PAPER AUSTRALIA PTY LTD

Holder of Works Approval: 184188
Issued: 28/11/2018
ACN: 061 583 533
Registered Address: 307 FERNTREE GULLY RD
MOUNT WAVERLEY VIC 3149
Premises Address: TRARALGON WEST RD
MARYVALE VIC 3840
Scheduled Categories: A08 Waste to Energy
K01 Power stations
Description: To construct a waste to energy facility (moving grate) with combined heat and power recovery. The facility will thermally treat non-hazardous residual municipal, commercial and industrial waste.

CATHY WILKINSON
Chief Executive Officer
Delegate of the Environment Protection Authority

Issued under the Environment Protection Act 1970, Section 19B
Works 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 works 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 works approvals for scheduled premises to prevent or minimise risk to the environment.

Section 19A of the Act requires the occupier of a “scheduled premises” to obtain works approval to construct or install plant and equipment in order to discharge, handle, treat or dispose of waste to the environment. These types of premises are defined in the Environment Protection (Scheduled Premises and Exemptions) Regulations 2007 (“the Regulations”).

When we issue works approvals: EPA will issue a works approval when satisfied that an applicant has put in place measures to protect the environment. Works approvals allow construction of works to occur and set control measures to minimise a site’s environmental risk. EPA can amend a works approval in response to changes in standards and site activities. Works approval holders must submit reports if required by a condition of the approval.

Works Approval information and obligations

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

If you object to any of the works approval conditions, you may have the decision reviewed by applying in writing to the Registrar, Planning and Environment Division, Victorian Civil and Administrative Tribunal (“VCAT”), 7th Floor, 55 King Street, Melbourne within 21 days of the date of issue. An application fee may be applicable when lodging an appeal with VCAT. Contact VCAT on (03) 9628 9777 for further details on fees associated with an appeal. A copy of the appeal should also be forwarded to the Manager, Development Assessments Unit, Environment Protection Authority, GPO Box 4395, Melbourne, 3001, within 7 days of lodgement of the appeal.

Interested (third) parties may also appeal against the works approval within 21 days of the date of issue. The Tribunal will notify you if such appeals are received. If an appeal is lodged, you must not go ahead with the works until the appeal is resolved.

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 works approval.

Works Approval structure

Structure: Your works approval has:
- Works conditions - setting out requirements for construction or installation;
- Schedule 1A - locality plan of your premises;
- Schedule 1B - plan of premises (provided by you).
Some types of works approvals also contain Schedule 1C - final landfill contour plan

CONDITIONS

General Conditions

WA_G1 Subject to the following conditions, this approval allows the construction of the following works and associated equipment – Waste to Energy facility (moving grate) capable of thermally treating 650,000 (+/-10 per cent) tonnes per annum of residual Municipal Solid Waste (MSW) and Commercial and Industrial (C&I) waste, consisting of the following key components:

(a) a fully enclosed negatively pressured waste tipping hall with a bunker that has a minimum capacity of storing 8,000 tonnes of residual waste;
(b) a flue gas treatment system including: selective non-catalytic reduction (SNCR) of NOx with injection of urea; dry/semi-dry lime injection; activated carbon injection; baghouse; and provision for future incorporation of additional pollution controls which meet Best Available Techniques (defined by Article 3(10) of Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions) without resulting in significant efficiency impacts of the initial design;
(c) a Continuous Emissions Monitoring System capable of measuring pollutants, including: carbon monoxide, total dust, total organic carbon, hydrogen chloride, hydrogen fluoride, sulphur dioxide, oxides of nitrogen expressed as NO2 and ammonia;
(d) continuous measurement of: temperature; stack gas flow; pressure; gas moisture content; oxygen;
(e) combined heat and power plant which recovers heat generated from the process as far as practicable and is designed to a minimum R1 energy efficiency of 0.72 (calculated in accordance with EPA guideline 1559); and
(f) provision for future incorporation of options to improve material recovery from the waste feedstock prior to incineration, if this becomes viable.

WA_G2 The works must be constructed in accordance with the application accepted on 25 May 2018 with additional information provided on 23 July 2018, 27 September 2018, 9 October 2018, 29 October 2018, 1 November 2018, 12 November 2018 and 22 November 2018 (‘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.

WA_G3 This approval will not take effect until any permit which is required under the Planning and Environment Act 1987 has been served on the Authority by the applicant.

WAG4.1.1 This approval expires on 28 November 2022 unless the works have been commenced by that date to the satisfaction of EPA.
Works Conditions

WA_W1 Before commencing construction of any works, you must provide to EPA the following report or reports with accompanying plans and specifications including:
(a) waste composition data report, including:
   I. at least 12 months of chemical, physical and calorific value analysis results representative of waste feedstocks;
   II. a list of types of wastes within the waste feedstocks including information on the quantity of each waste type;
   III. a comparison between the waste feedstock and the waste composition described in the works approval application; and
   IV. details of the methodology used for collecting the waste composition data.
(b) the final detailed designs and schematics of the works optimised to treat the intended feedstocks specified in WA_W1(a) and an updated chemical mass balance of the waste, approved in writing by an EPA-appointed environmental auditor (or alternative expert approved by the EPA in writing);
(c) an updated noise assessment, including:
   I. final acoustic design details of all buildings as part of works;
   II. noise predictions based on the final equipment schedule including reference equipment noise data;
   III. considerations of noise character (tonality, impulsiveness, or intermittency) with adjustments to be applied for the determination of the effective noise levels and details of any new or proposed noise mitigation measures designed to address the potential audible character;
   IV. assessment of the risk for intrusive low frequency noise, and detail of mitigation measures; and
   V. evidence of the implementation of best practice to minimise noise emissions.
(d) computational fluid dynamics (CFD) modelling demonstrating that:
   I. all combustion gases, after the last injection of air, are elevated to a minimum temperature of 850 °Celsius with a residence time of at least two seconds;
   II. the injection point of urea and the injection point of recirculated flue gas maximises NO\textsubscript{x} reduction; and
   III. all combustion gases are reduced to 200 °Celsius, or below, at the outlet of the boiler.
(e) a wastewater report based on the final detailed designs that:
   I. quantifies the wastewater generated and confirms compliance with your current licence conditions; and
   II. specifies the predicted wastewater discharge of sulphates and chlorine with a comparison to the ANZECC guidelines;
(f) an updated premises plan with location of discharge points; and
(g) a Construction Environment Management Plan.

WA_W2 You must not commence construction of the works for which reports are required by condition WA_W1 until written EPA approval of those reports has been received.

WA_W3 Where any reports specified in condition WA_W1 and approved by EPA differ from the application, the works must be constructed in accordance with those approved reports.

WA_W4 You must notify EPA when the construction of the works covered by this approval has been commenced.
You must notify EPA when the construction of the works covered by this approval has been completed.

WA_W8 You must install:
(a) a continuous emission monitoring system for mercury when it is formally required as part of Best Available Techniques (BAT) Reference Document on Waste Incineration;
(b) for each combustion chamber, at least one auxiliary burner that is automatically switched on when the temperature of the combustion gases after the last injection of air fall below 850 °Celsius.
(c) a system to prevent waste feed if:
   I. temperature (at least 850 °Celsius with a residence time of at least 2 seconds) at start-up has not been reached;
   II. combustion temperature (at least 850 °Celsius with a residence time of at least two seconds) is not maintained; or
   III. continuous Emissions Monitoring Systems show that any emission limit value is exceeded due to disturbance or failure of the waste gas cleaning devices.

WA_W12 You must install all stacks and sampling platforms to allow for testing of exhaust gases in accordance with Australian Standard 4323.1/1995 revised 2014.

WA_W13 You must install the chemical storage and ash storage in a bunded area or areas, each of which is constructed in accordance with EPA Publication 347 Bunding Guidelines, as amended from time to time.

WA_W14 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.

WA_W15 During construction, unacceptable noise (including vibration) must not be emitted beyond the boundaries of the premises.

WA_W17 All construction activities must be undertaken in accordance with EPA publication 480 Environmental Guidelines for Major Construction Sites, as amended from time to time.

WA_W19 During construction, you must ensure that all activities are carried out in accordance with the information provided in the works approval application.

### Reporting Conditions

WA_R1 At least four months before the commencement of any commissioning, you must provide to EPA a plan and plans that include(s):
(a) a report detailing provisions for publicly reporting of monitoring results on a website related to the project, or through a website agreed to by EPA, that must include:
   I. periodic reporting of monitoring results at a minimum frequency of quarterly;
   II. reporting of continuous emission monitoring results at a minimum frequency of monthly; and
   III. reporting of compliance status of air emissions against licence limits at a minimum frequency of daily.
(b) a report describing baseline conditions of soil, surface and groundwater at the premises and its boundary;
(c) a summary report of the site Environmental Management System (EMS) and make available for inspection all documents and procedures which form part of the EMS
(d) a detailed commissioning plan for the works;
(e) an air emissions monitoring and assessment plan that must include, as a minimum:

II. monitoring of individual species of the following indicators: Polycyclic Aromatic Hydrocarbons, Polychlorinated biphenyls, Volatile Organic Compounds, Polyhalogenated dibenzo-dioxins/furans, Chlorinated polycyclic aromatics and Chlorinated monocyclic aromatics; and

III. an accompanying commissioning monitoring and sample plan, prepared in accordance with EPA publication no. 440.1 A Guide to the Sampling and Analysis of Air Emissions and Air Quality, dated 2002, including, but not limited to, sampling and measurement procedures and frequencies;

(f) a noise emission monitoring and assessment plan include commissioning monitoring methodology for verifying compliance the noise assessment in WA_W1;

(g) a waste management acceptance plan that considers (as a minimum):
   I. waste acceptance procedures including processes and systems, by which waste unsuitable for incineration at the facility will be identified and managed;
   II. contingency for waste that consists of pre-sorted recyclable material or is contaminated with hazardous material or prescribed industrial waste; and
   III. regular review identifying options available for improving material recovery from the waste feedstock prior to incineration, at a minimum of five-yearly intervals and to the satisfaction of EPA;

(h) waste management contingency plan for extended planned and unplanned shutdowns expected to exceed 72 hours, that as a minimum considers:
   I. alternative waste management options;
   II. alternative waste odour control contingency measures; and
   III. arrangements or systems to inform relevant stakeholders (including, but not limited to, energy offtake companies, the EPA and local councils).

WA_R4 Before the commencement of any commissioning, you must provide, to the satisfaction of EPA, a report that includes: (a) all plans specified in condition WA_R1 of the works approval; and (b) construction verification report prepared by an EPA-appointed auditor demonstrating that the facility has been built in accordance with the works approval; and (c) confirmation that the recommendations of a hazard and operability study (HAZOP) have been implemented.

WA_R5 You must not commence operation of the works until written EPA approval of the plans and reports required by condition(s) WA_R1 and WA_R4 has been received.
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.
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