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: EPPR00503513

Environmental authority takes effect 28 October 2015

The anniversary date of this environmental authority is the 28 April each year. An annual return and the payment of the annual fee will be due each year on this day.

Environmental authority holder(s)

Name	Registered address
Melvyn Mills and Dianne Mills	The Bearded Dragon 27 Keen Road NERANG QLD 4211

Environmentally relevant activity and location details

Environmentally relevant activity(ies)	Location(s)
63-(1a)(i) Sewage treatment >21 to 100EP - IT or IR	2-22 Tamborine Mountain Road and TAMBORINE - Lot 11 Plan SP170002

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).

Contaminated land

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

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.

	28.10.15
Signature	Date

Sarah Horton
Department of Environment and Heritage Protection
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
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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.

Agency interest: General	
Condition number	**Condition**
A1	**Maintenance of plant and equipment** The holder of this approval must: (i) install all plant and equipment necessary to ensure compliance with the conditions of this approval; 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 waste; (v) monitoring equipment and associated alarms; and (vi) backup systems that act in the event of failure of the primary system.
A2	**Display of approval** A copy of this approval must be kept in a location readily accessible to personnel carrying out the activity.

A3	**Trained operators** 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 approval; and (b) prevent environmental harm during normal operation and emergencies; or (ii) under the close supervision of such a trained person.
A4	**Records** Any record or document required to be kept by a condition of this approval must be kept at the approved place for a period of 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 years and these records are then kept in the form of annual summaries after that period.
A5	**Alterations** 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 approval. An example of a substantial increase in the risk of environmental harm is an increase of ten percent or more in the quantity of the contaminant to be released into the environment.
A6	**Calibration** All instruments and devices used for the measurement or monitoring of any parameter under any condition of this approval must be calibrated, and appropriately operated and maintained.
A7	**Site-based management plan** Within 12 months of the issue of this approval, the holder of this approval must develop and implement an effective and appropriate Site-based management plan which details how the holder will manage the actual and potential environmental impacts resulting from the carrying out of the 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) contingent 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 or procedures adopted; and (ix) staff training and awareness of environmental issues related to the operation of the activity, 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 approved place and be available for examination by an authorised person on request.
Agency interest: Air	
Condition number	**Condition**
B1	**Noxious or offensive odour** Notwithstanding any other condition of this approval, no release of contaminants from the approved place is to cause a noxious or offensive odour beyond the boundaries of the approved place.

Agency interest: Water	
Condition number	**Condition**
C1	**Release of contaminants to waters** Contaminants must not be directly or indirectly released from the approved place to any waters or the bed and banks of any waters except; (i) as permitted under any stormwater schedule; or (ii) to a sewer as permitted or otherwise agreed from time to time by the relevant Local Government.
Agency interest: Stormwater management	
Condition number	**Condition**
D1	**Contaminant release caused by rainfall** The 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 approved place to any stormwater drain or waters or 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.
D2	**Maintenance and cleanup** 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.
Agency interest: Land application	
Condition number	**Condition**
E1	**Release of contaminants to land** The only contaminants to be released to land are treated effluent from the sewage treatment plant.
E2	**Contaminant release location** The defined contaminant release area is the irrigation area depicted in Schedule I – Approved Plans - "Drawing No H10062_P01A_Onsite Wastewater Layout Plan, dated 29/09/2015".
E3	A minimum area of 1925m^2 of land must be provided for the treated sewage effluent contaminant release area.

<table>
<tr><td>E4</td><td>Quantity of contaminants released
The total quantity of contaminants released during any day must not exceed 10 cubic metres.</td></tr>
<tr><td>E5</td><td>Quality of contaminants released from the sewage treatment plant to wet weather storage tank
The contaminants released from the sewage treatment plant to the wet weather storage tank 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
<table>
<tr><th>Quality characteristic</th><th>Release limit</th><th>Limit type</th></tr>
<tr><td>5-day Biochemical Oxygen Demand (inhibited)</td><td>20mg/L</td><td>Maximum</td></tr>
<tr><td>Suspended Solids</td><td>30mg/L</td><td>Maximum</td></tr>
<tr><td>pH</td><td>6.5 to 8.5</td><td>Range</td></tr>
<tr><td>Dissolved Oxygen</td><td>2.0mg/L</td><td>Minimum</td></tr>
<tr><td>Faecal Coliforms</td><td colspan="2">1000 organisms per 100mL 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 100mL)</td></tr>
</table></td></tr>
<tr><td>E6</td><td>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.</td></tr>
<tr><td>E7</td><td>Wet weather storage tank
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.</td></tr>
<tr><td>E8</td><td>When wet weather conditions or soil conditions preclude the release of contaminants, the contaminants must be directed to the wet weather storage tank.</td></tr>
<tr><td>E9</td><td>The wet weather storage tank must be designed to hold at least 30,000 litres of treated effluent.</td></tr>
<tr><td>E10</td><td>Contaminant release precautions
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.</td></tr>
<tr><td>E11</td><td>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.</td></tr>
</table>

E12	Pipelines and fitting 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 contaminated 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.
Agency interest: Noise	
Condition number	**Condition**
F1	**Emission of noise** In the event of a complaint about noise that constitutes intrusive noise being made to the administering authority, that the administering authority considers is not frivolous or vexatious, then the emission of noise from the approved 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 as the Adjusted Maximum Sound Pressure Level ($L_{Amax\ adj,T}$)**
7 am – 6 pm	Background noise level plus 5dB(A)
6 pm – 10 pm	Background noise level plus 5dB(A)
10 pm – 7 am	Background noise level plus 3dB(A)
Noise limits at a commercial place	
Period	**Noise level at a noise sensitive place as the Adjusted Maximum Sound Pressure Level ($L_{Amax\ adj,T}$)**
7 am – 6 pm	Background noise level plus 10dB(A)
6 pm – 10 pm	Background noise level plus 10dB(A)
10 pm – 7 am	Background noise level plus 8dB(A)

Agency interest: Waste management	
Condition number	**Condition**
G1	**General** The holder of this approval must not: (i) allow waste to burn or be burnt at or on the approved place; not (ii) remove waste from the approved place and burn such waste elsewhere.
G2	**Offsite movement** Where regulated waste is removed from the approved place (other than by a release as permitted under another schedule of this approval), the holder of this approval 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.
G3	**Notification of improper disposal of regulated waste** If the holder of this approval becomes aware that a person has removed regulated waste from the approved place and disposed of the regulated waste in a manner which is not authorised by this approval or improper or unlawful, then the holder of this approval must, as soon as practicable, notify the administering authority of all relevant facts, matters and circumstances known concerning the disposal.
Agency interest: Monitoring and reporting	
Condition number	**Condition**
H1	**Complaint recording** All complaints received by the holder of this approval relating to operations at the approved place must be recorded in a log book with the following details: (i) nature, time and date 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 the complaint; and (vi) action taken as a result of the complaint investigation and signature of responsible person.

H2	**Incident recording** A record must be maintained of events including but not limited to: (i) the time, date and duration of equipment malfunctions, including sewage pump stations, that may affect the environmental performance of the approved place; and (ii) any shut-downs of equipment upon which the environmental performance of the approved place depends.
H3	**Notification of emergencies and incidents** As soon as possible 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 approval, the holder of this approval must notify the administering authority of the release by telephone or facsimile.
H4	The notification of emergencies or incidents as required by condition number H3 must include but not be limited to the following: (i) the name of the holder of the approval; (ii) the location of the emergency or incident; (iii) the number of this approval; (iv) the name and telephone number of the designated contact person; (v) the time of the release; (vi) the time the holder of the approval became aware of the release; (vii) the suspected cause of the release; (viii) the environmental harm and/or environmental nuisance caused, threatened, or suspected to be caused by the release; and (ix) actions taken to prevent any further release and mitigate any environmental harm and/or environmental nuisance caused by the release.
H5	Not more than 14 days following the initial notification of an emergency or incident, the holder of the approval must provide written advice of the information supplied in accordance with condition number H4 in addition to: (i) proposed actions to prevent a recurrence of the emergency or incident; (ii) outcomes of actions taken at the time to prevent or minimise environmental harm.
H6	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 reasonable expected to be not in accordance with the conditions of this approval, the holder of the approval must provide written advice of the results of any such monitoring performed to the administering authority.

<table>
<tr><td>H7</td><td>Monitoring of effluent released to land
The holder of this approval is responsible for the making of determinations and keeping records of the quality characteristics of the effluent released for irrigation, and at the frequency specified in Schedule H - Table 1:
Schedule H – Table 1
<table>
<tr><th>Quality characteristics</th><th>Units</th><th>Monitoring frequency</th></tr>
<tr><td>5-day Biochemical Oxygen Demand (inhibited)</td><td>mg/L</td><td rowspan="9">Quarterly</td></tr>
<tr><td>Suspended Solids</td><td>mg/L</td></tr>
<tr><td>pH</td><td>pH scale</td></tr>
<tr><td>Dissolved Oxygen</td><td>mg/L</td></tr>
<tr><td>Total Nitrogen (as Nitrogen)</td><td>mg/L</td></tr>
<tr><td>Total Phosphorus (as Phosphorus)</td><td>mg/L</td></tr>
<tr><td>Faecal Coliforms</td><td>cfu/100mL</td></tr>
<tr><td>Specific Conductance or electrical conductivity</td><td>µS/cm</td></tr>
</table></td></tr>
<tr><td>H8</td><td>Sampling and in-situ monitoring point details
Determinations of the quality of contaminants released to land to check conformity with the release quality characteristics specified in Schedule E – Table 1 of this approval must be undertaken at the sampling and in-situ measurement point(s) described prior to land disposal.</td></tr>
<tr><td>H9</td><td>All determinations of the quality of contaminants released to land must be made in accordance with the methods prescribed in the Department of Environment and Heritage Protection Water Quality Sampling Manual, 2nd Edition, February 1995 or more recent editions or supplements to that document as such become available, or as specifically approved by the administering authority.</td></tr>
<tr><td>H10</td><td>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.</td></tr>
<tr><td>H11</td><td>Exception reporting
The holder of this approval must notify the administering authority in writing of any monitoring result which indicates exceedance of any approval limit within 28 days of completion of analysis.</td></tr>
</table>

<table>
<tr><td>H12</td><td>The written notification required by condition number H11 above must include:
(i) the full analysis results; and
(ii) details of investigations or corrective actions taken; and
(iii) any subsequent analysis.</td></tr>
<tr><td>H13</td><td>Monitoring of volume of release
The daily quantity of contaminants released must be determined or estimated by an appropriate method, for example, a flow meter.</td></tr>
<tr><td>H14</td><td>Contaminant release area monitoring program
Within 12 months of the date of issue of this approval, the holder of this approval must develop and implement a Contaminant Release Area Monitoring Program to effectively monitor the condition of the land to which contaminants are released.</td></tr>
<tr><td>H15</td><td>Monitoring required by condition H14 shall include the taking of top soil and sub-soil samples at least two sites for the quality characteristics and at the frequency specified in Schedule H - Table 2.
Schedule H – Table 2
<table>
<tr><th>Quality characteristics</th><th>Units</th><th>Frequency</th></tr>
<tr><td>pH</td><td>pH scale</td><td rowspan="16">Every 2 years</td></tr>
<tr><td>Sodium Adsorption Ratio (1:5 Soil/water mix)</td><td>calculated</td></tr>
<tr><td>Calcium/Magnesium Ratio (1:5 Soil/water mix)</td><td>calculated</td></tr>
<tr><td>Exchangeable Cations</td><td>mg/kg</td></tr>
<tr><td>Total Cations</td><td>mg/kg</td></tr>
<tr><td>Specific Conductance or electrical conductivity</td><td>µS/cm</td></tr>
<tr><td>Total Manganese</td><td>mg/kg</td></tr>
<tr><td>Total Nitrogen</td><td>mg/kg</td></tr>
<tr><td>Phosphorus (extractable)</td><td>mg/kg</td></tr>
<tr><td>Potassium (available)</td><td>mg/kg</td></tr>
<tr><td>Potassium (extractable)</td><td>mg/kg</td></tr>
<tr><td>Total Calcium (exchangeable)</td><td>mg/kg</td></tr>
<tr><td>Total Chloride</td><td>mg/kg</td></tr>
<tr><td>Total Magnesium (exchangeable)</td><td>mg/kg</td></tr>
<tr><td>Total Sodium (exchangeable)</td><td>mg/kg</td></tr>
</table></td></tr>
</table>

H16	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.
H17	The holder of the approval must submit with each annual return a report on the Contaminant Release Area Monitoring Program including 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 an expert in the field of effluent land disposal.
H18	The holder of this approval must ensure that the results of all monitoring performed in accordance with this approval for the period covered by the return are submitted with the Annual Return.
H19	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.
H20	**Noise monitoring** For the purposes of investigating any complaint made about noise annoyance and also checking compliance with condition number F1 of the noise schedule, monitoring and recording the noise levels from the activity must be undertaken for at least the following descriptors, 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 noise 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.
H21	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.
H22	The method of measurement and reporting of noise levels must comply with the Department of Environment and Heritage Protection *Noise Measurement Manual, second edition, March 1995*, or more recent additions or supplements to that document as become available.
H23	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.

H24	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.

Definitions

For the purposes of this approval the following definitions apply:

"Act" means the *Environmental Protection Act 1994*

"administering authority" means the Department of Environment and Heritage Protection or its successor

"land" in any Land Application Schedule, means land excluding waters and the atmosphere

"mg/L" means milligrams per litre

"cfu" means colony forming units

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

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

"range" means 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

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

"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.

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

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

"STP" means Sewage Treatment Plant

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

"$L_{Amax\ adj,\ T}$" 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.

"Background noise level" means either:

> LA90, T being the A-weighted sound pressure level exceeded for 90% 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.

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

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

"noise sensitive place" means:

(a) a dwelling, mobile home or caravan park, residential marina or other residential purposes; or

(b) a motel, hotel or hostel; or

(c) a kindergarten, school, university or other educational institution; or

(d) a medical centre or hospital; or

(e) a protected area

(f) a park or gardens

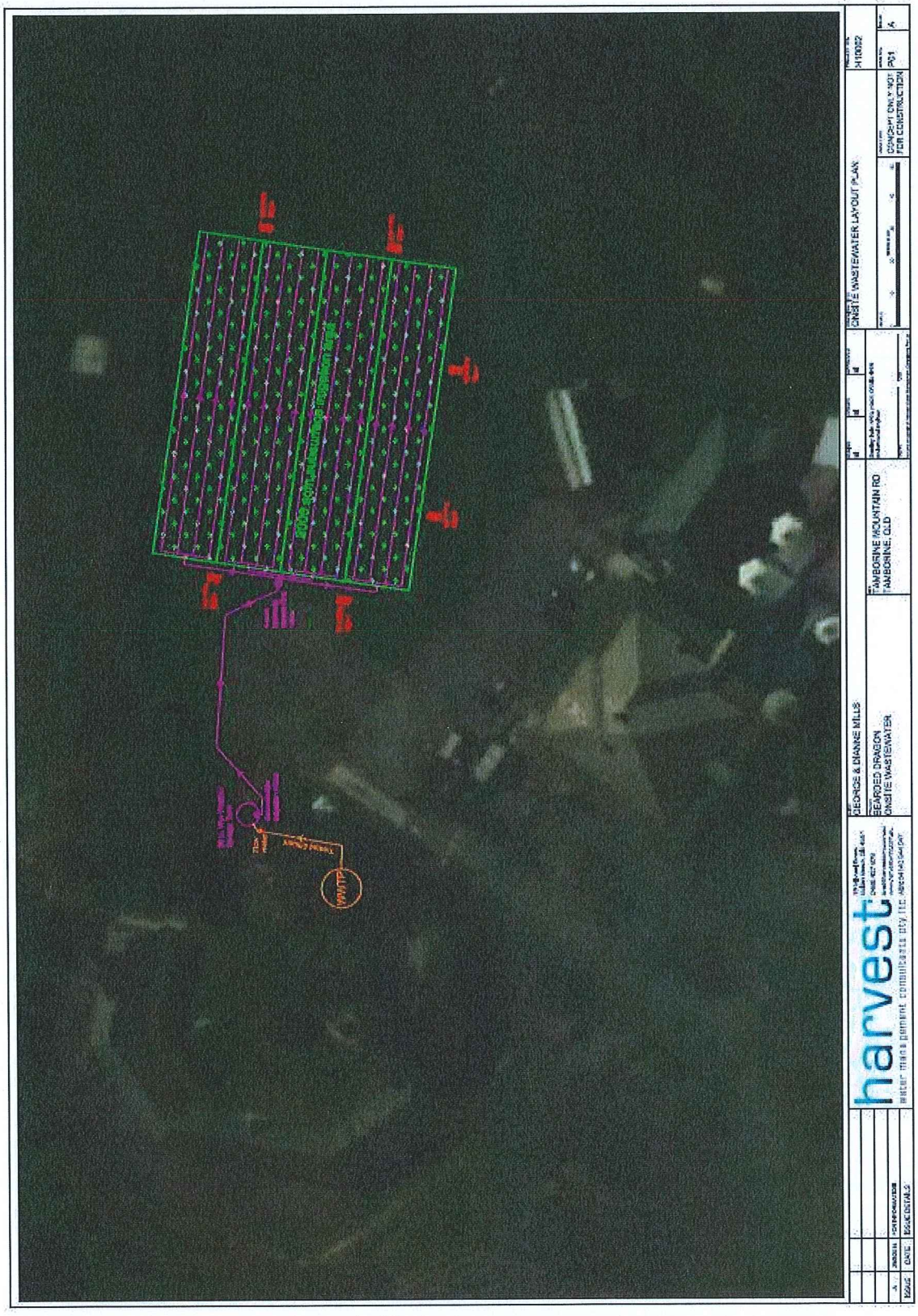
"intrusive noise" means noise that, because of its frequency, duration, level, tonal characteristics, impulsiveness or vibration:

(a) is clearly audible to, or can be felt by, an individual; and

(b) annoys the individual.

In determining whether a noise annoys an individual and is unreasonably intrusive, regard must be had to *Australian Standard 1055.2 – 1989 Acoustics – Description and measurement of environmental noise Part 2 – Application to specific situations.*

Schedule 1—Approved plans



END OF PERMIT