Department of Environment and Heritage Protection

Permit[1]

Environmental Protection Act 1994

Environmental authority

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

Permit[1] number: EPPR00568013

Environmental authority takes effect on 25-NOV-2013.

The anniversary date of this environmental authority remains 8 September.

Environmental authority holder(s)

Name	Registered address
Indigenous Land Corporation	Level 7, 121 King William Street ADELAIDE SA 5000

Environmentally relevant activity and location details

Environmentally relevant activity(ies)	Location(s)
63-(1b)(i) Sewage treatment >100 to 1500EP - IT or IR	Jumbun Community - STP - Lot 115 Plan CWL709

Additional information for applicants

Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an environmental authority is issued is a restatement of the ERA as defined by legislation at the time the approval is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an environmental authority as to the scale, intensity or manner of carrying out an ERA, then the conditions prevail to the extent of the inconsistency.

An environmental authority authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the authority specifically authorises environmental harm.

A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994* (EP Act).

[1] Permit includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation

Contaminated land

It is a requirement of the EP Act that if an owner or occupier of land becomes aware a notifiable activity (as defined in Schedule 3 and Schedule 4) is being carried out on the land, or that the land has been, or is being, contaminated by a hazardous contaminant, the owner or occupier must, within 22 business days after becoming so aware, give written notice to the chief executive.

Llangridge	25/11/2013
Signature	Date

Linda Langridge
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Margaret Jones
Permit and Licence Management
Department of Environment and Heritage Protection
GPO Box 2454
BRISBANE QLD 4001
Phone: 1300 130 372
Fax: (07) 3330 5875
Email: palm@ehp.qld.gov.au

Obligations under the *Environmental Protection Act 1994*

In addition to the requirements found in the conditions of this environmental authority, the holder must also meet their obligations under the EP Act, and the regulations made under the EP Act. For example, the holder must comply with the following provisions of the Act:

- general environmental duty (section 319)
- duty to notify environmental harm (section 320-320G)
- offence of causing serious or material environmental harm (sections 437-439)
- offence of causing environmental nuisance (section 440)
- offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- offence to place contaminant where environmental harm or nuisance may be caused (section 443)

Conditions of environmental authority

SCHEDULE A - GENERAL CONDITIONS

Access to Development approval and Site Based Management Plan

(A1) A copy of the conditions of this development permit and the site based management plan for the licensed place must be kept in a location readily accessible to personnel carrying out the environmentally relevant activity.

Records

(A2) Any record or document required to be kept by a condition of this development permit must be kept at the council offices for a period of at least five (5) years and be available for examination by an authorised person. For daily and weekly records, 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

(A3) 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 development approval.

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.

Monitoring and Measurements

(A4) All determinations of the quality of contaminants released to the environment and all measurement and reporting of noise levels that are required by this development permit must be undertaken by a person or body possessing appropriate experience and qualifications to perform the required determinations and the required measurements.

Calibration

(A5) All instruments and devices used for the measurement or monitoring of any parameter under any condition of this development permit must be calibrated, and appropriately operated and maintained.

Site Based Management Plan

(A6) The holder of this development permit must, by 30 November 1999, prepare and implement a Site Based Management Plan which must provide for at least the following functions:

(a) routine operating procedures to prevent or minimise environmental harm from the carrying out of the environmentally relevant activity; and

(b) maintenance practices and procedures to ensure that all plant, equipment and reticulation systems used in the carrying out of the environmentally relevant activities are maintained in good working order; and

(c) contingency plans and emergency procedures to deal with foreseeable risks and hazards including inspection procedures and response plans for sewage pump stations in the event of failure of any pumps, motors or the power supply to any pump station; and

(d) recording and handling of environmental complaints; and

(e) preparation and implementation of a waste management plan for the storage, treatment, transport and reuse or disposal of any sludge removed from the sewage treatment plant. This plan must deal with sludge in a manner that minimises the risk of spillage of sludge or any other release of contaminants to the environment; and

(f) preparation and carrying out of monitoring programs to ensure compliance with the conditions of this development permit; and

(g) monitoring of compliance with any of the requirements of any plans or programs prepared under this development permit; and

(h) review and amendment or improvement of operating procedures and plans or programs required under this Site Based Management Plan where deficiencies are revealed by the monitoring program required in section (g) of this condition; and

(i) any other specific requirements of the other parts of this development permit.

END OF CONDITIONS FOR SCHEDULE A

SCHEDULE B - AIR

(B1) Nil conditions.

END OF CONDITIONS FOR SCHEDULE B

SCHEDULE C - WATER

(C1) Contaminants that may cause environmental harm must not be directly or indirectly released from any source on the licensed place to any waters at any location other than overflows from sewage pump stations in accordance with the requirements of this schedule or in accordance with Schedule D of this development permit.

Pump Stations

(C2) The only overflow points permitted to release untreated sewage to any waters or land are those listed below:

OVERFLOW POINTS	LOCATION	DISCHARGE TO
Pump Station 1	Murray Falls Road, Jumbun	Absorption Trench
Pump Station 2 (Rising Main)	Jumbun	Absorption Trench

Sewage Pump Station Alarms and Standby Pump Systems

(C3) Sewage pump stations whose failure would, or would be likely to, result in a direct or indirect release of contaminants to waters 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 if such power failure occurs and, when in operation, must notify the appropriate person to respond to the alarm.

END OF CONDITIONS FOR SCHEDULE C

SCHEDULE D - STORMWATER MANAGEMENT

(D1) Contaminants that may cause environmental harm must not be directly or indirectly released from any source on the licensed place to any stormwaters other than in runoff from the defined contaminant release area and only then when the effluent storage tank specified in Schedule E is full.

(D2) The licensed place must be operated in such a way that contamination of stormwater is avoided or minimised by:

(a) diversion of upstream runoff away from areas containing wastes or contaminants; and

(b) minimisation of the size of contaminated areas; and

(c) if soil is to be exposed or disturbed as a result of any works associated with the licensed place:

(i) minimisation of the amount of soil to be exposed or disturbed by staging works; and

(ii) revegetation or stabilisation of exposed or disturbed areas; and

(iii) installation of sediment control measures such as silt fences and settling basins; and

(iv) diversion of upstream runoff from exposed or disturbed areas.

END OF CONDITIONS FOR SCHEDULE D

SCHEDULE E - LAND APPLICATION

Irrigation of Treated Sewage Effluent to Land

(E1) The holder of this development approval must not discharge any treated sewage effluent to land under their control unless the discharge of treated sewage effluent to that area of land is permitted under this development approval.

(E2) Treated effluent from the sewage treatment plant may only be discharged to land on the defined treated sewage effluent irrigation area marked as the hatched area on the site plan as shown in condition number (J1) of this development approval.

(E3) A minimum of eleven (11) hectares of land must be provided for the treated sewage effluent irrigation area.

Identification of Pipelines and Fittings

(E4) Pipelines and fittings for the land disposal of treated sewage effluent must be clearly identified. Wherever possible, standard water taps, hoses and cocks should not be fitted to effluent irrigation system pipelines, and lockable valves or removable handles should be fitted to the effluent irrigation pipelines where there is public access to the contaminants release areas. The irrigation system must not be connected to other service pipelines.

Control of Release of Contaminants to Land

(E5) The irrigation of treated sewage effluent to land under this development approval must be carried out in a manner so as to ensure that:

(a) vegetation is not damaged;

(b) soil erosion and soil structure damage is minimised;

(c) there is no surface ponding of effluent;

(d) the effluent is evenly distributed on the irrigation area;

(e) there is no spray drift or overspray or contaminated runoff outside the effluent irrigation area approved under this schedule;

(f) the infiltration of effluent beyond the plant root zone is minimised; and

(g) each portion of the irrigation area is irrigated at an application rate and frequency that optimises plant growth.

(E6) The holder of this development approval must ensure that access of grazing animals to the treated sewage effluent irrigation area is controlled to prevent soil pugging.

(E7) Notices must be prominently displayed on the treated sewage effluent irrigation area on the licensed place warning the public that the area is irrigated with treated sewage effluent and not to use or drink the wastewater. These notices must be maintained in a visible and legible condition.

Sampling Point

(E8) The holder of this development approval must provide and maintain a sampling point for the treated sewage effluent at the point of discharge from the treated sewage effluent storage tank to the irrigation system. This sampling point must be maintained so as to be readily accessible to authorised officers at any reasonable time.

Quality of Contaminants Released to Land

(E9) The release of treated sewage effluent to land must comply with the quality characteristics specified in Schedule E – Table 1.

Schedule E - Table 1

QUALITY CHARACTERISTIC	RELEASE LIMIT(S)	LIMIT TYPE
5-Day Biochemical Oxygen Demand (mg/l)	20 60	annual average maximum
Suspended Solids (mg/l)	60 180	annual average maximum
pH (pH units)	6.5 to 8.5	range
Specific Conductance (µS/cm)	1000	maximum

Investigation and Design of Treated Sewage Effluent Irrigation Areas

(E10) Any extension of the area used for irrigation of treated sewage effluent to land (other than for maintenance of any grounds and gardens around the sewage treatment plant generating the effluent) may only take place:

(a) in accordance with the Environmental Protection Act 1994; and

(b) after the holder of this development approval has carried out an investigation into:

(i) the ecological sustainability of the irrigation or re-use proposal; and

(ii) the suitability for irrigation with treated sewage effluent of the land to be used; and

(iii) Best Practice Environmental Management (BPEM) to minimise any environmental harm resulting from the irrigation.

Wet Weather Effluent Storage

(E11) Treated sewage effluent must, when irrigation cannot be carried out in accordance with the requirements of this Schedule, be stored in an effluent storage tank with at least 195 kilolitres total capacity. This effluent storage tank must be operated to maintain an excess capacity of at least 100 cubic metres at all times, except in the period during and after wet weather when it has been filled to capacity and before the excess effluent can be disposed of by irrigation.

Note: As soon as conditions permit after rainfall, the excess treated sewage effluent in the storage tank should be pumped and disposed of on the irrigation area to ensure the tank is capable of storing effluent during the next wet weather period.

END OF CONDITIONS FOR SCHEDULE E

SCHEDULE F - NOISE

Emission of Noise

(F1) In the event of a complaint about unreasonable noise generated on the licensed place, that the administering authority considers to be neither frivolous or vexatious, then the holder of this development permit must take action to ensure that the noise is no longer an unreasonable noise.

END OF CONDITIONS FOR SCHEDULE F

SCHEDULE G - WASTE MANAGEMENT

Off Site Movement of Regulated Wastes

(G1) Where regulated waste is removed from the licensed place (other than by a release as permitted under another schedule of this development permit), the holder of this development permit must ensure that records are kept of the following:

(a) the date, quantity and type of waste removed; and

(b) name of the waste transporter that removed the waste; and

(c) 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.

Acceptance of Regulated Wastes

(G2) The holder of this development approval may only accept regulated waste into the sewerage system serving the licensed place when such wastes are commingled with normal domestic sewage or in accordance with a trade waste policy.

(G3) Records of any trade waste agreements for discharge of wastes to sewers must be made available for inspection on request.

Infiltration Management

(G4) The holder of this development approval must maintain the sewage reticulation system in such a manner that infiltration and other stormwater inflows are minimised.

END OF CONDITIONS FOR SCHEDULE G

SCHEDULE H - MONITORING AND REPORTING

Sampling and Analysis of Waters

(H1) All determinations of the quality of leachate, contaminants released to waters or land must be made in accordance with methods prescribed in the Department of Environment and Heritage Water Quality Sampling Manual, 2nd Edition, February 1995, or more recent additions or supplements to that document as such become available.

Recording of Monitoring Program Results

(H2) The holder of this development approval must keep a written record of the results of all monitoring programs required under this development approval. This record must:

(a) record the results of all analyses, measurements and observations;

(b) record the date and time of sampling; and

(c) have all records of analyses, measurements and observations signed by a responsible officer.

Annual Monitoring Report

(H3) The holder of this development approval must submit a report to the administering authority with the annual return which shall include but not be limited to:

(a) a summary of the previous twelve (12) month's monitoring results obtained under any monitoring program(s) required under this development approval; and

(b) a summary of any record of quantities of discharge required to be kept under this development approval; and

(c) for the sewage treatment plant:

(i) the number of domestic tenements newly connected to the sewage treatment works during the previous twelve (12) months; and

(ii) the progressive total number of connections; and

(iii) a summary of any trade waste agreements entered into or amended during the year, including the nature of the industry.

Exception Reporting

(H4) The holder of this development approval must, unless a program notice in accordance with Section 101 of the Act is submitted, notify the administering authority in writing of any monitoring result which indicates an exceedance of any development approval limit within twenty-eight (28) days of completion of analysis.

(H5) The written notification required by condition number (H4) above must include:

(a) the full analysis results; and

(b) details of investigation or corrective actions taken; and

(c) results of any subsequent analysis carried out to verify the success of any corrective actions taken.

(H6) If a program notice has been submitted under Section 101 of the Act, condition numbers (H4) and (H5) will have been complied with if the required information is submitted by the date specified in a Section 103 notice requiring submission of a draft Environmental Management Program.

Monitoring of Contaminant Releases to Land

(H7) The holder of this development approval is responsible for the making of determinations and keeping of records of the quality of the contaminants released to land for the quality characteristics, and at the frequency specified in Schedule H - Table 1.

Sampling and Monitoring Point Details

(H8) Determinations of the quality of contaminants released to land to check conformity with the release quality characteristics specified in the Land Application Schedule of this development approval must be undertaken at least quarterly on samples collected from the sampling and in situ monitoring point referred to in condition number (E8) of this development approval.

Schedule H - Table 1

QUALITY CHARACTERISTIC DETERMINATION
5-day Biochemical Oxygen Demand
Suspended Solids
pH
Specific Conductance

Irrigation Area Soil Monitoring

(H9) The holder of this development approval must monitor the soil condition of the effluent irrigation area by measurement of the following soil physical and chemical properties at a minimum frequency of five (5) years with the first samples being taken before 1 December 1999:

(a) pH (Ca and H_2O) (determined from a 1:5 soil to water suspension); and

(b) electrical conductivity (determined from a 1:5 soil to water suspension); and

(c) chloride (as % Na Cl); and

(d) available potassium; and

(e) phosphorus sorptive capacity; and

(f) available phosphorus; and

(g) total nitrogen; and

(h) organic carbon;

and the following field tests;

(i) infiltration rate; and

(j) subsoil hydraulic conductivity; and

(k) soil texture, structure, colour, moisture; and

(l) available water capacity.

Note: Soil analysis should be carried out on composite topsoil samples taken from at least 5 "average" spots per ten (10) hectares and separately for any major area of poorer topsoil. The soil sampling sites should be chosen to enable them to be used as permanent reference points for long term soil monitoring.

END OF CONDITIONS FOR SCHEDULE H

SCHEDULE I - DEFINITIONS

For the purposes of this development approval the following definitions apply:

(I1) "administering authority" means the Environmental Protection Agency or its successor.

(I2) "total nitrogen" means the sum of Organic Nitrogen, Ammonia Nitrogen, Nitrite plus Nitrate Nitrogen.

(I3) "mg/l" means milligrams per litre.

(I4) "annual average" is the arithmetic average calculated using twelve (12) months consecutive results for the characteristic.

(I5) "quarterly" means in the first week of each of March, June, September and December.

(I6) "grab" sample means one sample collected at any point in time.

(I7) "maximum" means that the measured value of the quality characteristic or contaminant must not be greater than the release limit stated.

(I8) "minimum" means that the measured value of the quality characteristic or contaminant must not be less than the release limit stated.

(I9) "range" means that the measured value of the quality characteristic or contaminant must not be greater than the higher release limit stated nor lower than the lower release limit stated.

(I10) "the holder of this development permit" means Department of Defence - Army 19th Chief Engineer Works.

(I11) "licensed place" means the Jumbun Community Sewage Treatment Plant on Lot 115, Plan CWL709, Parish of Meunga, County of Cardwell located at Jumbun Community, Murray Falls Road, via Murray Upper, Queensland 4854 and includes any pump stations, reticulation systems and other ancillary works associated with the plant.

END OF CONDITIONS FOR SCHEDULE I

SCHEDULE J - SITE PLAN

(J1) **Location of Licensed Place and Treated Sewage Effluent Irrigation Area**

END OF CONDITIONS FOR SCHEDULE J

END OF PERMIT