 days following the initial notification of an emergency or incident, the holder of the environmental authority must provide written advice of the information supplied in accordance with condition H26 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.

(H28) As soon as practicable, but not more than six weeks following the conduct of any environmental monitoring performed in relation to the emergency or incident, which results in the release of contaminants not in accordance, or reasonably expected to be not in accordance with the conditions of this environmental authority, the holder of the environmental authority must provide written advice of the results of any such monitoring performed to the administering authority.

Exception Reporting

(H29) The holder of this environmental authority must notify the administering authority in writing of any monitoring result which indicates an exceedance of any licence limit within 28 days of completion of analysis.

(H30) The written notification required by condition H29 above must include:

(i) The full analysis results, and
(ii) Details of investigation or corrective actions taken, and
(iii) Any subsequent analysis.

Monitoring Reporting

(H31) The holder of this environmental authority must ensure that the results of all monitoring performed in accordance with this environmental authority for the period covered by the return are submitted with the Annual Return.

(H32) Contaminant release quality pertaining to the yearly period, compiled, collected or recorded in accordance with condition H2 and H4 shall be presented:

(i) in a tabular format, showing:
  (a) date, times, and day of week sampled;
  (b) all raw data;
  (c) any exceedance of levels of all parameters specified in Schedule E, Table 1; and
  (d) maximum and minimum values for parameters specified in Schedule H Table 1; and

(ii) graphically showing data referred to in part (i) of this condition vs time

END OF CONDITIONS FOR SCHEDULE H

Schedule I - Definitions

For the purposes of this environmental authority the following definitions apply:

(I1) "Act" means the Environmental Protection Act 1994.

(I2) "administering authority" means the Environmental Protection Agency or its successor.

(I3) "authorised person" means a person holding office as an authorised person under an appointment under the *Environmental Protection Act 1994* by the chief executive or chief executive officer of a local government.

(I4) "composite" in respect of sampling means either time based taken at hourly intervals to cover the period in the 24 hours of the sampling day during which a contaminant release occurs; or taken after set flow volumes to cover the period of the sampling day during which the contaminant release occurs.

(I5) "land" in the Land Application Schedule, means land excluding waters and the atmosphere.

(I6) "mg/L" means milligrams per litre.

(I7) "cfu" means colony forming units.

(I8) "80 percentile compliance" means that not more than three (3) of the measured values of the quality characteristic are to exceed the stated release limit for any twelve (12) consecutive samples where:
(i) the consecutive samples are taken over a one year period;
(ii) the consecutive samples are taken at approximately equal periods; and
(iii) the time interval between the taking of each consecutive sample is not less than twenty-five days.

(I9) "annoyance" - In determining what constitutes "annoyance", regard must be had to Australian Standard 1055.2 - 1989 Acoustics - Description and Measurement of Environmental Noise Part 2 - Application to Specific Conditions.

(I10) "median" means the middle value, where half the data are smaller, and half the data are larger. If the number of samples is even, the median is the arithmetic average of the two middle values.

(I11) "maximum" means that the measured value of the quality characteristic or contaminant must not be greater than the release limit stated.

(I12) "minimum" means that the measured value of the quality characteristic or contaminant must not be less than the release limit stated.

(I13) "range" means that the measured value of the quality characteristic or contaminant must not be greater than the higher release limit stated nor less than the lower release limit stated.

(I14) "geometric mean" refers to the nth root of the product of the n values in a series of not less than five (5) samples.

(I15) "Sodium adsorption ratio" (SAR) means the relative concentration of sodium (Na) to calcium (Ca) and magnesium (Mg) in the soil solution.

(I16) "$L_{Amax\ adj,\ T}$ " means the average maximum A-weighted sound pressure level, adjusted for noise character and measured over a time period of not less than 15 minutes, using Fast response.

(I17) "background noise level" means either:

$L_{A90,\ T}$ being the A-weighted sound pressure level exceeded for 90 percent of the time period not less than 15 minutes, using Fast response, or

$L_{Abg,\ T}$ being the arithmetic average of the minimum readings measured in the absence of the noise under investigation during a representative time period of not less than 15 minutes, using Fast response.

(I18) "Max$L_{pA\ T}$" means the maximum A-weighted sound pressure level measured over a time period of not less than 15 minutes, using Fast response.

(I19) "total Nitrogen" means the sum of Organic Nitrogen, Ammonia, Nitrite plus Nitrate, as mg/L of Nitrogen.

(I20) "total Phosphorus" 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.

(I21) "commercial place" means a place used as an office or for business or commercial purposes.

(I22) "noise sensitive place" means-

(i) a dwelling, mobile home or caravan park, residential marina or other residential premises; or
(ii) a motel, hotel or hostel; or
(iii) a kindergarten, school, university or other educational institution; or
(iv) a medical centre or hospital; or
(v) a protected area; or
(vi) a park or gardens.

(I23) "regulated waste" means non-domestic waste mentioned in Schedule 8 of the Environmental Protection (Interim) Regulation 1995, including but not limited to, for the purpose of this authority, bacterial sludge (septic tank and sewage) and includes-

(i) for an element - any chemical containing the element; and
(ii) anything that has contained a regulated waste; and
(iii) regulated waste that has been treated or immobilised.

END OF CONDITIONS FOR SCHEDULE I

END OF DEVELOPMENT APPROVAL

Extract from the Integrated Planning Act 1997

Division 8—Appeals to court relating to development applications

Appeals by applicants

4.1.27 (1) An applicant for a development application may appeal to the court against any of the following -

(a) the refusal, or the refusal in part, of a development application;
(b) a matter stated in a development approval, including any condition applying to the development, and the identification of a code under section 3.1.6;
(c) the decision to give a preliminary approval when a development permit was applied for;
(d) the length of a currency period;
(e) a deemed refusal.

(2) An appeal under subsection (1)(a) to (d) must be started within 20 business days (the **"applicant's appeal period"**) after the day the decision notice or negotiated decision notice is given to the applicant.

(3) An appeal under subsection (1)(e) may be started at any time after the last day a decision on the matter should have been made.

Appeals by submitters

4.1.28 (1) A submitter for a development application may appeal to the court about -

(a) the giving of a development approval, including any conditions (or lack of conditions) or other provisions of the approval; or
(b) the length of a currency period for the approval.

(2) The appeal must be started within 20 business days (the **"submitter's appeal period"**) after the day the decision notice or negotiated decision notice is given to the submitter.

(3) If a person withdraws a submission before the application is decided, the person may not appeal the decision.

(4) If an application involves both impact assessment and code assessment, appeal rights for submitters are available only for the part of the application involving impact assessment.

Appeals by advice agency submitters

4.1.29 (1) An advice agency may, within the limits of its jurisdiction, appeal to the court about the giving of a development approval for a development application if -

(a) the development application involves impact assessment; and
(b) the advice agency told the applicant and the assessment manager to treat its response to the application as a submission for an appeal.

(2) The appeal must be started within 20 business days after the day the decision notice or negotiated notice is given to the advice agency as a submitter.

Appeals for matters arising after approval given (co-respondents)

4.1.30 (1) For a development approval given for a development application, a person to whom any of the following notices have been given may appeal to the court against the decision in the notice -

(a) a notice giving a decision on a request for an extension of the currency period for an approval;
(b) a notice giving a decision on a request to make a minor change to an approval.

(2) The appeal must be started within 20 business days after the day the notice of the decision is given to the person.

(3) Subsection (1)(a) does not apply if the approval resulted from a development application (superseded planning scheme) that was assessed as if it were an application made under a superseded planning scheme.

Division 9 - Appeals to court about other matters

Appeals for matters arising after approval given (no co-respondents)

4.1.31 (1) A person to whom any of the following notices have been given may appeal to the court against the decision in the notice -

(a) a notice giving a decision on a request to change or cancel a condition of a development approval;
(b) a notice under section 6.1.44 giving a decision to change or cancel a condition of a development approval.

(2) The appeal must be started within 20 business days after the day the notice of the decision is given to the person.

Appeals against enforcement notices

4.1.32 (1) A person who is given an enforcement notice may appeal to the court against the giving of the notice.

(2) The appeal must be started within 20 business days after the day notice is given to the person.

Stay of operation of enforcement notice

4.1.33 (1) The lodging of a notice of appeal about an enforcement notice stays the operation of the enforcement notice until -

(a) the court, on the application of the entity issuing the notice, decides otherwise; or
(b) the appeal is withdrawn; or
(c) the appeal is dismissed.

(2) However, subsection (1) does not apply if the enforcement notice is about -

(a) a work, if the enforcement notice states the entity believes the work is a danger to persons or a risk to public health; or
(b) carrying out development that is the demolition of a work.

Appeals against decisions on compensation claims

4.1.34 (1) A person who is dissatisfied with a decision under section 5.4.8 or 5.5.3 for the payment of compensation may appeal to the court against -

(a) the decision; or
(b) a deemed refusal of the claim.

(2) An appeal under subsection (1)(a) must be started with 20 business days after the day notice of the decision is given to the person.

(3) An appeal under subsection (1)(b) may be started at any time after the last day a decision on the matter should have been made.

Appeals against decisions on requests to acquire designated land under hardship

4.1.35 (1) A person who is dissatisfied with a designator's decision to refuse a request made by the person under section 2.6.19, may appeal to the court against -

(a) the decision; or
(b) a deemed refusal of the request.

(2) An appeal under subsection (1)(a) must be started within 20 business days after the day notice of the decision is given to the person.

(3) An appeal under subsection (1)(b) may be started at any time after the last day a decision on the matter should have been made.

Appeals from tribunals

4.1.37 (1) A party to a proceeding decided by a tribunal may appeal to the court against the tribunal's decision, but only on the ground -

(a) of error or mistake in law on the part of the tribunal; or
(b) that the tribunal had no jurisdiction to make the decision or exceeded its jurisdiction in making the decision.

(2) An appeal against a tribunal's decision must be started within 20 business days after the day notice of the tribunal's decision is given to the party.

Court may remit matter to tribunal

4.1.38 If an appeal includes a matter within the jurisdiction of a tribunal and the court is satisfied the matter should be dealt with by a tribunal, the court must remit the matter to the tribunal for decision.

Division 10 - Making an appeal to court

How appeals to the court are started

4.1.39 (1) An appeal is started by lodging written notice of appeal with the registrar of the court.

(2) The notice of appeal must state the grounds of the appeal.

(3) The person starting the appeal must also comply with the rules of the court applying to the appeal.

(4) However, the court may hear and decide an appeal even if the person has not complied with subsection (3).

Certain appellants must obtain information about submitters

4.1.40 (1) If the applicant or a submitter for a development application appeals about the part of the application involving impact assessment, the appellant must ask the assessment manager to give the appellant the name and address of each principal submitter who made a properly made submission about the application and has not withdrawn the submission.

(2) The assessment manager must give the information requested under subsection (1) as soon as practicable.

Notice of appeal to other parties (div 8)

4.1.41 (1) An appellant under division 8 must, within 10 business days after the day the appeal is started (or if information is requested under section 4.1.40, within 10 business days after the day the appellant is given the information) give written notice of the appeal to -

(a) if the appellant is an applicant - the assessment manager, any concurrence agency, any principal submitter whose submission has not been withdrawn and any advice agency treated as a submitter whose submission has not been withdrawn; or
(b) if the appellant is a submitter or an advice agency whose response to the development application is treated as a submission for an appeal - the assessment manager, the applicant and any concurrence agency; or
(c) if the appellant is a person to whom a notice mentioned in section 4.1.30 has been given - the assessment manager and any entity that was a concurrence agency for the development application.

(2) The notice must state -

(a) the grounds of the appeal; and
(b) if the person given the notice is not the respondent or a co-respondent under section 4.1.43 - that the person, within 10 business days after the day the notice is given, may elect to become a co-respondent to the appeal.

Notice of appeal to other parties (div 9)

4.1.42 (1) An appellant under division 9 must, within 10 business days after the day the appeal is started give written notice of the appeal to -

(a) if the appellant is a person to whom a notice mentioned in section 4.1.31[73] has been given - the entity that gave the notice; or
(b) if the appellant is a person to whom an enforcement notice is given - the entity that gave the notice and if the entity is not the local government, the local government; or
(c) if the appellant is a person dissatisfied with a decision about compensation - the local government that decided the claim; or
(d) if the appellant is a person dissatisfied with a decision about acquiring designated land - the designator; or
(e) if the appellant is a person who is disqualified as a private certifier - the entity disqualifying the person and if the entity disqualifying the person is not the accrediting body, the accrediting body; or
(f) if the appellant is a party to a proceeding decided by a tribunal - the other party to the proceeding.

(2) The notice must state the grounds of the appeal.

Respondent and co-respondents for appeals under div 8

4.1.43 (1) This section applies to appeals under division 8 for a development application.

(2) The assessment manager is the respondent for the appeal.

(3) If the appeal is started by a submitter, the applicant is a co-respondent for the appeal.

(4) If the appeal is about a concurrence agency response, the concurrence agency is a co-respondent for the appeal.

(5) If the appeal is only about a concurrence agency response, the assessment manager may apply to the court to withdraw from the appeal.

(6) The respondent and any co-respondents for an appeal are entitled to be heard in the appeal as a party to the appeal.

(7) A person to whom a notice of appeal is required to be given under section 4.1.41 and who is not the respondent or a co-respondent for the appeal may elect to be a co-respondent.

Respondent and co-respondents for appeals under div 9

4.1.44 (1) This section applies if an entity is required under section 4.1.42 to be given a notice of an appeal.

(2) The entity given written notice is the respondent for the appeal.

(3) However, if under a provision of the section more than 1 entity is required to be given notice, only the first entity mentioned in the provision is the respondent.

(4) The second entity mentioned in the provision may elect to be a co-respondent.

How a person may elect to be co-respondent

4.1.45 (1) An entity elects to be a co-respondent by lodging in the court, within 10 business days after the day the notice of the appeal is given to the entity, a notice of election under the rules of court.

(2) If a principal submitter is entitled to elect to become a co-respondent, any other submitter for the submission may also elect to become a co-respondent to the appeal.

Minister entitled to be represented in an appeal involving a State interest

4.1.46 If the Minister is satisfied that an appeal involves a State interest, the Minister is entitled to be represented in the appeal.

Lodging appeal stops certain actions

4.1.47 (1) If an appeal (other than an appeal under section 4.1.30) is started under division 8, the development must not be started until the appeal is decided or withdrawn.

(2) Despite subsection (1), if the court is satisfied the outcome of the appeal would not be affected if the development or part of the development is started before the appeal is decided, the court may allow the development or part of the development to start before the appeal is decided.