Permit

Environmental Protection Act 1994

Environmental authority P-EA-100118389

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

Environmental authority number: P-EA-100118389

Environmental authority takes effect on the date that your related development approval MCU20/0026 takes effect. Within 20 business days of the environmental authority taking effect, the administering authority must be given written notice of the occurrence. Prior to the commencement of the activity, the administering authority must be given written notice of the proposed date of commencement.

The first annual fee is payable within 20 business days of the effective date.

The anniversary date of this environmental authority is the same day each year as the effective date. The payment of the annual fee will be due each year on this day. An annual return will be due each year on 1 March.

Environmental authority holder

Name	Registered address
AJK Contracting Pty Ltd	59 Talty Road, FOULDEN QLD 4740

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Locations
ERA 33 - Crushing, milling, grinding or screening more than 5,000t of material in a year	Lot 7 Plan WHS381 located at 22178 Peak Downs Highway Blue Mountain 4737
ERA 53 - Organic material processing: Processing more than 200t of organic material in a year - (a) by composting the organic material	
ERA 54 - Mechanical waste reprocessing 1: Operating a facility for receiving and mechanically reprocessing, in a year, more than 5,000t of inert, non-putrescible waste or green waste only	

ABN 46 640 294 485

Queensland Government

Additional information for applicants

Environmentally relevant activities

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

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

It is a requirement of the EP Act that an owner or occupier of contaminated land give written notice to the administering authority if they become aware of the following:

- the happening of an event involving a hazardous contaminant on the contaminated land (notice must be given within 24 hours); or
- a change in the condition of the contaminated land (notice must be given within 24 hours); or
- a notifiable activity (as defined in Schedule 3) having been carried out, or is being carried out, on the contaminated land (notice must be given within 20 business days)

that is causing, or is reasonably likely to cause, serious or material environmental harm.

For further information, including the form for giving written notice, refer to the Queensland Government website www.qld.gov.au, using the search term 'duty to notify'.

Take effect

Please note that, in accordance with section 200 of the EP Act, an EA has effect:

a) if the authority is for a prescribed ERA and it states that it takes effect on the day nominated by the holder of the authority in a written notice given to the administering authority-on the nominated day; or

b) if the authority states a day or an event for it to take effect-on the stated day or when the stated event happens; or

c) otherwise - on the day the authority is issued.

However, if the EA is authorising an activity that requires an additional authorisation (a relevant tenure for a resource activity, a development permit under the *Planning Act 2016* or an SDA Approval under the *State Development and Public Works Organisation Act 1971*), this EA will not take effect until the additional authorisation has taken effect.

If this EA takes effect when the additional authorisation takes effect, you must provide the administering authority written notice within 5 business days of receiving notification of the related additional authorisation taking effect.

The anniversary day of this environmental authority is the same day each year as the effective date. The payment of the annual fee will be due each year on this day.

If you have incorrectly claimed that an additional authorisation is not required, carrying out the ERA without the additional authorisation is not legal and could result in your prosecution for providing false or misleading information or operating without a valid environmental authority.

	19 November 2021
Signature	Date

Scott Blanchard
Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Waste Assessment
Department of Environment and Science
Phone: 1300 130 372
Email: palm@des.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)

Other permits required

This permit only provides an approval under the *Environmental Protection Act 1994*. In order to lawfully operate you may also require permits / approvals from your local government authority, other business units within the department and other State Government agencies prior to commencing any activity at the site. For example, this may include permits / approvals with your local Council (for planning approval), the Department of Transport and Main Roads (to access state controlled roads), the Department of Natural Resources, Mines and Energy (to clear vegetation), and the Department of Agriculture and Fisheries (to clear marine plants or to obtain a quarry material allocation).

Development Approval

This permit is not a development approval under the *Planning Act 2016*. The conditions of this environmental authority are separate, and in addition to, any conditions that may be on the development approval. If a copy of this environmental authority is attached to a development approval, it is for information only, and may not be current. Please contact the Department of Environment and Science to ensure that you have the most current version of the environmental authority relating to this site.

Conditions of environmental authority

Agency interest: General	
Condition number	**Condition**
G1	Activities under this environmental authority must be conducted in accordance with the following limitations: a) The only organic materials that may be accepted for crushing, milling or grinding are: i. wood waste (excluding chemically treated timber) including pallets, offcuts, boards, stumps and logs; ii. green wastes; and b) The only organic materials that may be accepted for composting activities are: i. wood waste (excluding chemically treated timber) including pallets, offcuts, boards, stumps and logs; ii. green wastes; iii. 'stabilised biosolids and green waste mixture'; and c) The maximum amount of 'stabilised biosolids and green waste mixture' accepted in a year must not exceed 17,000 tonnes (wet weight); and d) Composting activities undertaken on site must only be conducted within the designated areas for each composting pad, as specified in *Appendix 1 – Site Plan*.
G2	All reasonable and practicable measures must be taken to prevent or minimise environmental harm caused by the activities.
G3	Any contravention of a condition of this environmental authority must be reported to the administering authority as soon as practicable within 24 hours of becoming aware of the breach.
G4	Records of any contravention of this environmental authority must be made including full details of the contravention, all investigations, and any subsequent actions undertaken.
G5	All records required by the conditions of this environmental authority must be provided to the administering authority upon request by the time and in the format requested.
G6	All information and records required by the conditions of this environmental authority must be kept for a minimum of five years with the exception of environmental monitoring results which must be kept until the surrender of this environmental authority.
G7	Written procedures must be developed and documented prior to commencement of the activity that: a) identify all potential risks to the environment from the activity, including during and outside routine operations, during closure and in an emergency (e.g. fire); and b) identify measures to secure compliance with the conditions and prevent or minimise the potential for environmental harm for all potential risks; and c) establish an ongoing inspection and maintenance program for measures, plant and equipment including calibration and servicing that is in accordance with manufacturer's instructions; and

	d) establish a staff training program on obligations under this environmental authority and the *Environmental Protection Act 1994* to be conducted as part of staff inductions and that training be completed at least annually; and e) establish processes to review environmental risks, incidents, performance and complaints to ensure ongoing effectiveness.
G8	Written procedures required by condition G7 must be: a) implemented; and b) reviewed at least annually; and c) provided to the administering authority upon request at the time and in the format requested.
G9	All plant, equipment and measures necessary to comply with the conditions of this environmental authority must be installed, operated and maintained in a proper and effective manner.
G10	Records must be kept of all persons trained under condition G7(d) and the date they received the training.
G11	Chemicals, fuels and liquid waste in quantities or containers of greater than 15 litres must be stored with covers in place within a secondary containment system. A first flush system must not be relied upon for secondary containment.
G12	The following details must be recorded for all environmental complaints received: a) Date and time the complaint was received; and b) If authorised by the person making the complaint, their name and contact details; and c) Nature and details of the complaint, including date and time the complaint was received; and d) Investigations carried out in response to the complaint as required by G13; and e) The results of investigations under G13; and f) Measures taken under G14.
G13	An investigation must be undertaken into all environmental complaints received to determine: a) the potential circumstances and actions on site that may have contributed to the basis of the complaint; and b) reasonable measures that could be implemented to address the complaint.
G14	Measures identified under G13 must be taken within: a) four weeks of the investigation required by G13 being finalised; or b) a longer period agreed to in writing by the administering authority.
G15	All analyses required under this environmental authority must be carried out by a laboratory that has National Association of Testing Authorities (NATA) certification, or an equivalent certification, for such analyses. The only exception to this condition is for in situ monitoring of pH, oxygen, electrical conductivity and turbidity.
G16	All testing and monitoring required by the conditions of this environmental authority: a) Must be carried out in the manner specified by this environmental authority; and b) Must be carried out on samples that are representative of the material being tested; and c) Must be carried out using monitoring devices that are calibrated and maintained according

	to the manufacturers' specifications; and d) Must be carried out, interpreted and recorded by an appropriately qualified person.
G17	When required by the administering authority, monitoring must be undertaken in the manner prescribed by the administering authority to investigate a complaint of environmental nuisance or unauthorised contaminant release arising from the activity. The monitoring results must be provided within 10 business days to the administering authority upon its request.
G18	A weather station must be installed, operated, calibrated and maintained on site which continuously and electronically records: a) Rainfall (mm/day); and b) Wind speed (km/hour); and c) Wind direction (cardinal direction, e.g. north-easterly); and d) Air temperature (degrees Celsius); and e) Relative humidity (%).
G19	The weather station required by condition G18 must be installed and operated in compliance with the Australian/New Zealand Standards: a) AS/NZS 3580.1.1: 2016 (Methods for sampling and analysis of ambient air – Guide to siting air monitoring equipment) (or more recent editions); and b) AS 3580.14:2014 (Methods for sampling and analysis of ambient air – Meteorological monitoring for ambient air) (or more recent additions).
G20	A visible and legible sign must be located on the front fence or adjacent to the entrance of the site stating: a) 'To contact the operator of this facility please refer all communication via these contact details'; and b) The name of the environmental authority holder; and c) A business hours and after hours telephone number; and d) An email address for the environmental authority holder.
G21	All reasonable and practicable measures must be taken to exclude vectors and pest species to the extent necessary to prevent: a) environmental nuisance to occupiers of neighbouring premises; and b) any danger or risk to the health of any persons.
G22	The following records must be kept for all feedstock received: a) Name of the generator and transporter of the feedstock including their contact details; and b) Time and date feedstock was received at the site; and c) Description of feedstock; and d) Weight or volume of feedstock; and e) Details of any samples taken (including sample ID, laboratory holding time, storage method and storage location); and f) Quality assurance information for all analysis; and g) Measurements, observations and characterisation results of feedstock; h) The name of any person undertaking any measurements, observations or characterisation of feedstock.
G23	Waste can only be accepted and used as feedstock if the following requirements are met:

	a) The waste is homogeneous; and b) The waste is effectively characterised for physical and chemical characteristics and any contaminants of concern potentially present; and c) The waste has characteristics that provide an agronomic or soil conditioning benefit to the finished compost; and d) The waste does not have any characteristics that may adversely affect the composting process; and e) The waste does not have any characteristics that contaminate plant or animal products produced from the finished compost.
G24	A Feedstock Management Plan must be developed and implemented, which includes: a) Methods for characterising actual and potential feedstock to assess compliance with condition G23; and b) Feedstock storage requirements based on the odour ratings, leachability and physical compositions of each type of feedstock; and c) Feedstock processing requirements for each type of feedstock; and d) Procedures to assess whether the feedstock received at the site is suitable for the processing techniques being used; and e) Procedures to assess feedstock received at the site to determine whether it is lawfully able to be accepted, including under the conditions of this environmental authority; and f) Procedures for rejecting unsuitable and/or unlawful feedstock; and g) Procedures for reporting unlawful waste delivery to the administering authority.
G25	The methods for characterising actual and potential feedstock required by condition G24 a) must include, but is not limited to: a) A feedstock analysis and testing program for the following parameters: i. Carbon and nitrogen content (% dry weight basis); and ii. Moisture content (% dry weight basis); and iii. Sulfur, hydrogen sulfide and mercaptans (ppm); and iv. Protein content (% dry weight basis); and v. Proportion of biodegradable volatile solids (BVS) (% dry weight basis); and vi. Total metals and metalloids including aluminium, arsenic, barium, beryllium, borate (boron), cadmium, cobalt, total chromium, copper, iron, fluoride, lead, manganese, mercury, molybdenum, antimony, nickel, selenium, silver, strontium, tin, titanium, thallium, vanadium and zinc) (µg/kg); and vii. Plastics Light Flexible or film > 5 mm as per Australian Standard (AS) 4454 Composts, soil conditioners and mulches; viii. Glass, metal and rigid plastics > 2 mm as per AS4454 Composts, soil conditioners and mulches; ix. PFAS (µg/kg) (refer to condition G26); and x. Any other potential contaminants of concern that may impede the composting process and/or may contaminate plant or animal products produced on compost treated soil and/or that are not beneficial for plant growth with the finished compost (µg/kg); and b) Procedures and methods to test the parameters listed in condition G25 a); and c) Provisions for testing the parameters listed in condition G25 a): i. At least one sample for every 1500 tonnes (wet weight);

	ii. On becoming aware that the processes for generating a feedstock have changed and prior to adding the feedstock to composting material; and d) Methods to assess all feedstock and determine the odour potential of the type of feedstock for intensity and hedonic tone, including unpleasantness.
G26	All PFAS sampling and analysis must: a) Use analysis techniques that achieve lowest practicable limits of reporting (LOR <0.5 µg/kg solids; LOR <0.001 µg/L for liquids) and maximise extraction of PFAS from samples; and b) Comply with recommendations in the PFAS National Management Plan May 2020 or more recent editions adopted by the Queensland Government; and c) incorporate standard and Total Oxidisable Precursor (TOP) Assay analysis to determine PFAS concentrations and must include at least Perfluoroalkyl carboxylic acids (C4-C14), Perfluoroalkyl sulfonic acids (C4-C10), Perfluoroalkane sulfonamides (C8), Perfluoroalkane sulfonamido acetic acids (FASAAs) and N-alkyl perfluoroalkane sulfonamido acetic acids (MeFASAAs, EtFASAAs) (C8 perfluoro) and n:2 Fluorotelomer sulfonic acids (n= 4, 6, 8 & 10); and d) incorporate quality assurance checks for Total Oxidisable Precursor (TOP) Assay (refer recommendations in the Australasian Land & Groundwater Association (ALGA) funded TOP Assay reliability study (Ventia 2019). Ventia (2019) Improving Measurement Reliability of the PFAS TOP Assay. Australasian Land and Groundwater Association Report 20 June 2019, 1-96pp); and e) give due regard to any advice from the administering authority concerning improvements in analysis techniques for the waste types accepted.
G27	All sampling programs for feedstock and product quality must incorporate quality assurance measures, including the following: a) duplicate samples, at not less than 1 in 10; and b) trip and field blank samples (1 of each for each sampling program); and c) rinsate samples off secondary sampling equipment, where such equipment is used to collect multiple samples.
G28	A Compost Process Plan must be developed, which includes: a) Ideal composting process parameters for the feedstock and processing techniques being used on site including: i. C:N ratio; and ii. Porosity or bulk density; and iii. Moisture content; and iv. pH; and v. Oxygen content; and vi. Temperature range; and b) Information to support the appropriateness of the ideal composting process parameters with regard to the feedstock and processing techniques being used on site; and c) Methods and frequencies for monitoring composting material to assess that the ideal composting process parameters are being met; and

<table>
<tr><td></td><td>d) At a minimum, annual reviews of the effectiveness of the ideal composting process parameters at achieving pasteurisation and minimising odour impacts.</td></tr>
<tr><td>G29</td><td>Composting material must comply with ideal composting process parameters identified in the Compost Process Plan required by condition G28.</td></tr>
<tr><td>G30</td><td>The following records must be kept for all monitoring undertaken to assess that the ideal composting process parameters are being met:
a) Details any analysis, measurements or observations of composting material and name of the person/s undertaking the assessment; and
b) Details of any samples taken (including sample ID, laboratory holding time, storage method and storage location).</td></tr>
<tr><td>G31</td><td>All finished compost must be monitored for the quality characteristics and at the monitoring frequency listed in Table1 – Finished Compost Product Quality Characteristic Limits.
Table 1 – Finished Compost Product Quality Characteristic Limits
<table>
<tr><th>Quality Characteristics</th><th>Quality Characteristic Limit</th><th>Monitoring Frequency</th></tr>
<tr><td>For any quality characteristic not specifically listed below but listed in Australian Standard AS 4454: 2012 (Composts, Soil Conditioners and mulches)</td><td>The respective requirements under Australian Standard AS 4454: 2012 (Composts, Soil Conditioners and mulches).</td><td rowspan="25">One composite sample consisting of at least five individual grab samples per 120 dry solid tonnes (dst) of finished compost.</td></tr>
<tr><td>pH</td><td>≥5.0 (pH units)</td></tr>
<tr><td>Electrical conductivity</td><td>≤10 (dS/m)</td></tr>
<tr><td>Arsenic (mg/kg)</td><td>≤20</td></tr>
<tr><td>Cadmium (mg/kg)</td><td>≤1</td></tr>
<tr><td>Chromium (total) (mg/kg)</td><td>≤100</td></tr>
<tr><td>Copper (mg/kg)</td><td>≤100</td></tr>
<tr><td>Lead (mg/kg)</td><td>≤150</td></tr>
<tr><td>Mercury (mg/kg)</td><td>≤1</td></tr>
<tr><td>Nickel (mg/kg)</td><td>≤60</td></tr>
<tr><td>Selenium (mg/kg)</td><td>≤5</td></tr>
<tr><td>Zinc (mg/kg)</td><td>≤300</td></tr>
<tr><td>DDT/DDD/DDE (mg/kg)</td><td>≤0.5</td></tr>
<tr><td>Aldrin (mg/kg)</td><td>≤0.02</td></tr>
<tr><td>Dieldrin (mg/kg)</td><td>≤0.02</td></tr>
<tr><td>Chlordane (mg/kg)</td><td>≤0.02</td></tr>
<tr><td>Heptachlor (mg/kg)</td><td>≤0.02</td></tr>
<tr><td>HCB (mg/kg)</td><td>≤0.02</td></tr>
<tr><td>Lindane (mg/kg)</td><td>≤0.02</td></tr>
<tr><td>BHC (mg/kg)</td><td>≤0.02</td></tr>
<tr><td>PCB's (mg/kg)</td><td>Not detected</td></tr>
<tr><td>Enteric viruses</td><td>< 1 PFU per 4 grams total solids</td></tr>
</table></td></tr>
</table>

	Helminth ova (Ascaris sp. and Taenia species.)	<1 per 4 grams total solids	
	E.coli (Most probable number/gram (dry weight))	<100	
	Faecal coliforms (Most probable number/gram (dry weight))	<1000	
	Salmonella species.	Not detected/50grams of final product (dry weight)	
	PFAS Compounds (see associated requirements in note 1 and note 2 of condition G31, condition G26, and condition G33)		
	PFOS (µg/kg)	1	
	PFHxS (µg/kg)	1	
	PFOA(µg/kg)	1	
	Sum of PFBA, PFPeA, PFHxA, PFHpA (above LOR) (µg/kg)	1	
	Sum of all C_9 to C_{14} perfluorocarboxylic acids (above LOR) (µg/kg)	1	
	Sum of all perfluorosulfonamides (above LOR) (µg/kg)	1	
	Sum of all n:2 Fluorotelomer sulfonic acids above LOR (µg/kg)	1	
	PFAS leachability (µg/L)	To be kept to minimum practicable	
	Phenoxy Herbicides (see requirements in note 1 and note 3)		
	Phenoxy Herbicides	Not detected above LOR	
	Glass, metal, rigid plastics	≤0.5 (% dry matter weight/weight)	
	Plastics – light, flexible, film	≤0.05 (% dry matter weight/weight)	
	Viable plant propagules	Not detected	

Note 1 - LOR means limit of reporting, which must be as low as practicably achievable.

Note 2 – The quality characteristic limits for PFAS Compounds in Table 1 apply to finished compost that does not contain any biosolids. Finished compost containing biosolids must still be monitored for PFAS Compounds at the monitoring frequency and quality characteristics required by Table 1. Finished compost containing biosolids is a stabilised biosolids resource and must be managed in accordance with condition G35 and the End of Waste Code for Biosolids.

Note 3 - Phenoxy Herbicides limit applies except when the product is used as part of a specific weed control program under the active management of an agronomist. The herbicide concentrations must still be monitored under this exemption.

G32	Finished compost must comply with the quality characteristic limits listed in *Table 1 – Finished Compost Product Quality Characteristic Limits.*
G33	PFAS leachability in finished compost must be determined from samples analysed using a leaching solution of pH 7 (un-buffered) under Australian Standard Leaching Procedure (ASLP).

	PFAS concentrations must be determined for the same suite of PFAS as in Condition G26 using the lowest practicable limit of reporting.
G34	Monitoring of feedstock, composting material and finished compost must be carried out in accordance with the test methods listed for the relevant parameters in Australian Standard AS 4454:2012 (Composts, soil conditioners and mulches) (or more recent editions).
G35	The environmental authority holder must: a) be a registered resource producer under the End of Waste Code for Biosolids; and b) comply with the requirements in 'Section 6 – Registered Resource Producer Requirements' of the End of Waste Code for Biosolids if the composting material or finished compost contains biosolids; and c) provide finished compost containing biosolids only for use as a resource under the End of Waste Code for Biosolids; and d) provide finished compost containing biosolids only to a Resource User who has notified the chief executive for the use under the End of Waste Code for Biosolids.

Agency interest: Waste

Condition number	Condition
W1	All waste generated in carrying out the activity must be lawfully reused, recycled or removed to a facility that can lawfully accept the waste.
W2	Incompatible wastes must not be mixed in the same container or waste storage area.
W3	Feedstock, composting material, finished compost and any waste must not be burnt or allowed to be burned.

Agency interest: Acoustic

Condition number	Condition
N1	Other than as permitted within this environmental authority, noise generated by the activity must not cause environmental nuisance to any sensitive place or commercial place.
N2	Noise from the activity must not include substantial low frequency noise components and must not exceed the levels identified in *Table 2 – Noise* limits and the associated requirements at any nuisance sensitive place or commercial place.

Table 2 - Noise limits

Noise level measured in dB(A)	Monday to Saturday			Sundays and public holidays		
	7am - 6pm	6pm - 10pm	10pm - 7am	9am - 6pm	6pm - 10pm	10pm - 9am
	Noise measured at the nearest sensitive place					
$L_{Aeq\ adj,\ 1\ hr}$	Bkg + 5	Bkg + 0	Bkg + 0	Bkg + 0	Bkg + 0	Bkg + 0
$L_{Amax\ ,\ 1\ hr}$	--	--	47 dB(A)	--	--	47 dB(A)

	Noise measured at a commercial place					
$L_{Aeq\ adj,\ 1\ hr}$	Bkg + 10	Bkg + 5	Bkg + 0	Bkg + 5	Bkg + 0	Bkg + 0

Bkg = Background

Associated requirements

1. All monitoring devices must be calibrated and maintained according to the manufacturer's instruction manual.
2. Any monitoring must be in accordance with the most recent version of the administering authority's *Noise Measurement Manual.*
3. Any monitoring of noise emissions from the activity must be undertaken when the activity is in operation.
4. Monitoring location(s) must be relevant to the matter(s) under investigation.
5. Monitoring must include:
    a. $L_{Aeq,\ adj,1hr}$ and $L_{Amax;}$
    b. Background noise (background) as $L_{A90,\ adj,\ T}$;
    c. The level and frequency of occurrence of any 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.

Agency interest: Air

Condition number	Condition
A1	Odours or airborne contaminants must not cause environmental nuisance to any sensitive place or commercial place.
A2	An Odour Management Plan must be developed and implemented while carrying out of the activity, which includes: a) Identification of all odour sources, and potential odour sources at the site; and b) Odour investigations to be completed by an appropriately qualified person; and c) An analysis of routine and non-routine processes and operating conditions that could result in, and potentially result in, odour emissions; and d) Measures to avoid the generation and impacts of odours; and e) At a minimum, annual reviews of the effectiveness of the measures.
A3	Dust and particulate matter emissions must not exceed the following concentrations at any sensitive place or commercial place: a) dust deposition of 120 milligrams per square metre per day, when monitored in accordance with Australian Standard AS 3580.10.1 (or more recent editions), or b) a concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM10) suspended in the atmosphere of 50 micrograms per cubic metre over a 24 hour averaging time, when monitored in accordance with Australian Standard AS 3580.9.6 (or more recent editions) or any other method approved by the administering authority.

Agency interest: Land

Condition number	Condition
L1	Contaminants must not be released to land.
L2	Land that has been disturbed by the activities conducted under this environmental authority must be rehabilitated in a manner such that: a) There is no visual evidence of erosion or sedimentation occurring; and b) The potential for environmental nuisance caused by dust is minimised; and c) The quality of water released from the site, including seepage, does not contain any prescribed water contaminant or cause environmental harm; and d) The quality of water or sediment in any residual water body does not have the potential to cause environmental harm; and e) The landform is in stable condition; and f) Land is re-profiled to a level consistent with surrounding soils; and g) Land is re-profiled to original contours and established drainage lines; and h) Land is vegetated with groundcover which is not a declared pest species, and which is established and actively growing; and i) Land is not contaminated by a hazardous contaminant.
L3	An area which provides an impervious barrier to subsoil and groundwater must be used for: a) receiving, mixing, storing and processing composting materials; and b) collecting and storing leachate; and c) storing finished compost.
Agency interest: Water	
Condition number	**Condition**
WT1	Contaminants must not be released to any waters in a manner that causes or is likely to cause environmental harm.
WT2	Any stormwater which filters through or emanates from composting material piles, finished compost or stored feedstock must be managed as leachate.
WT3	Leachate must be reused within compost windrows or removed by an appropriately licenced person to a facility that can accept the waste.
WT4	Stormwater runoff from disturbed areas, generated by a storm event up to and including a 24 hour storm event with an average recurrence interval (ARI) of 1 in 25 years (3.92% annual exceedance probability) must be contained and beneficially re-used in the carrying out of the activity.
WT5	Notwithstanding condition WT4, stormwater may be released from the site only after an event exceeding a 24 hour storm event with an average recurrence interval (ARI) of 1 in 25 years (3.92% annual exceedance probability) and where:

<table>
<tr><td></td><td>a) Beneficial reuse of contained stormwater runoff on the site to which this environmental authority relates is not viable; and
b) The release is required to prevent an exceedance of the stormwater retention capacity required by this environmental authority; and
c) There are no contaminants present that will, or that are capable of causing environmental harm or adversely affecting produce or stock.</td></tr>
<tr><td>WT6</td><td>An appropriately qualified person(s) must monitor and record all indicators required by and in accordance with Table 3 – Water monitoring and the associated monitoring requirements.
Table 3 – Water monitoring
<table>
<tr><th>Monitoring point</th><th>Indicators</th><th>Monitoring frequency</th></tr>
<tr><td rowspan="6">Stormwater Dam identified as Dam ‘C’ in Appendix 1 – Site Plan</td><td>Total suspended solids (TSS)</td><td rowspan="6">Quarterly</td></tr>
<tr><td>pH</td></tr>
<tr><td>Electrical Conductivity (EC)</td></tr>
<tr><td>Dissolved Oxygen (DO)</td></tr>
<tr><td>Total Nitrogen (TN) and Total Phosphorus (TP) (µg/L)</td></tr>
<tr><td>PFAS (ng/L trace level analysis)</td></tr>
</table>
Associated requirements
1. Monitoring must be in accordance with the methods prescribed in the current edition of the administering authority’s Water Quality Sampling Manual.
2. Samples must be taken using representative samples.
3. All determinations must employ analytical practical quantification limits sufficiently low enough to enable comparisons to be made against water quality objectives/limits relevant to the particular water quality characteristic.
4. All monitoring devices must be correctly calibrated and maintained.</td></tr>
<tr><td>WT7</td><td>Except when compost windrows are required to be uncovered such as for inoculation, monitoring or turning, the compost material must be kept under impermeable covers (e.g. tarpaulins) that prevent rainfall infiltration.</td></tr>
<tr><td>WT8</td><td>The pads on which compost windrows, feedstock and product are placed must be graded and managed to prevent infiltration of stormwater runoff into the materials.</td></tr>
<tr><td>WT9</td><td>Contaminants must not be released to groundwater or at a location where they are likely to release to groundwater.</td></tr>
<tr><td>WT10</td><td>Livestock must be excluded from drinking stormwater runoff collected on the site.</td></tr>
</table>

Definitions

Note: Where a term is not defined, the definition in the Environmental Protection Act 1994, its regulations or environmental protection policies must be used. If a word remains undefined it has its ordinary meaning.

24 hour storm event with an average recurrence interval of 1 in 10 years means the maximum rainfall depth from a 24-hour duration precipitation event with an average recurrence interval of once in 10 years. For example, an Intensity–Frequency–Duration table for a 24-hour duration event with an average recurrence interval of 1 in 10 years, identifies a rainfall intensity of 8.2mm/hour. The rainfall depth for this event is therefore 24 hour x 8.2mm/hour = 196.8mm.

Activity means the environmentally relevant activity or activities to which the environmental authority relates.

Administering authority means the Department of Environment and Science or its successors or predecessors.

Appropriately qualified person(s) means a person or persons who has professional qualifications, training, skills and experience relevant to the environmental authority requirement and can give authoritative assessment, advice and analysis in relation to the environmental authority requirement using the relevant protocols, standards, methods or literature. Where a requirement relates to odour, the person or persons must have odour assessment qualifications and must be able to demonstrate a calibrated nose or that their sense of smell has not been comprised.

Background means noise, measured in the absence of the noise under investigation, as $L_{A90,T}$ being the A-weighted sound pressure level exceeded for 90% of the time period of not less than 15 minutes, using Fast response.

Biosolids means treated tank sludges and residues from a sewage treatment plant including sedimentation tank and clarifier sludges, aerobically and anaerobically digested sludge and cake products from those sewage treatment plants.

C:N ratio means the ratio of elemental carbon (C) to elemental nitrogen (N) by weight in organic material.

Commercial place means 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.

Composting material refers to waste or other material received on the site, which is mixed and undergoing a composting process until it becomes **finished compost**.

Declared pest species means a pest species listed as restricted matter in Schedule 2 of the *Biosecurity Act* 2014.

Disturbed areas includes areas:

- That are susceptible to erosion;
- That are contaminated by the activity; and/or
- Upon which stockpiles of soil or other material are located.

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.

End of Waste Code for Biosolids means the latest version of the End of Waste Code for Biosolids (ENEW07359617) published by the chief executive under the *Waste Reduction and Recycling Act 2011*. The

End of Waste Code for Biosolids (ENEW07359617) can be located on the administering authority's website at www.des.qld.gov.au.

Environmental harm as defined under section 14 of the *Environmental Protection Act 1994.*

Environmental nuisance as defined in Chapter 1 of the *Environmental Protection Act 1994*.

Feedstock means the organic material/s used or intended to be used for organic material processing, including **stabilised biosolids and green waste mixture**.

Finished compost is an organic product that has completed the onsite production process.

Generator means a person who sells, or gives away, or otherwise provides, a **feedstock**.

Green waste means grass cuttings, trees, bushes, shrubs, loppings of trees, bushes or shrubs, or similar matter produced as a result of the ordinary use or occupation of premises.

Groundwater means water that occurs naturally in, or is introduced artificially into, an aquifer.

Hazardous Contaminant means contaminants described in Schedule 4 of the *Environmental Protection Act 1994.*

Impervious barrier means a barrier with a thickness of at least 600 mm with an in-situ permeability (K) of less than 10^{-9} ms^{-1}.

Incompatible waste means waste that may chemically react when:

1. placed in proximity to other wastes; and/or
2. mixed with other wastes.

$L_{Aeq\ adj,T}$ means the adjusted A weighted equivalent continuous sound pressure level measures on fast response, adjusted for tonality and impulsiveness, during the time period T, where T is measured for a period no less than 15 minutes when the **activity** is causing a steady state noise, and no shorter than one hour when the approved **activity** is causing an intermittent noise.

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.

Land does not include **waters**.

Leachate means a liquid that has passed through or emerged from, or is likely to have passed through or emerged from, a material that contains soluble, suspended or miscible contaminants.

Measures have the broadest interpretation and includes plant, equipment, physical objects, monitoring, procedures, actions, directions and competency.

NATA means National Association of Testing Authorities.

Offensive means causing offence or displeasure, is unreasonably disagreeable to the sense, disgusting, nauseous or repulsive.

PFAS means Per-and poly-fluoroalkyl substances.

PFAS Compounds includes the PFAS sub-classes outlined in Appendix A of the most recent edition of the PFAS National Environmental Management Plan.

Prescribed water contaminants means contaminants listed within Schedule 10 of the Environmental Protection Regulation 2019.

Records include breach notifications, written procedures, analysis results, monitoring reports and monitoring programs required under a condition of this authority.

Registered resource producer means a person who sells or gives away the **resource** under the **End of Waste Code for Biosolids to a Resource User** under the **End of Waste Code for Biosolids.**

Resource means **biosolids**, including **finished compost** containing **biosolids**, that complies with all the requirements and conditions under the **End of Waste Code for Biosolids**.

Resource user means a person who has entered into a written agreement with a **registered resource producer**, unless the **registered resource producer** and the **resource user** are the same entity, to use the **resource** in accordance with the conditions of the **End of Waste Code for Biosolids**, and includes a **registered resource producer** who uses the **resource**.

Secondary containment system means a system of capacity to contain and that is designed, installed and operated to prevent any potential release of contaminants from the system, or containers within the system, to land, atmosphere, **groundwater**, or surface waters, and excludes a first flush system.

Sensitive place includes the following and includes a place within the curtilage of such a place reasonably used by persons at that place:

1. a **dwelling**, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
2. a motel, hotel or hostel; or
3. a kindergarten, school, university or other educational institution; or
4. a medical centre or hospital; or
5. a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 2004* or a World Heritage Area; or
6. a public park or garden; or
7. for noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise) Policy 2019.

Stable condition for the purposes of this document means the **land** is safe and structurally stable and there is no **environmental harm** being caused by anything on or in the **land**.

Stabilised biosolids means biosolids processed to reduce or eliminate the potential for putrefaction and which, as a result, reduces pathogens, vector attraction and **offensive** odours.

'Stablised biosolids and green waste mixture' means a **stabilised biosolids** and **green waste** mixture that:

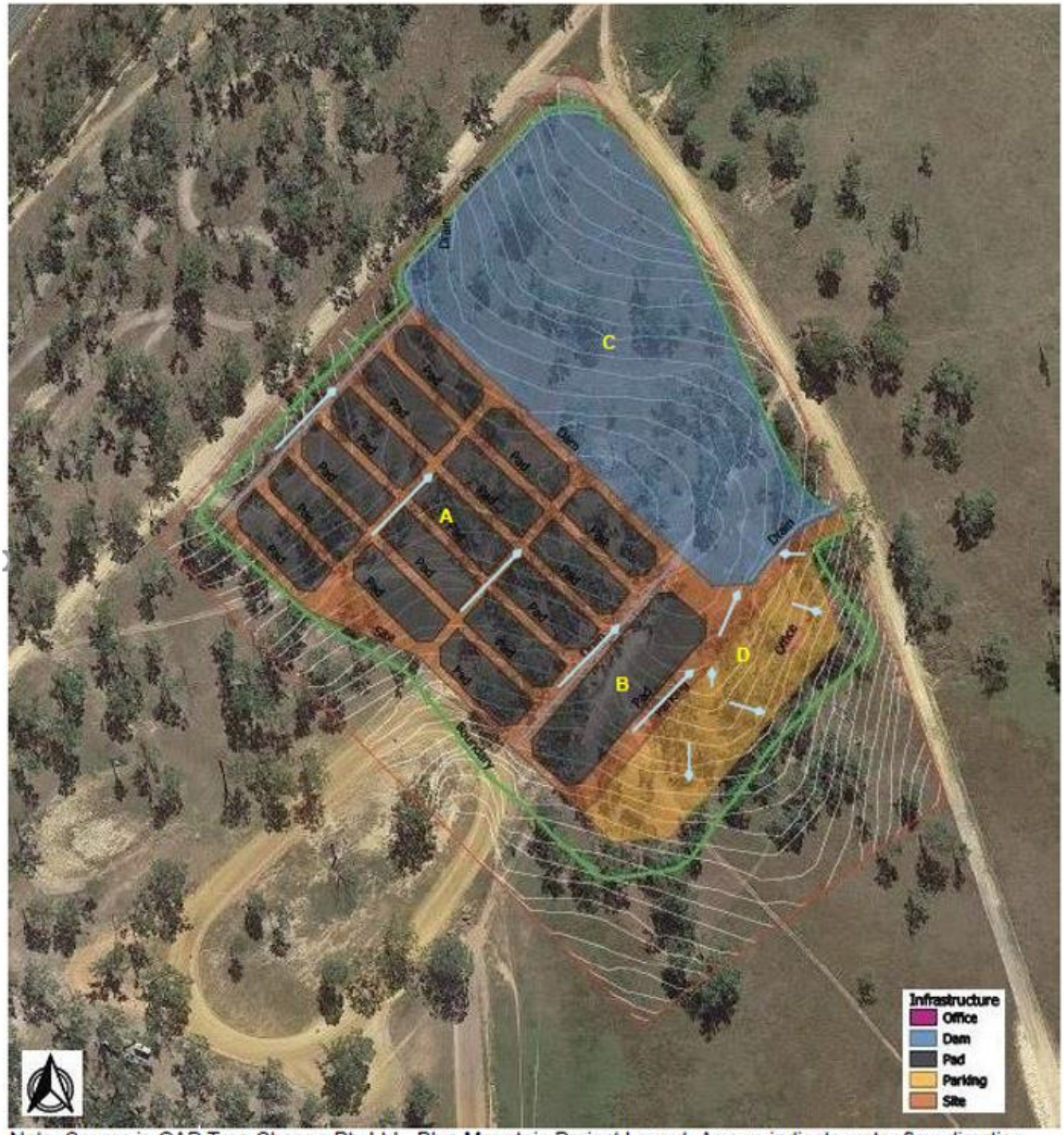
a) contains biosolids originating from Mackay Regional Council Sewage Treatment Plants only; and
b) contains up to 10% (in total) of bagasse and biodunder waste; and
c) has been composted for a minimum of six weeks at AJK Pty Ltd's Talty Road Facility (located on Lot 1 Plan SP268385); and
d) excludes any other waste.

Substantial low frequency noise means a noise emission that has an unbalanced frequency spectrum shown in a one-third octave band measurements, with a predominant component within the frequency range 10 to 200 Hz. It includes any noise emission likely to cause an overall sound pressure level at a noise sensitive place exceeding 55 dB(Z).

Transporter means a person who transports feedstock.

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.

Appendix 1 – Site Plan



Note: Source is GAP Tree Change Pty Ltd - Blue Mountain Project Layout. Arrows indicate water flow direction.