Permit

Environmental Protection Act 1994
Environmental Authority EA0002792

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

Environmental authority number: EA0002792

Environmental authority takes effect on the date development approval A005538407 is approved.

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.

Environmental authority holder

Name	Registered address
Reclaim PV Recycling Pty Ltd	33 Parkview Drive, OAKDEN SA 5086

Environmentally relevant activity and location details

Environmentally relevant activities	Location
ERA 61 (1) – Thermal waste reprocessing and treatment – (a) thermally reprocessing or treating, in a year, the following quantity of general waste – 5, 000t or less. ERA 62 (1) - Resource recovery and transfer facility operation – (b) operating a facility for receiving and sorting, dismantling, baling or temporarily storing **general waste**.	28 Reginald Street, ROCKLEA QLD 4106 – Lot 29/RP37409

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.

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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.

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

Date issued: 15-06-2021

Enquiries:
Waste Assessment
Department of Environment and Science

Phone: 1300 130 372
Email: palm@des.qld.gov.au

Queensland Government

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.

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	Any breach 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. **Records** must be kept including full details of the breach and any subsequent actions taken.
G2	**Activities** under this environmental authority must be conducted in accordance with the following limitations: a) The only waste which can be accepted on site for processing in the gas (pyrolysis) furnace are solar panels; b) Waste solar panels must be dismantled and stored within Building 1 as shown in *Appendix 1 – Site Map*; c) The gas (pyrolysis) furnace must be undertaken within Building 1 as shown in *Appendix 1 – Site Map*.
G3	All reasonable and practicable **measures** must be taken to prevent or minimise environmental harm caused by the activities.
G4	Written procedures must be developed and documented within 3 months of the environmental authority taking effect that: a) identify all potential risks to the environment from the **activity**, including during and outside routine operations, during closure and in an emergency; and b) identify **measures** to prevent or minimise the potential for environmental harm for each of the potential risks identified; and c) establish an inspection and maintenance program for 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 at least annually; and a) establish processes to review environmental risks, incidents, performance and complaints.
G5	Written procedures required by condition G4 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.
G6	For plant and equipment, all **measures** necessary to comply with the conditions of this environmental authority must be: a) installed, operated and maintained in a proper and effective manner; and b) in accordance with condition G4.
G7	All **records** must be kept for a period of at least five years and provided to the **administering authority** upon request.
G8	Chemicals and fuels in containers of greater than 15 litres must be stored within a **secondary containment system.**

G9	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** arising from the **activity**. The monitoring results must be provided within 10 business days to the **administering authority** upon its request.
G10	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.
G11	An annual monitoring report must be prepared by an **appropriately qualified person(s)** and submitted to the **administering authority** with the annual return each year. The annual monitoring report must include, but not be limited to: a) A summary of the previous 12 months monitoring data obtained in accordance with any of the monitoring requirement of this approval; and b) An evaluation/explanation of the data from any monitoring programs, including graphical representations showing relevant limits and trends; and c) An outline of actions taken, and proposed to be taken, to minimise the environmental risk from any deficiency identified by the monitoring or recording programs.
Agency interest: Water	
WT1	Contaminants must not be released to any **waters**.
Agency interest: Noise	
N1	Noise generated by the **activity** must not cause **environmental nuisance** to any **sensitive place** or **commercial place.**
Agency interest: Land	
L1	Contaminants must not be released to **land.**
Agency interest: Waste	
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.
Agency interest: Air	
A1	Odours or airborne contaminants must not cause **environmental nuisance** to any **sensitive place** or **commercial place**.
A2	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**.

A3

Contaminants must only be released to air from the point source in accordance with *Table 1 – Point Source Air Release Limits* and the associated requirements.

Table 1 - Point Source Air Release Limits

Release point	Minimum release height above ground (metres)	Minimum velocity (m/sec)	Contaminant released	Maximum release limit	Monitoring frequency
Stack serving combustion gases generated from the pyrolysis plant (depicted as 'Location of Furnace' in Appendix 2 – Building 1: Location of Furnace)	11.4	6	Total Solid Particles (TSP)	50 mg/**Nm**^{3} (dry) dry @ 7% O_2	Stack must be monitored within three (3) months of commissioning of the pyrolysis plant and 6 monthly thereafter.
			Carbon Monoxide (CO)	125 mg/**Nm**^{3} (dry) @ 7% O_2 (see Note 2)	
			Oxides of Nitrogen (as NO_2)	350 mg/**Nm**^{3} (dry) @ 7% O_2	
			Hydrogen Chloride (HCl)	60 mg/**Nm**^{3} (dry) @ 7% O_2	
			Hydrogen Fluoride (HF)	4 mg/**Nm**^{3} (dry) @ 7% O_2	
			Volatile Organic Compounds (as n-propane equivalent)	20 mg/**Nm**^{3} (dry) @ 7% O_2 (see Note 2)	
			Cadmium and its compounds (expressed as Cd)	0.2 mg/**Nm**^{3} (dry) @ 7% O_2	
			Mercury and its compounds (expressed as Hg)	0.2 mg/**Nm**^{3} (dry) @ 7% O_2	
			Total Heavy Metals (see Note 3)	1 mg/**Nm**^{3} (dry) @ 7% O_2	
			Dioxins and furans (I-TEQ for PCDDs and PCDFs, including half LOD)	0.1 ng I-TEQ/**Nm**^{3} (dry) @ 11% O_2	

A3 (cont.)	Note 1: When it is not possible to comply with the CO release limit, as an alternative, the VOC release must be applied. Compliance with either CO or VOC release limits must be demonstrated. Note 2: Total heavy metals limit is for the total of the following heavy metals: (a) antimony, arsenic, cadmium, lead, mercury, beryllium, chromium, cobalt, manganese, nickel, selenium, tin or vanadium or any compound containing one or more of those elements. **Associated requirements** 1) The release of contaminants from a point source must be directed vertically upwards through a stack incorporating the use of a rain cap. 2) Monitoring must be undertaken during a release and at the authorised release points, frequency and for the contaminants specified in Table 1. 3) Monitoring must be undertaken when emissions are expected to be representative of actual operating conditions for the sample period. 4) All monitoring devices must be effectively calibrated and maintained in accordance with the manufacturer's instructions and Australian and international standards. 5) Air Monitoring must be in accordance with the current edition of the **administering authority's** Air Quality Sampling Manual. If monitoring requirements are not described in the department's Air Quality Sampling Manual, monitoring protocols must be in accordance with a method as approved by New South Wales Environmental Protection Agency, Victorian Environmental Protection Agency or United States Environmental Protection Agency. 6) Monitoring provision for the release points (stack) listed in Table 1 must comply with the Australian Standard AS 4323.1 - 1995 "Stationary source emissions Method 1: Selection of sampling positions". 7) All air emission stack monitoring must be conducted by an experienced person or body which holds current **National Association of Testing Authorities** (**NATA**). 8) The following tests must be performed for each required determination specified in Table 1: (i) gas velocity and volume flow rate; (ii) temperature and oxygen content; and (iii) water vapour concentration. 9) During the sampling period the following additional information must be gathered: a. plants throughput rate at the time of sampling; b. any typical factors that may influence air pollutant emissions; c. reference to the actual test methods and accuracy.

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.

Activity means the environmentally relevant activities, whether resource activities or prescribed 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 EA requirement and can give authoritative assessment, advice and analysis in relation to the EA requirement using the relevant protocols, standards, methods 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.

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

Incompatible waste means waste that may chemically react when:
a) placed in proximity to other wastes; and / or
b) mixed with other wastes.

Land does not include **waters**.

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

NATA means National Association of Testing Authorities.

Normal cubic metre (Nm^3) means the volume of dry gaseous contaminant which occupies 1 cubic metre at temperature of zero degrees Celsius and at an absolute pressure of 101.3 kilopascals.
Records include breach notifications, written procedures, analysis results, monitoring reports and monitoring programs required under a condition of this authority.

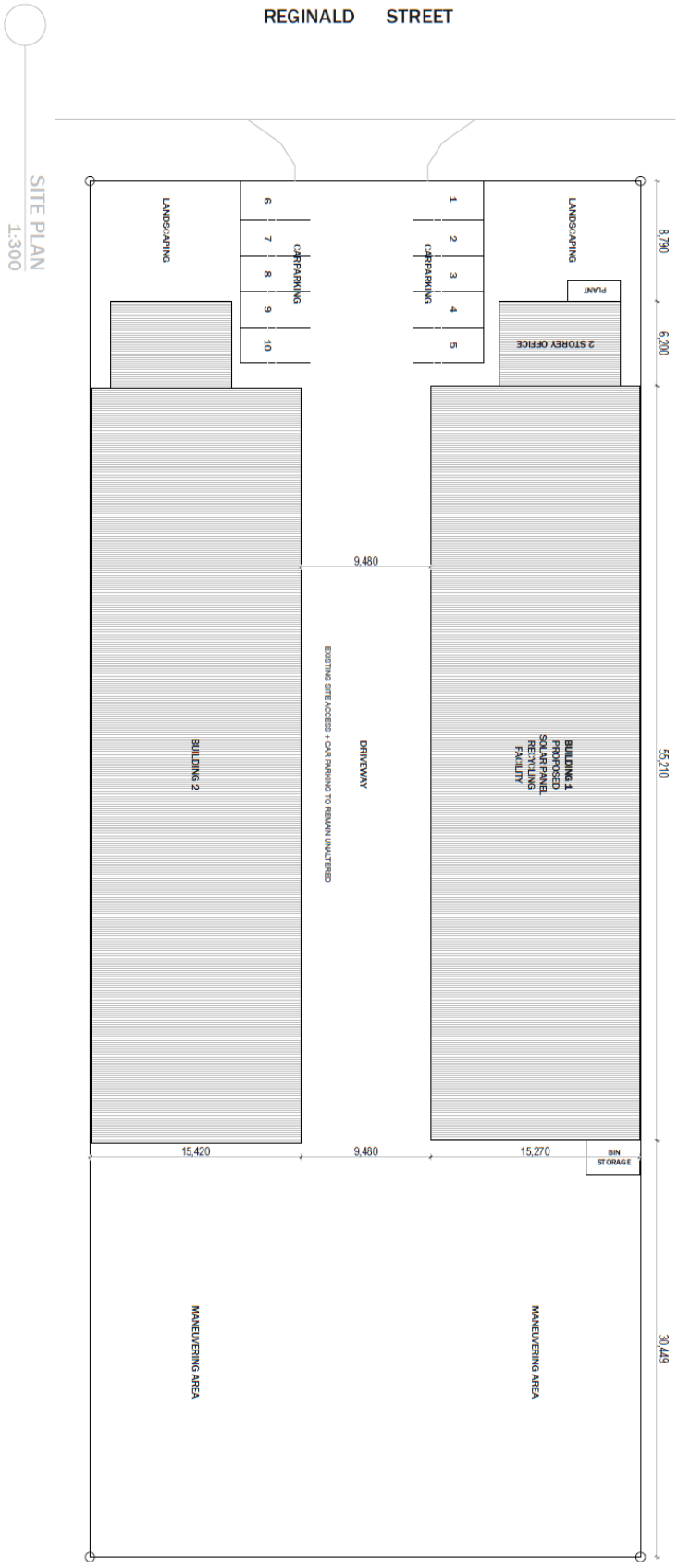
Secondary containment system means a system designed, installed and operated to prevent any release of contaminants from the system, or containers within the system, to land, groundwater, or surface waters.

Sensitive place includes the following and includes a place within the curtilage of such a place reasonably used by persons at that place:
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 kindergarten, 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 thoroughfare, park or garden; or
g) for noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise) Policy 2019.

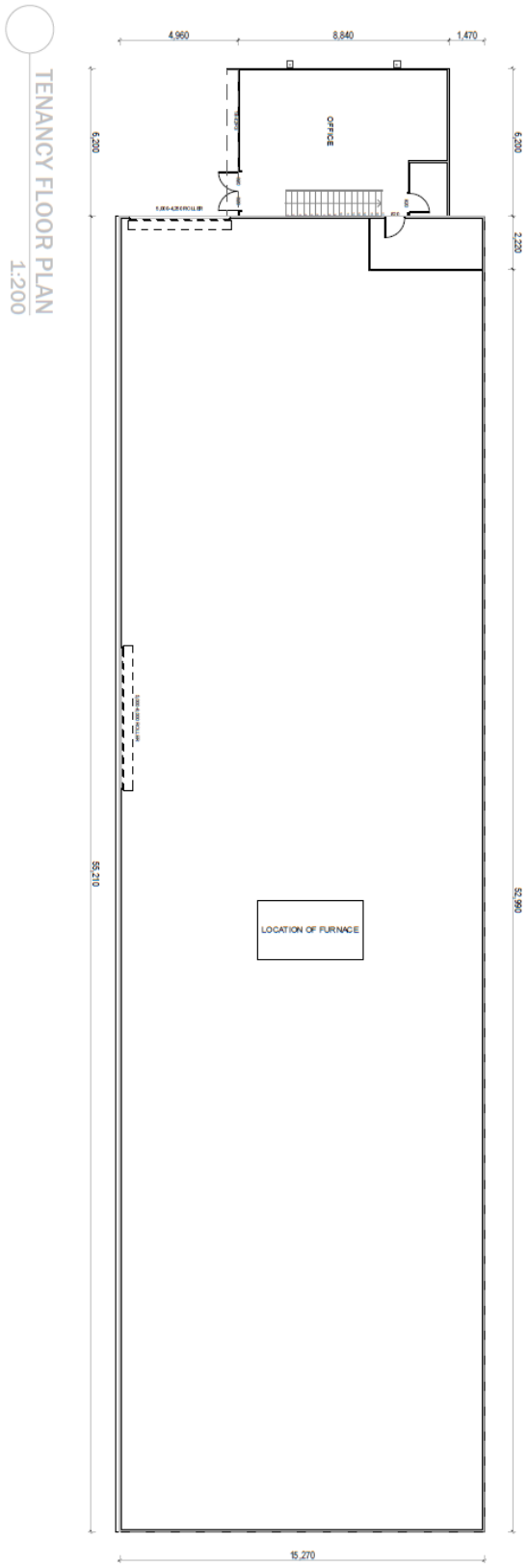
Volatile organic compounds (VOC) means any chemical compound based on carbon chains or rings with a vapour pressure greater than 2mm of mercury (0.27 kPa) at 25ºC), that participate in atmospheric photochemical reactions. The substances that are specifically excluded are: methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides and carbonate salts. This is according to the definition of VOC outlined in the Australian Government National's Pollutant Inventory

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 Map



Appendix 2 – Building 1: Location of Furnace



END OF ENVIRONMENTAL AUTHORITY