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: EPPR00506413

Environmental authority takes effect on 11 January 2017.

The anniversary date of this environmental authority remains as 05 July. An annual return and the payment of the annual fee will be due each year on this day.

Environmental authority holder(s)

Name	Principal address
Susan Vivien Unwin	Bunya Avenue BUNYA MOUNTAINS QLD 4405

Environmentally relevant activity and location details

Environmentally relevant activity(ies)	Location(s)
63-(1a)(i) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of 21 to 100EP if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme	Bunya Avenue,BUNYA MOUNTAINS 4405 - Lot 1 Plan SP158775

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 an owner or occupier of land give written notice to the chief executive if they become aware of the following:

- a notifiable activity (as defined in Schedule 3) that is being, or has been, carried out on the land (notice must be given within 20 business days)
- an event involving a hazardous contaminant on the land, or a change in the condition of the contaminated land, that is causing, or is reasonably likely to cause, serious or material environmental harm (notice must be given within 24 hours).

For further information, including the form for giving written notice, refer to the Queensland Government website http://www.qld.gov.au/ (using the search term 'managing contaminated land').

Ruth Brown

Signature

11 January 2017

Date

Ruth Brown
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

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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

The environmentally relevant activity(ies) conducted at the location as described above must be conducted in accordance with the following site specific conditions of approval.

Schedule A - Activity	
Condition number	**Condition**
A1-1	In carrying out the environmentally relevant activities, you must take all reasonable and practicable measures to prevent and / or to minimise the likelihood of environmental harm being caused. Any environmentally relevant activity, that, if carried out incompetently, or negligently, may cause environmental harm, in a manner that could have been prevented, shall be carried out in a proper manner in accordance with the conditions of this authority. NOTE: This authority authorises the environmentally relevant activity. It does not authorise environmental harm unless a condition contained within this authority explicitly authorises that harm. Where there is no condition or the authority is silent on a matter, the lack of a condition or silence shall not be construed as authorising harm.

A2-1	From commencement of the activity, a Site Based Management Plan (SBMP) must be implemented. The SBMP must identify all sources of environmental harm, including but not limited to the actual and potential release of all contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused. The SBMP must also provide for the review and 'continual improvement' in the overall environmental performance of all Environmentally Relevant Activities that are carried out. The site based management plan 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 likelihood of environmental harm. (d) Contingency plans and emergency procedures for non-routine situations. (e) Organisational structure and responsibility. (f) Effective communication. (g) Monitoring of the contaminant releases. (h) Conducting environmental impact assessments. (i) Staff training. (j) Record keeping. (k) Periodic review of environmental performance and continual improvement.
A3-1	The holder of this environmental authority must: (a) install all plant and equipment necessary to ensure compliance with the conditions of this environmental authority; and (b) maintain such plant and equipment in a proper and efficient condition; and (c) operate such plant and equipment in a proper and efficient manner. In this condition, "plant and equipment" includes: (a) plant and equipment used to prevent and/or minimise the likelihood of environmental harm being caused; (b) devices and structures to contain foreseeable escapes of contaminants and waste; (c) devices and structures used to store, handle, treat and dispose of waste; (d) backup systems that act in the event of failure of the primary system.
A4-1	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.
A5-1	Record, compile and keep all monitoring results required by this document and present this information to the administering authority when requested, in a specified format.
Schedule B - Air	
Condition number	**Condition**
B1-2	The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any odour sensitive place

B2-1	The release of dust and/or particulate matter resulting from the activity must not cause an environmental nuisance at any dust sensitive place.
B2-2	Exceedance of any of the following levels when measured at any dust sensitive place is an environmental nuisance for the purposes of condition B2-1. (a) Dust deposition of 120 milligrams per square metre per day, when monitored in accordance with Australian Standard AS 3580.10 of 1991; OR (b) A concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM10) suspended in the atmosphere of 150 micrograms per cubic metre over a 24 hour averaging time, at a dust sensitive place downwind of the site, when monitored in accordance with: - Australian Standard AS 3580.9.6 'Ambient air - Particulate matter - Determination of suspended particulate PM10 high-volume sampler with size-selective inlet - Gravimetric method'; or - any alternative method of monitoring PM10 which may be permitted by the 'Air Quality Sampling Manual' as published from time to time by the administering authority.
B2-3	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 14 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.

Schedule C - Water

Condition number	**Condition**
C1-1	Contaminants must not be released from the site to any waters or the bed and banks of any waters.
C2-1	There must be no release of stormwater runoff that has been in contact with any contaminants at the site to any waters, roadside gutter or stormwater drain.
C2-2	Suitable banks and/or diversion drains must be installed and maintained to exclude excess stormwater runoff from entering any treated wastewater disposal areas or structures used for the storage or treatment of contaminants or wastes.

Schedule D - Noise

Condition number	Condition
D1-1	Noise from activities must not cause an environmental nuisance at any noise sensitive place or any commercial place.
D1-2	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 each of the licensed places must not result in levels greater than those specified in Schedule D – Table 1.

Schedule D - Table 1

Time period	Noise level at a 'Noise sensitive place' measured as the Adjusted Maximum Sound Pressure Level $L_{A, max\ adj\ T}$ Note 1
7am - 6pm	Background noise level plus 5 dB(A)
6pm - 10pm	Background noise level plus 5 dB(A)
10pm - 7am	Background noise level plus 3 dB(A)
Time period	**Noise level at a 'Commercial place' measured as the Adjusted Maximum Sound Pressure Level $L_{A, max\ adj\ T}$**
7am - 6pm	Background noise level plus 10 dB(A)
6pm - 10pm	Background noise level plus 10 dB(A)
10pm - 7am	Background noise level plus 8 dB(A)

Note 1: $L_{A\ 10,\ adj,\ 15\ mins}$ levels may be substituted for $L_{Amax,\ adj,\ 15\ mins}$ levels if evidence is provided that $L_{A\ 10,\ adj,\ 15\ mins}$ levels are representative of component noise levels from source(s)/premises under investigation.

D2-1	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) background noise; (b) $L_{A, max\ adj, T}$ or where established as being appropriate $L_{A10, adj\ 15mins}$; (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; and (f) location, date and time of recording.
D2-2	The method of measurement and reporting of noise levels must comply with the latest edition of the Environmental Protection Agency's Noise Measurement Manual.

Schedule E - Waste	
Condition number	**Condition**
E1-1	Regulated waste must be handled and transferred in a proper manner to prevent any leakage or spillage of waste.
E1-2	All regulated waste removed from the site must be removed by a person who holds a current approval to transport such waste under the provisions of the Environmental Protection Act 1994.
E1-3	Records must be kept for five years, and must include the following information: (a) date of pickup of waste; (b) description of waste; (c) cross reference to relevant waste transport documentation; (d) quantity of waste; (e) origin of the waste; (f) destination of the waste; and (g) intended fate of the waste, for example, type of waste treatment, reprocessing or disposal. 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.
Schedule F - Land	
Condition number	**Condition**
F1-1	The only contaminants permitted to be released to land are treated sewage effluent to the absorption trenches in areas shown in Figure 1 Schedule I, in compliance with the conditions of this environmental authority.
F1-2	The quality of wastewater disposed of from the sewage treatment system is to be consistent with that produced by a septic tank designed for at least the equivalent population actually served, and properly operated and maintained.
F1-3	Notwithstanding Condition (F1-2), contaminants released must not have any properties nor contain any organisms or contaminants in concentrations which are capable of causing environmental harm.
F1-4	The total quantity of sewage effluent released to land is to be consistent with that produced by a septic tank designed for at least the equivalent population actually served, and properly operated and maintained.
F2-1	The method of disposal of wastewater must be sub-surface in properly constructed absorption trenches.

<table>
<tr><td>F3-1</td><td>The disposal of effluent must be carried out in a manner such that:
(a) vegetation is not damaged;
(b) soil erosion and soil structure damage is avoided;
(c) there is no surface ponding of effluent;
(d) the capacity of the land to assimilate nitrogen, phosphorus, salts, organic matter as measured by oxygen demand and water is not exceeded; and
(e) the quality of ground water is not adversely affected.</td></tr>
<tr><td>F3-2</td><td>The release of contaminants to land must not be carried out if soil moisture conditions are such that sub-surface release of wastewater beyond designated disposal areas is likely to occur.</td></tr>
<tr><td>F3-3</td><td>The contaminant release area/s must be maintained in a proper and efficient condition so as to provide adequate assimilation, percolation and transpiration of the released contaminants.</td></tr>
<tr><td>F3-4</td><td>The contaminant release area/s must not be used as a traffic thoroughfare, or for recreation or camping purposes.</td></tr>
<tr><td>F3-5</td><td>Notices must be prominently displayed on any effluent disposal area warning the public that treated wastewater is disposed within the area and not to use or drink the effluent. These notices must be maintained in a visible and legible condition.</td></tr>
<tr><td>F3-6</td><td>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.</td></tr>
<tr><td>F4-1</td><td>Monitoring must be undertaken and records kept of a monitoring program of contaminant releases from the treatment plant at the monitoring points, frequency, and for the parameters specified in Schedule F - Table 1. The monitoring program must include samples collected at peak residency times.
Schedule F - Table 1 (Monitoring program)
<table>
<tr><th>Monitoring point</th><th>Quality characteristics</th><th>Units</th><th>Frequency</th></tr>
<tr><td>Outlet of the sewerage treatment plant prior to discharge to land</td><td>5-day Biochemical Oxygen Demand</td><td>mg/L</td><td>Quarterly</td></tr>
<tr><td>"</td><td>Suspended Solids</td><td>mg/L</td><td>Quarterly</td></tr>
<tr><td>"</td><td>pH</td><td>pH scale</td><td>Quarterly</td></tr>
</table></td></tr>
<tr><td>F4-2</td><td>The daily volume of contaminants released to land must be determined or estimated by an appropriate method, for example a flow meter, hour meter or accommodation records, and records kept of such determinations and estimates.</td></tr>
<tr><td>F5-1</td><td>Effluent must not be allowed to move into the ground beyond the designated effluent disposal trenches (eg. by seeping below, above or laterally from the trenches).</td></tr>
</table>

F5-2	The ground surface near all effluent disposal trenches and areas must be inspected at least once every three months for any signs of effluent seepage at the soil surface. The inspection must include ground down slope from each disposal or trench area.
F6-1	The sewage treatment plant must be inspected at least once every month to determine whether sludge removal is required. Whenever sludge removal is found to be required, this must be carried out promptly.
Schedule G - Community	
Condition number	**Condition**
G1-1	All complaints received must be recorded including investigations undertaken, conclusions formed and action taken. This information must be made available to the administering authority on request.

Definitions

Words and phrases used throughout this licence or development approval are defined below:

Where a definition for a term used in this authority is sought and the term is not defined within this authority the definitions provided in the Environmental Protection Act 1994, its regulations, and Environmental Protection Policies shall be used.

Word Definitions

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

"you" means the holder of this Environmental Authority or owner / occupier of the land which is the subject of this Development Approval.

"site" means the place to which this environmental authority relates or the premises to which this development approval relates.

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

"this authority" means this environmental authority/development approval.

"authority" means level 1 licence (without development approval), or level 1 approval (without development approval), or level 2 approval (without development approval) under the Environmental Protection Act 1994.

"approval" means 'notice of development application decision' or 'notice of concurrence agency response' under the Integrated Planning Act 1997

"dust sensitive place" means -

- a dwelling, mobile home or caravan park, residential marina or other residential place;
- a motel, hotel or hostel;
- a kindergarten, school, university or other educational institution;
- a medical centre or hospital;
- a protected area;
- a park or gardens; or
- a place used as an office or for business or commercial purposes.

  and includes the curtilage of any such place.

"odour sensitive place" has the same meaning as a "dust sensitive place"

"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.

"noxious" means harmful or injurious to health or physical well being.

"offensive" means causing offence or displeasure; is disagreeable to the sense; disgusting, nauseous or repulsive.

"nuisance sensitive place" includes -

- a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or

- a kindergarten, school, university or other educational institution; or
- a medical centre or hospital; or
- a protected area under the Nature Conservation Act 1992, the Marine Parks Act 1992 or a World Heritage Area; or
- a public thoroughfare, park or gardens; or
- a place used as a workplace, an office or for business or commercial purposes.

and includes a place within the curtilage of such a place reasonably used by persons at that place.

"LA, 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.

"background noise level" means either:

LA90, 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

Labg, T being the A-weighted sound pressure level obtained using Fast response and arithmetically averaging the lowest levels of the ambient sound pressure level during a representative time period of not less than 15 minutes.

"noise affected premises" means a "noise sensitive place" or a "commercial place"

"noise sensitive place" means -

- a dwelling, 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; or
- a park or gardens.

and includes the curtilage of such place.

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

"intrusive noise" means noise that, because of its frequency, duration, level, tonal characteristics, impulsiveness or vibration -

- is clearly audible to, or can be felt by, an individual; and
- annoys the individual.

In determining whether a noise annoys an individual and is unreasonably intrusive, regard must be given to Australian Standard 1055.2 - 1997 Acoustics - Description and Measurement of Environmental Noise Part 2 - Application to Specific Situations.

"protected area" means -

- a protected area under the Nature Conservation Act 1992; or
- a marine park under the Marine Parks Act 1992; or
- a World Heritage Area.

"waters" includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water natural or artificial watercourse, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and groundwater and any part-thereof.

"land" in the "land schedule"of this document means land excluding waters and the atmosphere.

"mg/L" means milligrams per litre.

"regulated waste" means non-domestic waste mentioned in Schedule 7 of the Environmental Protection Regulation 1998 (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.

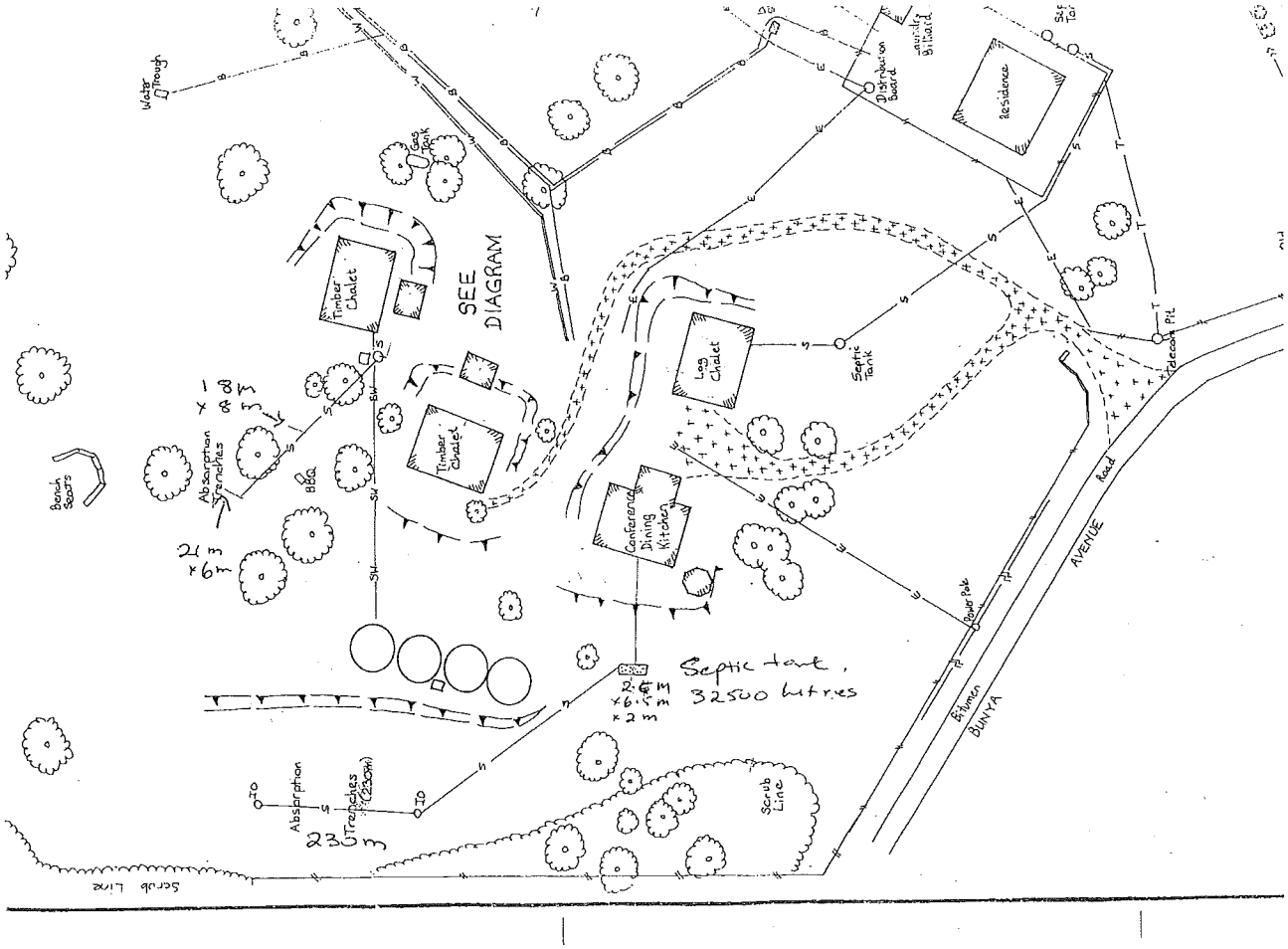
"licensed vehicle" means a vehicle authorised to be used under the licence to transport regulated waste.

"registered vehicle" means "licensed vehicle"

"annual return" means the return required by the annual notice (under section 316 of the Environment Protection Act, 1994) for the section 86(2) licence that applies to the development approval.

Schedule I - Maps / Plan

Location of absorption trenches within Lot 1 on SP158775



END OF PERMIT