

RESEARCH, DEVELOPMENT AND DEMONSTRATION APPROVAL

J-POWER LATROBE VALLEY PTY LTD

Holder of

Approval Number: 190670

Issued: 11/02/2019

Last Amended: 01/10/2020

ACN: 626 639 629

Registered Address: LEVEL 1 - 5 CHURCH STREET
TRARALGON VIC 3844

Premises Address: BARTONS LANE HYLAND HIGHWAY
TRARALGON VIC 3844

Scheduled Categories: G02 Coal Processing

Description: A 16-month trial operation of a co-current entrained-flow slagging gasification pilot plant to produce pure hydrogen from 150 tonnes of Latrobe Valley coal and 40 tonnes coal blended with up to 50% biomass.



Tim Eaton
Executive Director

Delegate of the Environment Protection Authority

Issued under the *Environment Protection Act 1970*, Section 19

PREAMBLE

RD&D Approvals

Who we are: The Environment Protection Authority (“EPA”) is an independent statutory authority established under the *Environment Protection Act 1970* (“the Act”). Our purpose is to protect and improve our environment by preventing harm to the environment and human health.

Why we issue RD&D Approvals: EPA is responsible for preventing or controlling pollution (including noise) and improving the quality of the environment. This responsibility includes regulating activities that may present a danger to the environment. One of the tools available to EPA is issuing research, development and demonstration (“RD&D”) approvals, which prevent or minimise risk to the environment while allowing innovation in environmental solutions.

Section 19D of the Act allows the occupier of a “scheduled premises” to obtain a RD&D approval to conduct a research, development and demonstration project. These types of premises are defined in the *Environment Protection (Scheduled Premises and Exemptions) Regulations 2007* (“the Regulations”).

When we issue RD&D Approvals: EPA will issue a RD&D approval when satisfied that an applicant has put in place measures to protect the environment. RD&D approvals allow research, development and demonstration projects to occur. EPA can amend or revoke a RD&D approval in response to changes in standards and site activities. RD&D approval holders must submit reports if required by a condition of the approval.

RD&D Approval information and obligations

For the purposes of this RD&D approval “You” means the approval holder identified on the first page of this approval at the “premises” identified on the first page and represented in Schedule 1.

Compliance: You must comply at all times with the Act and all policies and regulations administered by EPA. Strict penalties apply for non-compliance with any part of your approval.

RD&D Approval structure

Structure: Your approval has multiple parts:

- Works and environmental performance conditions - setting out requirements for construction or installation, and the performance outcomes you must meet;
- Schedule 1A - locality plan of your premises;
- Schedule 1B - plan of premises (provided by you).

Some types of approvals also contain Schedule 2 - tables specifying wastes that may be accepted at the premises and the associated treatment applied to them.

CONDITIONS

General Conditions

- RD_G1 Subject to the following conditions, this approval allows the construction and operation of the following works and associated equipment - as described in the application accepted on the 11th of January 2019 and request for amendment received on 24 July 2020, including: coal crushing, milling/pulverising and drying equipment; a co-current entrained-flow slagging gasifier; and gas refining equipment.
- RD_G2 The works must be constructed and the trial conducted in accordance with the application accepted on 11 January 2019 as amended by additional information dated 5 February 2019, 24 July 2020, 18 August 2020, 10 September 2020 ("the application") except that, in the event of any inconsistency arising between the application and the conditions of this approval, the conditions of this approval shall apply.
- RD_G3 This approval will not take effect until any permit which is required under the Planning and Environment Act 1987 has been issued by the Responsible Planning Authority.
- RD_G4 This approval expires on the 8th of February 2022.
- RD_G5 This approval may be amended or terminated at any time within the approval period if in the opinion of the Authority the trial results in, or has the potential to result in, adverse environmental impacts.

Works Conditions

- RD_C1 Before commencing construction of the following components of the works, you must provide to EPA a report or reports with the plans and specifications of those components, including details of: (a) the final detailed designs and schematics of the works; (b) an updated premises plan with location of discharge points (c) a detailed construction environmental management plan; (d) a detailed community engagement plan.
- RD_C14 You must install all wastewater discharge points so that provisions for sampling are included in accordance with EPA Publication 441 "Guide to the Sampling and Analysis of Waters, Wastewaters, Soils and Wastes", as amended from time to time.
- RD_C15 During construction, unacceptable noise (including vibration) must not be emitted beyond the boundaries of the premises.
- RD_C16 During construction, stormwater discharged from the premises must not be contaminated with waste.
- RD_C17 All construction activities must be undertaken in accordance with EPA Publication 480 "Environmental Guidelines for Major Construction Sites", as amended from time to time.
- RD_C2 You must not commence construction of those parts of the works for which reports are required by condition RD_C1 until written EPA approval of those reports has been received.
- RD_C3 Where any reports specified in condition RD_C1 and approved by EPA differ from the application, the works must be constructed in accordance with those approved reports.
- RD_C4 You must notify EPA when the construction of the works covered by this approval has been commenced.
- RD_C5 You must notify EPA when the construction of the works covered by this approval has been completed.
- RD_C7 You must not commission or operate the works without the written approval of EPA.

RD_C8 You must install (a) all exhaust stacks so that discharge to atmosphere is unimpeded in a vertical upward direction; (b) all exhaust stacks and sampling platforms to allow for testing of exhaust gases in accordance with Australian Standard 4323.1/1995 revised 2014 Stationary Source Emissions - Selection of Sampling Positions.

Operating Conditions

RD_O1 Waste from the premises must not be discharged to the environment except in accordance with this approval.

RD_O11 Nuisance airborne particles must not be discharged beyond the boundaries of the premises.

RD_O12 Stormwater discharged from the premises must not be contaminated with waste.

RD_O15 You must not contaminate land or groundwater.

RD_O3 You must notify EPA of the date on which the plant commences operation, within 14 days of that date.

RD_O4 You must immediately notify EPA of any actual or potential non-compliance with any condition of this approval.

RD_O5 You must immediately notify EPA if any actual or potential off-site impact occurs during the period of this approval.

RD_O6.1 Air emissions from the thermal oxidiser must not exceed :

- (a) 34.02 grams per minute of CO;
- (b) 2.4 grams per minute of SO_x;
- (c) 0.1 grams per minute of total particulate matter.

RD_O7 Visible emissions to air other than steam must not be discharged from the premises.

RD_O8 Offensive odours must not be discharged beyond the boundaries of the premises.

RD_O9 Unacceptable noise (including vibration) must not be emitted beyond the boundaries of the premises.

This RD&D approval does not have any Water Conditions.

Monitoring and Reporting Conditions

RD_MR1 At least three months before the commencement of any commissioning, you must provide to EPA a plan and plans that include(s): (a) confirmation that the recommendations of a hazard and operability study (HAZOP) have been implemented; (b) a detailed commissioning plan for the works; (c) a final comprehensive analytical and monitoring programme to the satisfaction of EPA which includes, but is not limited to the measurement and reporting of emissions to air, noise emissions and waste characterisation; (d) a detailed decommissioning plan which includes details of the disassembly and removal of all plant, equipment, pipework and amenities.

RD_MR2 You must implement a monitoring program that enables you and EPA to determine compliance with this approval.

RD_MR3.1 Within 30 days of: (a) the completion of commissioning; (b) six-months following the commencement of operation; (c) following the completion of the 16 month trial operation, you must provide to EPA a written report detailing the results of the monitoring program referred to in condition RD_MR2 or RD_MR2.1 (whichever applies).

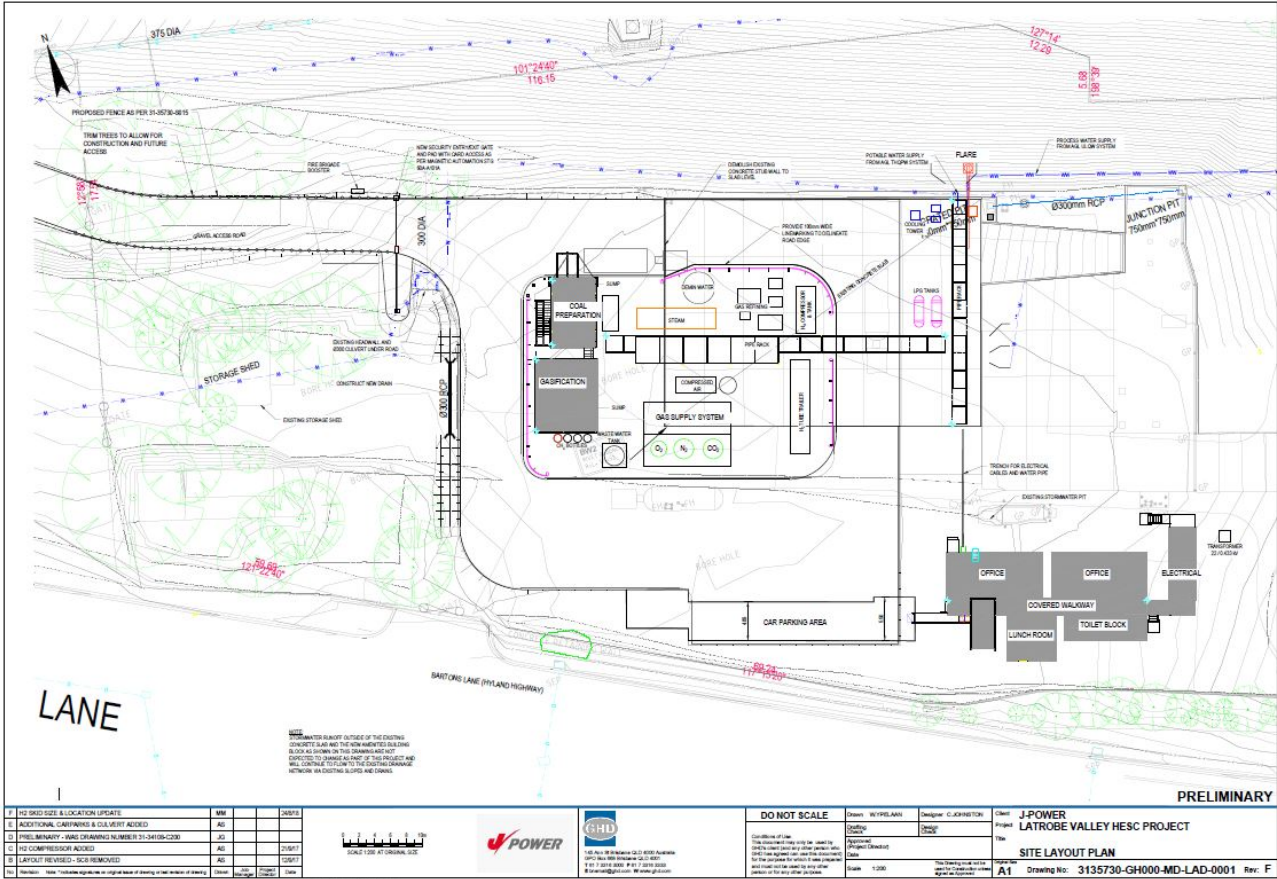
SCHEDULE 1A - LOCALITY PLAN



RD&D Approval:	190670
Company Name:	J-POWER LATROBE VALLEY PTY LTD
ACN:	626 639 629
Premises Address:	BARTONS LANE, HYLAND HIGHWAY, TRARALGON VIC 3844
Issued:	11/02/2019
Last Amended:	01/10/2020

Before relying on the information in this map, users should carefully evaluate its accuracy, currency, completeness and relevance for their purposes, and should obtain any appropriate professional advice relevant to their particular circumstances.

SCHEDULE 1B - PREMISES PLAN



RD&D Approval:	190670
Company Name:	J-POWER LATROBE VALLEY PTY LTD
ACN:	626 639 629
Premises Address:	BARTONS LANE, HYLAND HIGHWAY, TRARALGON VIC 3844
Issued:	11/02/2019
Last Amended:	01/10/2020

Before relying on the information in this map, users should carefully evaluate its accuracy, currency, completeness and relevance for their purposes, and should obtain any appropriate professional advice relevant to their particular circumstances.