

Annual performance report for: Integra North Energy Recovery Facility

Permit Number: EPR/ BJ7786IV

Year: 2018

This document represents the Annual Performance Report for Integra North Energy Recovery Facility (Chineham ERF) and has been submitted in compliance with Chapter IV Article 55(2) of the Industrial Emissions Directive (IED):

“For waste incineration plants or waste co-incineration plants with a normal capacity of 2 tonnes or more per hour, the report referred to in Article 72 shall include information on the function and monitoring of the plant and give account of the running of the incineration or co-incineration process and the level of emissions into air and water in comparison with the emission limit values. That information shall be made available to the public.”

1. Introduction

Name and address of plant	Veolia ES Hampshire Ltd Integra North Energy Recovery Facility Whitmarsh Lane Basingstoke Hampshire RG24 8LL
Description of waste input	Non-hazardous municipal waste and similar commercial wastes
Operator contact details if members of the public have any questions	020 7812 5000

2. Plant description

Chineham ERF was the first of its kind to be built in Hampshire and is leading example of best environmental practice for waste treatment. Waste produced by Basingstoke and North Hampshire Districts is processed at this ERF, providing a long term, sustainable solution for waste recovery. It recovers heat energy from the waste to produce steam, which is used to generate electricity supplied to the National Grid. Strict environmental controls and proven operating experience ensure the Chineham ERF is a centre of excellence and a benchmark for the industry.

3. Summary of Plant Operation

Municipal waste received	71,466 tonnes
Commercial and industrial waste received	21,711 tonnes
Total waste received	93,177 tonnes
Total plant operational hours	8125 hours
Total hours of “abnormal operation” (see permit for definition)	2 hours 14 minutes
Total quantity of incinerator bottom ash (IBA) produced	16,100 tonnes
Disposal or recovery route for IBA	R5: recycling of inorganic materials.
Did any batches of IBA test as hazardous? If yes, state quantity	None
Total quantity of air pollution control (APC) residues produced	2637 tonnes
Disposal or recovery route for APC residues	D9: physico-chemical treatment resulting in final compounds which are then discarded
Total electricity generated for export to the National Grid	39,564 MWh
Electrical energy used on installation	5846 MWh

4. Summary of periodic monitoring results for emissions to air

The table below shows the results of periodically monitored substances.

Substance	Emission limit value	Results	
		Line 1 Jan – Jun	Line 1 Jul - Dec
		12-16/04/2018	31/10/2018 & 27-29.11.2018
Mercury and its compounds	0.05 mg/m ³	0.0016 mg/m ³	0.00090 mg/m ³
Cadmium & thallium and their compounds (total)	0.05 mg/m ³	0.0010 mg/m ³	0.0012 mg/m ³
Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total)	0.5 mg/m ³	0.020 mg/m ³	0.023 mg/m ³
Dioxins and furans (I-TEQ)	0.1 ng/m ³	0.0011-0.0012 ng/m ³	0.0067 ng/m ³
Hydrogen Fluoride	2 mg/m ³	<0.040 mg/m ³	<0.027 mg/m ³

4.2 Summary of monitoring results for emissions to water

There are no releases other than uncontaminated surface water.

5. Summary of Permit Compliance

5.1 Compliance with permit limits for continuously monitored pollutants

The plant met its emission limits as shown in the table below.

Substance	Percentage time compliant during operation	
	Half-hourly limit	Daily limit
Particulates	100 %	100 %
Oxides of nitrogen	100 %	100 %
Sulphur dioxide	100 %	100 %
Carbon monoxide	100 % of 95% of 10-min averages	100 % of 95% of 10-min averages
Total organic carbon	100 %	100 %
Hydrogen chloride	100 %	100 %
Hydrogen fluoride	100 %	100 %

5.2 Summary of any notifications or non-compliances under the permit

Date	Summary of notification or non-compliance	Reason	Measures taken to prevent reoccurrence
14.02.2018	Notification of abnormal operation	Technically unavoidable stoppage of the lime system and resultant failure in acid gas abatement	The problem was rapidly addressed by flushing the system thus clearing the blockage and reinstating the flow of lime to the scrubber.
06.08.2018	Notification of abnormal operation	A sudden blockage of the lime dosing system reduced the effectiveness of the acid gas abatement.	The problem was rapidly addressed by flushing the system thus clearing the blockage and reinstating the flow of lime to the scrubber.

5.3 Summary of any complaints received and actions to taken to resolve them.

Date of complaint	Summary of complaint	Reason for complaint including whether substantiated by the operator or the EA	If substantiated, measures to prevent reoccurrence
	None		

6. Summary of plant improvements

Summary of any permit improvement conditions that have been completed within the year and the resulting environmental benefits.

None

Summary of any changes to the plant or operating techniques which required a variation to the permit and a summary of the resulting environmental impact.

None

Summary of any other improvements made to the plant or planned to be made and a summary of the resulting environmental benefits.

Every practicable opportunity to use the heat rejected at the steam condensers for beneficial local use is investigated. To date no cost effective or practicable options have become available. The site will continue to identify all possible opportunities, and investigate the practicalities of its installation. All viable developments will be implemented at the earliest opportunity.