

Permit

Environmental Protection Act 1994

Environmental authority EPPR00495113

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

Environmental authority number: EPPR00495113

Environmental authority takes effect on the date it is signed by the delegate.

*The anniversary day of this environmental authority remains **31 January**. The payment of the annual fee will be due each year on this day.*

Environmental authority holder

Name	Registered address
GELITA Australia Pty Ltd	50 Flood Road JOSEPHVILLE QLD 4285

Environmentally relevant activity and location details

Environmentally relevant activities	Locations
ERA 25 - Meat Processing 3: Rendering, without any other processing, in a year, the following quantity of meat or meat products (b) more than 500t	Lot 1 RP118424 Lot 2 RP118424 Lot 3 CP862699
ERA 63 - Sewage Treatment 1: Operating sewage treatment works, other than no-release works, with a total daily peak design capacity of (a-i) 21 to 100EP if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme	Lot 1 RP118424 Lot 2 RP118424 Lot 3 CP862699
ERA 53 - Organic material processing: Processing more than 200t of organic material in a year - (a) by composting the organic material	Lot 1 RP118424 Lot 2 RP118424 Lot 3 CP862699
ERA 15 - Fuel burning: Using fuel burning equipment that is capable of burning at least 500kg of fuel in an hour	Lot 3 CP862699

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.

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.

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:

- 1) general environmental duty (section 319)
- 2) duty to notify environmental harm (section 320-320G)
- 3) offence of causing serious or material environmental harm (sections 437-439)
- 4) offence of causing environmental nuisance (section 440)
- 5) offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- 6) 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.

Obligations under the Mining and Quarrying Safety and Health Act 1999

If you are operating a quarry, other than a sand and gravel quarry where there is no crushing capability, you will be required to comply with the Mining and Quarrying Safety and Health Act 1999. For more information on your obligations under this legislation contact Mine Safety and Health at www.dnrm.qld.gov.au, or phone 13 QGOV (13 74 68) or your local Mines Inspectorate Office.

Environmental authority

This permit is not an environmental authority under the *Planning Act 2016*. The conditions of this environmental authority are separate, and in addition to, any conditions that may be on the environmental authority. If a copy of this environmental authority is attached to an environmental authority, 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.



Rebecca Griffiths
Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:

Utilities and Government Organisations
Assessment
Department of Environment and Science
Phone: 1300 130 372
Email: palm@des.qld.gov.au

Date issued: 26/03/2021

Conditions of environmental authority

Environmentally relevant activities	Locations
ERA 25 - Meat Processing 3: Rendering, without any other processing, in a year, the following quantity of meat or meat products (b) more than 500t	Lot 1 RP118424 Lot 2 RP118424 Lot 3 CP862699
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ERA 53 - Organic material processing: Processing more than 200t of organic material in a year - (a) by composting the organic material	Lot 1 RP118424 Lot 2 RP118424 Lot 3 CP862699
ERA 15 - Fuel burning: Using fuel burning equipment that is capable of burning at least 500kg of fuel in an hour	Lot 3 CP862699

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

Schedule A – General	
Condition number	Condition
A1	The holder of this environmental authority must: (a) install all plant and equipment necessary to ensure compliance with the conditions; 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: (i) plant and equipment used to prevent and/or minimise the likelihood of environmental harm being caused; (ii) devices and structures to contain foreseeable, escapes of contaminants and waste; (iii) vehicles used to transport waste; (iv) devices and structures used to store, handle, treat and dispose of waste; (v) monitoring equipment and associated alarms; and (vi) backup systems that act in the event of failure of a primary system.
A2	A copy of this environmental authority must be kept in a location readily accessible to personnel carrying out the activity .
A3	Any record required to be kept by a condition of this environmental authority must be kept at the approved place and be available for examination by an authorised person.
A4	Copies of any record required to be kept by a condition of this environmental authority must be provided to any authorised person or the administering authority on request.

A5	No change, replacement or operation of any plant or equipment is permitted if the change, replacement or operation of the plant or equipment increases, or is likely to substantially increase, the risk of environmental harm above that expressly provided by this environmental authority. An example of a substantial increase in the risk of environmental harm is an increase of ten percent (10%) or more in the quantity of the contaminant to be released into the environment.
A6	All instruments and measurement devices used for the measurement or monitoring of any parameter under any condition of this environmental authority must be calibrated, and appropriately operated and maintained.
A7	Notwithstanding any other condition of this environmental authority, this environmental authority does not authorise any release of contaminants which causes or is likely to cause an environmental nuisance beyond the boundaries of the approved place.
A8	The holder of this environmental authority, must implement an Integrated Environmental Management System (IEMS) which provides for the effective and appropriate management by the holder of this environmental authority of the actual and potential environmental impacts resulting from the carrying out of the environmentally relevant activity /activities.
A9	The IEMS must provide for at least the following functions: (a) The monitoring of releases of contaminants into the environment, for example measurement of the quantities and concentrations of releases of contaminants to the environment as required under this environmental authority; and (b) The assessment of the environmental impacts of any releases of contaminants into the environment, for example any ambient environmental quality monitoring, noise monitoring or complaints monitoring required under this environmental authority; and (c) The training of all relevant staff, agents and contractors ("staff") to competent levels in at least the following: (i) the environmental policy of the holder of this environmental authority so that staff are aware of any relevant commitments to environmental management; and (ii) any relevant environmental objectives and targets so that all staff are aware of the relevant performance objectives and can-work towards these; and (iii) control procedures for routine operations for day to day operational activities to prevent or minimise environmental harm, however occasioned or caused; and (iv) contingency plans and emergency procedures for non-routine situations to deal with foreseeable risks and hazards including corrective responses to prevent and mitigate environmental harm (including any necessary site rehabilitation); and (v) organisational structure and responsibility to ensure that roles, responsibilities and authorities are appropriately defined to manage environmental issues effectively; and (vi) effective communication to ensure two-way communication on environmental matters between operational staff and higher management; and (vii) documentation systems so that appropriate records of environmental matters are kept to satisfy the holder of this environmental authority, the administering authority and the community that the applicant is meeting environmental commitments; and (viii) responsibilities of the holder of this environmental authority and staff under the <i>Environmental Protection Act 1994</i> so that these can be met; and

	(d) The conduct of environmental and energy audits to review periodically: (i) the level of environmental performance; and (ii) the effectiveness of environmental management procedures adopted; and (iii) efficiency in using energy and resources and opportunities for more efficient usage; and (e) The implementation of effective and appropriate strategies for waste prevention, treatment and disposal.
A10	The conduct of environmental and energy audits required by condition A9(iv) must be carried out as often as necessary but not less frequently than the frequency specified below: (a) the level of environmental performance: annually; and (b) the effectiveness of environmental management procedures adopted: once every two (2) years; and (c) efficiency in using energy and resources and opportunities for more efficient usage: within two (2) years of the granting of this environmental authority, and then not less than once every five (5) years.
A11	The holder of this environmental authority must prepare a report summarising the outcomes of the environmental and energy audits required by condition.A9(iv).
A12	The holder of this environmental authority must not implement an IEMS or amend the IEMS where such implementation or amendment would result in a contravention of any condition of this environmental authority.
A13	A copy of the IEMS must be kept at the approved place.
A14	The holder of the environmental authority must, in consultation with the administering authority, cooperate with and service any community environment liaison committee established in respect of either the approved place specifically or the industrial estate where the approved place is located.
A15	At all reasonable times, and to the satisfaction of an authorised person, the following must be provided to enable an authorised person to check compliance with the conditions of this environmental authority: (a) monitoring facilities; and (b) access to such facilities; and (c) any reasonable assistance which the authorised person deems necessary.

The following schedule of this environmental authority (Schedule B – Air) remains in effect until the day the coal powered *5MW Finafire Fluidised Bed Boiler* (identified as RP1 in *Schedule B – Table 1 – Point Source Air Release Limits*) is decommissioned. Once this event has occurred, Schedule BB – Air takes effect and Schedule B is superseded.

Schedule B – Air																																					
Condition number	Condition																																				
B1	Odours or airborne contaminants from the activity must not cause environmental nuisance to any sensitive place or commercial place .																																				
B2	Contaminants must only be released to air from the Authorised Release Points in accordance with <u>Schedule B – Table 1 – Point Source Air Release Limits</u>. <u>Schedule B – Table 1 – Point Source Air Release Limits</u> <table> <tr> <th colspan="4">Authorised Release Point (GPS)</th><th rowspan="2">Contaminant</th><th rowspan="2">Maximum release limit (mg/Nm³)</th><th rowspan="2">Minimum release height (m)</th><th rowspan="2">Minimum efflux velocity (m/sec)</th></tr> <tr> <th>Ref</th><th>Description</th><th>Latitude</th><th>Longitude</th></tr> <tr> <td rowspan="2">RP1</td><td rowspan="2">5MW Finafire Fluidised Bed Boiler</td><td rowspan="2">-28.0200</td><td rowspan="2">152.9323</td><td>Nitrogen Oxides (expressed as NO₂)</td><td>500</td><td rowspan="2">21</td><td rowspan="2">15</td></tr> <tr> <td>Total Solids Particulates (TSP)</td><td>250</td></tr> <tr> <td>RP2</td><td>5MW LPG Stand-by Boiler</td><td>-28.0200</td><td>152.9323</td><td>NA</td><td>NA</td><td>16</td><td>10</td></tr> </table>							Authorised Release Point (GPS)				Contaminant	Maximum release limit (mg/Nm ³)	Minimum release height (m)	Minimum efflux velocity (m/sec)	Ref	Description	Latitude	Longitude	RP1	5MW Finafire Fluidised Bed Boiler	-28.0200	152.9323	Nitrogen Oxides (expressed as NO ₂)	500	21	15	Total Solids Particulates (TSP)	250	RP2	5MW LPG Stand-by Boiler	-28.0200	152.9323	NA	NA	16	10
Authorised Release Point (GPS)				Contaminant	Maximum release limit (mg/Nm ³)	Minimum release height (m)	Minimum efflux velocity (m/sec)																														
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				Total Solids Particulates (TSP)	250																																
RP2	5MW LPG Stand-by Boiler	-28.0200	152.9323	NA	NA	16	10																														
B3	The holder of this environmental authority must conduct a monitoring program of contaminant releases to the air at the release points, frequency, and for the parameters specified in <u>Schedule B - Table 2 – Required Release Point Determinations</u> and which complies with the following: (a) All determinations of the quality of contaminants released must be performed by an appropriately qualified person; and (b) Monitoring must comply with the Australian Standard AS 4323.1 - 1995 "Stationary source emissions Method 1: Selection of sampling provisions"; and (c) The following tests must be performed for each required determination specified in <i>Schedule B - Table 2 – Required Release Point Determinations</i>: (i) gas velocity and volume flow rate; and (ii) temperature; and (iii) water vapour and oxygen concentration; and (d) samples taken must be representative of the contaminants discharged when emissions are expected to be at a maximum.																																				

Schedule B - Table 2 – Required Release Point Determinations			
Release Point Number	Determination Required	Frequency	
RP1	Mass rate and concentration of Total Solids Particulates where gas volume is calculated at 12% CO ₂	Biennially	
RP1	Mass rate and concentration of Sulphur Dioxide (expressed as SO ₂).	Biennially	
RP1	Mass rate and concentration of Nitrogen Oxides (expressed as NO ₂ at a 7% oxygen level):	Biennially	
B4	The only type of fuel to be burnt in the industrial fuel burning equipment is coal, liquid petroleum gas (LPG), natural gas and biogas.		
B5	The sulphur content of liquid petroleum gas (LPG) and natural gas burnt in industrial fuel burning equipment is not to exceed one (1) percent by weight.		
B6	Ventilation air and effluent gases from the raw materials building must be collected and treated by a wet scrubber and a biofilter prior to release to the atmosphere.		
B7	Effluent gases from the raw wastewater balance tank, the equalisation tank, and the sludge storage tank, must be collected and treated through a biofilter prior to release to the atmosphere.		

The following schedule of this environmental authority (Schedule BB – Air) takes effect on the day the coal powered **5MW Finafire Fluidised Bed Boiler** is decommissioned. The holder of this environmental authority must notify the administering authority in writing within 48 hours of this event happening.

Schedule BB – Air								
Condition number	Condition							
BB1	You must notify the administering authority in writing within 48 hours of the decommissioning the coal powered, 5MW Finafire Fluidised Bed Boiler.							
BB2	Odours or airborne contaminants from the activity must not cause environmental nuisance to any sensitive place or commercial place .							
BB3	Contaminants must only be released to air from the Authorised Release Points in accordance with <u>Schedule BB – Table 1 – Point Source Air Release Limits</u> .							
	<u>Schedule BB – Table 1 – Point Source Air Release Limits</u>							
	Authorised Release Point (GPS)				Contaminant	Minimum release height (m)	Minimum efflux velocity (m/sec)	Maximum release limit (mg/Nm³)
	Ref	Description	Latitude	Longitude				
RP1	10MW LPG Boiler	-28.0200	152.9323	Nitrogen Oxides (expressed as NO ₂)	10	6	350	
				Carbon monoxide (expressed as CO)	10	6	125	
RP2	5MW LPG Stand-by Boiler	-28.0200	152.9323	NA	16	10	NA	

BB4	The holder of this environmental authority must conduct a monitoring program of contaminant releases to the air at the release points, frequency, and for the parameters specified in <u>Schedule BB - Table 2 – Required Release Point Determinations</u> and which complies with the following: (a) All determinations of the quality of contaminants released must be performed by an appropriately qualified person; and (b) Monitoring must comply with the Australian Standard AS 4323.1 - 1995 "Stationary source emissions Method 1: Selection of sampling provisions"; and (c) The following tests must be performed for each required determination specified in <i>Schedule BB - Table 2 – Required Release Point Determinations</i>: (i) gas velocity and volume flow rate; and (ii) temperature; and (iii) water vapour and oxygen concentration; and (d) samples taken must be representative of the contaminants discharged when emissions are expected to be at a maximum. <u>Schedule BB - Table 2 – Required Release Point Determinations</u> <table><tr><th>Release Point Number</th><th>Determination Required</th><th>Frequency</th></tr><tr><td>RP1</td><td>Mass rate and concentration of Carbon Monoxide (expressed as CO at a 3% oxygen level).</td><td>Biennially</td></tr><tr><td>RP1</td><td>Mass rate and concentration of Nitrogen Oxides (expressed as NO₂ at a 3% oxygen level):</td><td>Biennially</td></tr></table>	Release Point Number	Determination Required	Frequency	RP1	Mass rate and concentration of Carbon Monoxide (expressed as CO at a 3% oxygen level).	Biennially	RP1	Mass rate and concentration of Nitrogen Oxides (expressed as NO ₂ at a 3% oxygen level):	Biennially
Release Point Number	Determination Required	Frequency								
RP1	Mass rate and concentration of Carbon Monoxide (expressed as CO at a 3% oxygen level).	Biennially								
RP1	Mass rate and concentration of Nitrogen Oxides (expressed as NO ₂ at a 3% oxygen level):	Biennially								
BB5	The only type of fuel to be burnt in the industrial fuel burning equipment is liquid petroleum gas (LPG), natural gas and biogas.									
BB6	The sulphur content of liquid petroleum gas (LPG) and natural gas burnt in industrial fuel burning equipment is not to exceed one (1) percent by weight.									
BB7	Ventilation air and effluent gases from the raw materials building must be collected and treated by a wet scrubber and a biofilter prior to release to the atmosphere.									
BB8	Effluent gases from the raw wastewater balance tank, the equalisation tank, and the sludge storage tank, must be collected and treated through a biofilter prior to release to the atmosphere.									

Schedule C – Water	
Condition number	Condition
C1	Contaminants must not be directly or indirectly released from the approved place to any waters or the bed and banks of any waters except: (a) as permitted under the stormwater management schedule; or (b) to a sewer as permitted or otherwise agreed from time to time by the relevant Local Government.
C2	All ponds used for the storage or treatment of contaminants or wastes must be installed and maintained so that a minimum freeboard of 0.5 metres is maintained at all times.
C3	All ponds used for the storage or treatment of contaminants or wastes must be installed and maintained to ensure the stability of the pond's construction
C4	Ponds or other structures used for the storage or treatment of contaminants or wastes must not be located in any area likely to receive substantial stormwater runoff.
C5	Suitable banks and or diversion drains must be installed and maintained to exclude stormwater runoff from entering wastewater treatment ponds.
C6	The holder of this environmental authority must operate all relevant equipment and undertake all practicable measures necessary to ensure that anaerobic conditions do not occur within any pond, or during any stage, of the waste water treatment process on the approved place.
C7	All ponds used for the treatment of contaminants or wastes must be operated in such a manner that short-circuiting of the flow of contaminants or wastes does not occur.
C8	All ponds used for the storage or treatment of contaminants or wastes must be installed and maintained to prevent any discharge through the bed or banks of the pond to any waters (including groundwaters).

Schedule D – Stormwater	
Condition number	Condition
D1	The environmentally relevant activities must be carried out by such practicable means necessary to prevent the contact of incident rainfall and stormwater runoff with wastes or other contaminants.
D2	Where it is not practicable to prevent contact as required by condition number D1, the environmentally relevant activities must be carried out by such practicable means necessary to minimise any such contact.
D3	Except as otherwise provided by the conditions of the stormwater management schedule and the water schedule of this environmental authority, the environmentally relevant activity must be carried out by such practicable means necessary to prevent the release or likelihood of release of contaminated runoff from the approved place to any stormwater drain or waters or the bed or banks of any such waters .
D4	Where it is not practicable to prevent any release of contaminated runoff as required by condition D3, the environmentally relevant activity must be carried out by such practicable means necessary to minimise any such release or the likelihood of any such release .
D5	The maintenance and cleaning of vehicles and any other equipment or plant must be carried out in areas from where contaminants cannot be released into any waters , roadside gutter or stormwater drainage system.
D6	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 .
D7	The base and walls of all bunded areas must be maintained free from gaps or cracks.
D8	All loading/unloading of bulk materials must take place only within designated vehicle loading/unloading areas.
D9	All chemical and fuel tank storages must be bunded so that the capacity of the bund is sufficient to contain at least one hundred percent (100%) of the largest storage tank plus ten percent (10%) of the second largest tank within the bund.
D10	All chemical and fuel drum storages must be bunded so that the capacity of the bund is sufficient to contain at least twenty-five percent (25%) of the maximum design storage volume within the bund.
D11	All bunding must be roofed where practicable.
D12	Where it is impractical to completely roof a bunded area, the holder of this environmental authority must ensure that any stormwater captured within the bund is free from contaminants or wastes prior to any release .
D13	All bunding must be constructed and maintained so as to be sufficiently impervious to allow retention and recovery of any materials being stored within the bund.

Schedule E – Land	
Condition number	Condition
E1	The only contaminants to be released to land are treated wastewaters irrigated from the final effluent balancing storage dam and the final effluent polishing and pump-out ponds and sewage treatment plant effluent.
E2	The defined contaminant release areas are marked on the ' <i>Leiner Davis Gelatin Sunny Hills Irrigation Farm</i> ' plan included with Leiner Davis Gelatin International Limited's application for an environmental authority, together with those areas of land where the holder of this environmental authority has a legal agreement or contract to dispose of treated wastewaters onto such property or supply treated effluent for reuse.
E3	Where treated wastewater is discharged to any land vested in or under the control of a person or body other than the holder of this environmental authority, the holder of this environmental authority, must have a legal agreement or contract with such body or person to dispose of treated wastewater onto that property or supply treated effluent for reuse. This agreement or contract must clearly identify the contractual obligations of the parties to the agreement or contract for any environmental harm arising from the supply or transfer or storage or reuse of the treated wastewater.
E4	The holder of this environmental authority must supply the administering authority with a copy of any agreement(s) or contract(s) held under condition (E3) within thirty (30) days of the agreement or contract being finalised.
E5	A minimum of 120 hectares of land , excluding buffer zones, must be provided for the contaminant release areas on site, apart from those areas of land where the holder of this environmental authority has a legal agreement or contract to dispose of treated wastewaters onto such property or supply treated effluent for reuse.
E6	All contaminants must be stored or disposed of on the defined contaminant release areas. There must be no direct or indirect release of contaminants to any waters .
E7	The contaminant release areas must be maintained in a proper and efficient condition so as to provide adequate assimilation, percolation, evaporation and transpiration of the released contaminants.
E8	Spray from any release of contaminants to land must not drift beyond the boundaries of the approved place or beyond the boundaries of those areas of land where the holder of this' environmental authority has a legal agreement or contract to dispose of treated wastewaters onto such property or supply treated effluent for reuse.
E9	The holder of this environmental authority must ensure that, on any treated effluent irrigation area under their control, access of grazing animals is controlled to prevent soil pugging.
E10	The release of contaminants to land must not be carried out within 30 metres of any watercourse.
E11	The release of contaminants to land must not be carried out within 20 metres of any boundary of the approved place.
E12	The release of contaminants to land must not be carried out if soil moisture conditions are such that water-logging of soils is likely to occur.
E13	When weather conditions or soil conditions preclude the application of final treated effluent, the contaminants must be directed to the effluent balancing storage dam.
E14	Public/employee access to any contaminant release area for the disposal of sewage effluent must be denied during the release of contaminants to land and until the release area has dried.

E15	Notices warning the public/employees 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.
E16	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.
E17	The holder of this environmental authority must develop and implement an Irrigation Management Plan which details how the holder of this environmental authority will effectively and appropriately manage the effluent irrigation process so as to sustainably comply with all conditions of this environmental authority.
E18	The IMP must detail how irrigation is to be managed and scheduled having regard to at least the following: (a) soil moisture results; and (b) weather forecasts and climate monitoring results; and (c) irrigation records for each effluent disposal area; and (d) water quality results for on-site and adjacent creeks; and (e) effluent quality results; and (f) soil quality results for the effluent disposal areas; and (g) groundwater level results; and (h) groundwater quality results; and (i) crop history for each effluent disposal area; and (j) sustainable hydraulic loadings for the contaminant release areas; and (k) sustainable biological oxygen demand loadings for the contaminant release areas; and (l) sustainable nitrogen loadings for the contaminant release areas; and (m) sustainable phosphorus loadings for the contaminant release areas; and (n) sustainable salt loadings for the contaminant release areas; and (o) production of appropriate records and reporting of results and environmental issues.
E19	In developing and implementing the Irrigation Management Plan use may be made of any relevant and appropriate plans, procedures or other relevant documents previously prepared.
E20	A copy of the Irrigation Management Plan must be kept at the approved place.
E21	The holder of this environmental authority must not implement an irrigation Management Plan or amend an Irrigation Management Plan where such implementation or amendment would result in a contravention of any condition of this environmental authority.
E22	The holder of this environmental authority must submit details of any amendment to the Irrigation Management Plan to the administering authority with the annual return which immediately follows the enactment of any such amendment.
E23	The contaminants released to land under the control of the holder of this environmental authority or supplied to any other person or body for irrigation to land must comply, at the sampling and in-situ measurement points specified in schedule H, with each of the release limits specified in <i>Schedule E – Table – Release Quality Characteristic Limits</i> for each quality characteristic.

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Notwithstanding the quality characteristic limits specified in *Schedule E – Table – Release Quality Characteristic Limits*, the contaminants **released** must also comply with the following qualitative characteristics:

(a) the **release** must not have any properties nor contain any organisms or contaminants in concentrations which are capable of causing environmental harm or an environmental nuisance.

Schedule E – Table 1 – Release Quality Characteristic Limits

Quality Characteristics	Release Limit	Units	Limit Type
5-day Biochemical Oxygen Demand	400	mg/L	maximum
Chemical Oxygen Demand	800	mg/L	maximum
pH	6.5 – 11	pH units	range

Schedule F – Noise	
Condition number	Condition
F1	Noise generated by the activity must not cause environmental nuisance to any sensitive place or commercial place .

Schedule G – Waste	
Condition number	Condition
G1	Waste must not be released to the environment, stored, transferred or disposed of contrary to any condition of this environmental authority.
G2	The holder of this environmental authority must not: (a) burn waste at or on the approved place; or (b) allow waste to burn or be burnt at or on the approved place; or (c) remove waste from the approved place and burn such waste elsewhere.
G3	An area must be set aside for the segregation and storage of recyclable solid wastes.
G4	Where a no-cost recycling service is available, reasonable and practicable steps must be taken to ensure recyclable waste is not deposited in the general waste stream. Such steps may include, but not be limited to; provision of receptacles, suitable signs, and promotion of awareness among staff of the recycling service.
G5	Where regulated waste is removed from the approved place (other than by a release as permitted under another schedule of this environmental authority), the holder of this environmental authority must monitor and record the following: (a) the date; quantity and type of waste removed; and (b) name of the waste transporter and/or disposal operator that removed the waste; and (c) the intended treatment/disposal destination of the waste. (NOTE: Records of documents maintained in compliance with a waste tracking system established under <i>the Environmental Protection Act 1994</i> or any other law for regulated waste will be deemed to satisfy this condition.)
G6	Regulated waste must not be sent for disposal at any facility without the written approval of the person operating that facility.
G7	Records must be maintained for a period of five (5) years for all wastes mentioned in this schedule.
G8	If the holder of this environmental authority becomes aware that a person has removed waste from the approved place and disposed of the waste in a manner which is not authorised by this environmental authority or improper or unlawful, then the holder of this environmental authority must, as soon as practicable, notify the administering authority of all relevant facts, matters and circumstances known concerning the disposal.

Schedule H – Self Monitoring and Reporting	
Condition number	Condition
H1	All complaints received by the holder of this environmental authority relating to operations at the approved place must be recorded and include the following details: (a) time, date and nature of complaint; type of communication (telephone, letter, personal etc.); and (b) name, contact address and contact telephone number of complainant, where possible, (Note: if the complainant does not wish to be identified then "Not identified" is to be recorded); and (c) a response and investigation undertaken as result of the complaint; and (d) name of person-responsible for investigating complaint; and (e) action taken as a result of the complaint investigation and signature of responsible person.
H2	The complaints record required by condition H1 must be maintained for a period of not less than five (5) years.
H3	A record must be maintained of events including but not limited to: (a) the time date and duration of equipment malfunctions that may affect the environmental performance of the approved place; and (b) any shut-downs of the biofilters, waste water treatment plant or other equipment upon which the environmental performance of the approved place depends; and (c) the hours of operation of the plant when these events have occurred.
H4	The record required by condition number H3 must be maintained for a period of not less than five (5) years.
H5	As soon as practicable after becoming aware of any emergency or incident which results in the release of contaminants not in accordance, or reasonably expected to be not in accordance with the conditions of this environmental authority, the holder of this environmental authority must notify the administering authority of the release by telephone, facsimile or e-mail.
H6	The notification of emergencies or incidents as required by condition number H5 must include but not be limited to the following: (a) the holder of the environmental authority; and (b) the location of the emergency or incident; and (c) the number of the environmental authority; and (d) the name and telephone number of the designated contact person; and (e) the time of the release; and (f) the time the holder of the environmental authority became aware of the release; and (g) the suspected cause of the release; and (h) the environmental harm and or environmental nuisance caused, threatened, or suspected to -be caused by the release; and (i) actions taken to prevent further any release and mitigate any environmental harm.
H7	Not more than fourteen (14) days following the initial notification of an emergency or incident, the holder of the environmental authority must provide written advice of the information supplied in accordance with condition number H6 in addition to: (a) pproposed actions to prevent a recurrence of the emergency or incident; and (b) outcomes of actions taken at the time to prevent or minimise environmental harm.

H8	As soon as practicable, but not more than six (6) weeks following the conduct of any environmental monitoring performed in relation to the emergency or incident, the holder of the environmental authority must provide written advice of the results of any such environmental monitoring performed.								
H9	All records required by the conditions of this environmental authority must be kept for a minimum of five years, and all monitoring results and underlying raw data must be kept until surrender of this environmental authority.								
H10	All records required by the conditions of this environmental authority must be provided to the administering authority : (a) within the timeframe specified by the administering authority ; and (b) in the format requested by the administering authority .								
H11	An appropriately qualified person(s) must monitor , record and interpret all parameters that are required to be monitored by this environmental authority and in the manner specified by this environmental authority.								
H18	For the purposes of checking conformity with condition E23 of the land application schedule, the holder of this environmental authority must be responsible for the making of determinations of the quality of the contaminants released . Such determinations must be performed for at least the quality characteristics and at least the frequency specified in Schedule H - Table 2. Schedule H – Table 2 <table border="1"> <thead> <tr> <th>Quality Characteristic</th><th>Frequency</th></tr> </thead> <tbody> <tr> <td>5-day Biochemical Oxygen Demand</td><td>Monthly</td></tr> <tr> <td>Chemical Oxygen Demand</td><td>Weekly</td></tr> <tr> <td>pH</td><td>Weekly</td></tr> </tbody> </table>	Quality Characteristic	Frequency	5-day Biochemical Oxygen Demand	Monthly	Chemical Oxygen Demand	Weekly	pH	Weekly
Quality Characteristic	Frequency								
5-day Biochemical Oxygen Demand	Monthly								
Chemical Oxygen Demand	Weekly								
pH	Weekly								
H19	The determinations of the quality of contaminants released to check conformity with condition E23 of the land application schedule must be undertaken at the monitoring and in-situ measurement point(s) described as: (a) SMP 1 : the in-line sampling point of the final effluent balancing storage dam reticulation pump; and (b) SMP 2 : the overflow from the final effluent polishing and pump-out ponds.								
H20	All determinations of the quality of contaminants required to be monitored under this environmental authority must be made in accordance with methods prescribed in the administering authority's Monitoring and Sampling Manual 2018 or more recent editions.								
H22	The daily quantity of contaminants released must be determined by an appropriate and accurate method, for example, a flow meter.								
H23	The holder of this environmental authority must keep records of the volume, date, time of commencement and duration of each occasion on which any release of contaminants is made to the contaminant release areas and the dates on which no such releases take place.								
H24	The holder of this environmental authority must design and conduct a Receiving Waters Monitoring Program to monitor the effects of the release of contaminants on the receiving waters ,								
H25	The parameters to be monitored and the frequency of monitoring in Receiving Waters Monitoring Program shall be in accordance with the parameters and monitoring frequency prescribed in ' <i>Leiner Davis Gelatin (Australia), June 1994, Environmental Management Plan (Draft)</i> ', Section 4.8, or more recent editions or supplements to that document as such become available and approved by the administering authority .								
H26	The holder of this environmental authority must conduct a Contaminant Release Area Monitoring Program to monitor the condition of the land to which contaminants are applied.								

H27

The parameters to be **monitored** and the frequency of **monitoring** in the Contaminant Release Area Monitoring Program must be in accordance with the parameters and **monitoring** frequency specified in Schedule H – Table 3.

Schedule H – Table 3

Element	Sites	Method	Frequency
Soil Salinity	Within soil units 2a, 2b, 2c, 2d, 2e, 3a, and 3b.	Sampling and analysis for pH (1:5), EC sat, Cl, NO ₃ , SO ₄ , Effective CEC, exchangeable Ca, Mg, Na	Annual
Soil infiltration and hydraulic conductivity	Within soil units 2a, 3b, and 2e.	Field instrumentation	Annual
Nutrient Status	Within soil units 2a, 3b, and 2e.	Soil Sampling and analysis for Total N, NO ₃ -N, NH ₄ -N, Acid extractable P	Biannual
Groundwater	Relevant bores with water table within soil units listed above	Tape measurement and EC. Water laboratory analysis	Biannual
Effluent	Pump out pond outlet	Water laboratory analysis	Monthly

Soil Salinity Monitoring					
Soil units 2a, 2b, 2c, 2d, 3a, 3b, 3d	Soil solution sampling via FullStop. Soil core sampling depth 0- 120cm.	Acceptable Limit at 10cm depth	Acceptable Limit at 50cm depth	Acceptable Limit at 120cm depth	Testing Frequency
pH	(1:5) solution soil extract	4.5 – 7.0	5.5 – 7.5	6.0 – 8.5	Annual
ESP (% calculated from sodium and cation exchange capacity)	Soil	10	15	20	Annual
SAR (Calculated from soil. solution cations Ca++, Mg++ Na+)	Solution	15	20	40	Annual
EC sat (dS/m)	Solution	3	4	5	Annual

	<table><tr><td>Cl</td><td>Solution</td><td>0-150mg/kg</td><td>0-450mg/kg</td><td>0-600mg/kg</td><td>Annual</td></tr><tr><td>NO₃⁺</td><td>Solution / soil</td><td>120mg/kg</td><td>100mg/kg</td><td>20mg/kg (soil sample)</td><td>Annual</td></tr><tr><td>Total sulphate sulphur</td><td>Solution – (includes gypsum precipitate)</td><td>4,000mg/L</td><td>5,000mg/L</td><td>6,000mg/kg</td><td>Annual</td></tr></table>	Cl	Solution	0-150mg/kg	0-450mg/kg	0-600mg/kg	Annual	NO₃⁺	Solution / soil	120mg/kg	100mg/kg	20mg/kg (soil sample)	Annual	Total sulphate sulphur	Solution – (includes gypsum precipitate)	4,000mg/L	5,000mg/L	6,000mg/kg	Annual
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H28	The holder of this environmental authority must maintain bores for the purpose of sampling and analysing groundwater at the locations shown on Dawson Thompson and Associates Pty Ltd, 4/12/93, 'Sunny Hills' Site Plan, Flood Road Josephville, as submitted with the application.																		
H29	The holder of this environmental authority is responsible for ensuring a groundwater monitoring program is performed which complies with the following requirements: (a) All determinations required to demonstrate compliance with Condition W2 must be made in accordance with methods prescribed in the administering authority's Monitoring and Sampling Manual 2018 or more recent editions. (b) Standing water levels must be measured in metres and recorded on each occasion that samples are obtained. Such measurement must be undertaken prior to any disturbance by sampling and must be reported as the depth in metres from the ground level to the water surface within the bore. (c) Samples of groundwater must be taken from each of the bores at least twice per annum, at approximately six (6) monthly intervals, (d) The samples obtained in accordance with paragraph (c) of this condition must be analysed for: (i) Electrical conductivity; (ii) Sodium; (iii) Magnesium; (iv) Total Dissolved Solids; (v) Total Nitrogen; (vi) Sulphate; (vii) Carbonic acid; (viii) pH; (ix) Chloride; (x) Calcium; (xi) Total Phosphorus as P.																		
H30	The holder of this environmental authority must ensure the monitoring data gathered in accordance with this environmental authority is analysed and interpreted, by an expert in the field of each monitoring program, to assess the nature and extent of any environmental impact of the environmentally relevant activity . The data, analyses and assessments must be submitted to the administering authority with each annual return.																		

H31	The holder of this environmental authority must notify the administering authority in writing of any monitoring result which indicates an exceedance of any environmental authority limit within twenty-eight (28) days of completion of analysis.
H32	The written notification required by condition number H31 must include: (a) the analysis results; and (b) details of investigation or corrective actions taken; and (c) any subsequent analysis.

Definitions

Key terms and/or phrases used in this document are defined in this section and **bolded** throughout this document. Applicants should note that 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.

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

Act means the *Environmental Protection Act 1994*.

Activity means the environmentally relevant activity(s) to which the environmental authority relates. An activity may be undertaken on the whole or a part of a site

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

Appropriately qualified person(s) means a person or persons who has professional qualifications, training, skills and experience relevant to the environmental authority (EA) requirements and can give authoritative assessment, advice and analysis in relation to the EA requirements using the relevant protocols, standards, methods and/or literature.

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.

Effluent gases shall be taken to include gaseous emissions as well as vapours.

Land means land excluding waters and the atmosphere.

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

mg/L means milligrams per litre.

Monitor, monitored and monitoring means monitoring the impact of an **activity** on the receiving environment and includes analysing, assessing, examining, inspecting, measuring, modelling or reporting any of the following matters—

- (a) the quantity, quality, characteristics, timing and variability of the **release** of any contaminant; and
- (b) the effectiveness of any control measure; and
- (c) the characteristics of, and impact on, the receiving environment; and
- (d) the effectiveness of remedial or rehabilitation measures (if applicable to the relevant monitoring requirement).

Raw materials building refers to the building containing the raw materials area, acidulators and by products area and the alkali treatment area.

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

Release of a contaminant into the environment or release means to:

- (a) deposit, discharge, emit or disturb the contaminant; or
- (b) cause or allow the contaminant to be deposited, discharged, emitted or disturbed; or
- (c) fail to prevent the contaminant from being deposited, discharged emitted or disturbed; or

- (d) allow the contaminant to escape; or
- (e) fail to prevent the contaminant from escaping.

Sensitive place includes any of the following places:

- (a) a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- (b) a motel, hotel or hostel; or
- (c) a kindergarden, school, university or other educational institution; or
- (d) a medical centre or hospital; or
- (e) a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 2004* or a World Heritage Area; or
- (f) a public park or garden; or
- (g) for noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise) Policy 2019; or
- (h) the area within the curtilage of any of the above places.

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.

END OF ENVIRONMENTAL AUTHORITY