



Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Covanta Energy Limited
Protos Energy Recovery Facility
Grinsome Road
Elton
Cheshire

Variation application number

EPR/LP3132FX/V007

Permit number

EPR/LP3132FX

Protos Energy Recovery Facility

Permit number EPR/LP3132FX

Introductory note

This introductory note does not form a part of the notice

Under the Environmental Permitting (England & Wales) Regulations 2016 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

Schedule 1 of the notice specifies the conditions that have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made. All the conditions of the permit have been varied and are subject to the right of appeal.

While there is currently a permit in place, the installation itself is currently under construction. The facility is now in the final design stage and this variation is to reflect the following revisions:

- a name change of the plant to Protos Energy Recovery Facility
- **an increase in the annual permitted throughput of waste from 400,000 tonnes to 500,000 tonnes**
- an updated Installation boundary including removal of land which has not been used for permitted activities
- the revised location of the incinerator stack (circa 10m from original location)
- the new location of the surface water emission point (W1) and the addition of a second surface water emission point (W2)
- addition of one emergency generator
- an increase in the generation of electrical power (gross) from 49MWe to 49.9MWe: and
- removal of the proposed odour abatement system to treat odorous air during periods of shut-down (due to the two stream design negating the requirement).

The applicant has also provided details to demonstrate that improvement condition IC9 is no longer relevant as the facility will now operate with two lines and that pre-operational conditions PO6, PO10, PO11 and PO13 have been completed. These conditions have been deleted from the permit. A new PO14 has been added which updates and supersedes PO7. PO14 takes into account the fact that the operator has provided a partial response to the original PO7. PO7 has been retained in the permit for reference.

The remainder of the site operations will remain unchanged and are summarised below.

This Permit allows Covanta Energy Limited to operate a waste incinerator plant for the disposal of non-hazardous waste by incineration. The Installation is located within the 'Protos Park' which itself lies to the east of the village of Ince and north-east of Elton in Cheshire. The city of Chester is approximately 10 km to the south west. Existing industrial plants are located to the south and west of the Installation, and other proposed industries forming the Protos Park are located in the immediate area around the Installation. To the north of the Protos Park lies the Manchester Ship Canal and beyond that, the Mersey Estuary. Development of the Protos Park continues to advance into an industrial hub.

The Installation is located to the south of the Mersey Estuary which is designated as a Site of Special Scientific Interest (SSSI), Ramsar and Special Protection Area (SPA), and a number of other SSSIs are located within a 10 km radius from the Installation.

Waste will be delivered to the Installation by road, or by shuttle vehicles for waste transported via rail or water. Waste will be received in the reception hall and stored in the bunker before being transferred by cranes to the combustion units. The reception hall and storage area are fully enclosed buildings, which will minimise the potential for release of dust and odour. The combustion units will be operated using moving grate technology, designed to ensure efficient combustion of the waste, through the use of combustion air control and auxiliary burners. Under this variation, the facility is limited to process 500,000 tonnes of waste

per annum. Annually the facility will consume up to 40,000 MWh while generating up to 415,200 MWh, with up to 375,000 MWh being exported. The installation will operate with two incineration lines.

Emissions of oxides of nitrogen will be controlled through Selective Non Catalytic Reduction (SNCR). Flue gas recirculation has been confirmed to be employed at the facility.

The combustion gases will be cleaned in a flue gas treatment plant to remove particulates, acid gases and heavy metals before release to atmosphere via flues in a 100-metre stack. The controls and abatement will ensure that the Installation is operated in compliance with the Industrial Emissions Directive.

There will be no significant aqueous discharge from the facility due to the change from once-through water cooling systems to air-cooled condensers. Clean surface water will be discharged to Manchester Ship Canal via the East Central Drain. Blowdown and any contaminated surface waters (wash-down and effluent from the demineralisation plant) will be reused by the ash quench system. Prior to use in the ash quench system, the water will be collected in a wastewater tank and settling basin.

The plant will produce two types of residue, bottom ash and air pollution control residues. Bottom ash will be extracted from the bottom of the moving grate furnace and will be transferred to a designated area prior to export from the Installation for use in the construction industry. The air pollution control residue will be collected in the ash silo and sent offsite to landfill.

Continuous monitoring of particulates, hydrogen chloride, carbon monoxide, oxygen, nitrogen oxides, sulphur dioxide, volatile organic compounds and ammonia will be undertaken for the flue gases in the main stack.

The plant is operated under an Environmental Management System and a Quality Management System. The Operator plans to gain ISO14001 certification.

The schedules specify the changes made to the permit.

The status log of a permit sets out the permitting history, including any changes to the permit reference number.

Status log of the permit		
Description	Date	Comments
Application received	Duly made 20/02/2006	Application for a waste incineration plant.
Permit determined TP3135LS	21/12/2006	Permit issued to Peel Environmental Ince Limited.
Application EPR/LP3132FX/T001 (full transfer of permit EPR/TP3135LS)	Duly made 16/09/2011	Application to transfer the permit in full to Covanta Energy Limited.
Transfer determined EPR/LP3132FX	03/10/2011	Full transfer of permit complete.
Variation application EPR/LP3132FX/V002	Duly made 03/10/2011	Application to change furnace technology, increase waste throughput and add cooling water discharge emission point.
Variation determined EPR/LP3132FX	19/03/2012	Varied permit issued.
Variation application determined EPR/LP3132FX/V003	03/05/2012	Environment Agency initiated variation to reflect that the installation is now a multiple operator installation.
Variation application determined EPR/LP3132FX/V004	23/01/2014	Environment Agency variation to implement the changes introduced by the Industrial Emissions Directive.

Status log of the permit		
Description	Date	Comments
Application EPR/LP3132FX/S005 and EPR/LP3132FX/V006 (partial surrender, variation and consolidation)	Duly made 25/06/2018	Application to vary the permit to reduce annual throughput, remove land, and change the cooling system. Application to update the permit to modern conditions.
Additional information received	01/11/2018 02/11/2018	Response to Schedule 5 notice including information on odour management.
Additional information received	26/11/2018	Response to Schedule 5 notice including information on proposed odour abatement for a single line incineration facility.
Additional information received	14/12/2018	Memorandum confirming operating parameters of the odour abatement system for a single incineration line facility.
Variation determined EPR/LP3132FX (Billing ref: BP3537JA)	29/01/2019	Varied and consolidated permit issued.
Variation application EPR/LP3132FX/V007	Duly made 03/02/2022	Variation primarily to increase in the annual permitted throughput of waste from 400,000 tonnes to 500,000 tonnes.
Variation application determined EPR/LP3132FX/V007	09/01/2023	Variation and consolidation issued.

End of introductory note