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Permit Ref: BR4551 Date: 25th February 2009

Annual Report For Allington Energy from Waste Facility. 2008

Introduction

PPC permit BR4551 requires the following requirements to be reported on annually each year:-

During 2008 the plant was in the 'commissioning / optimisation' phase for the majority of the year. TOC (Test on Completion) ended on 22nd October 2008 and plant hand over occurred on the 24th December 2008.

Report

Permit requirement - Emissions of Heat

6.5.1 The Operator shall take every practical opportunity to use the heat rejected at the steam condensers for beneficial local use. A report shall be submitted to the Environment Agency bi-annually on the Anniversary of the issue of the Permit on the Operator's progress in investigating and developing opportunities for the use of the rejected heat.

During 2008 the plant has been in the commissioning, optimisation and take over phases and emissions of heat has yet to be fully investigated. Initial discussions have taken place with local businesses who are interested in taking the rejected heat and these discussions will continue.



Permit Requirement - Environmental Management System

4.1.3 Where the Operator has a formal environmental management system applying to the Permitted Installation which encompasses annual improvement targets the Operator shall, not later than 31 January in each year, provide a summary report of the previous year's progress against such targets.

During 2008 the plant has been in the commissioning, optimisation and take over phases. A formal environmental management system is required one year after the plant has been formally handed over. There is a management system implemented on site and is in use by Kent Environower and our O&M Contractor Fortum. This system was audited by the Environment Agency in September 2008 (no non conformances raised) and a further fly audit was carried out in October 2008 which raised some observations suggesting improvements to the existing fly monitoring regime. The intention to achieve accredited status with BSI (British Standards Institute) by our O&M (operator & maintenance) contractor is scheduled for completion in 2009.

Fugitive Emissions

4.1.5 Fugitive emissions shall be reviewed and quantified on an annual basis and, not later than 31st January in each year, a summary report on this review shall be sent to the Agency detailing such releases and the measures taken to prevent and reduce them.

During 2008 the plant has been in the commissioning, optimisation and take over phases. A water spray misting system has been installed in the non hazardous bottom ash area to improve control of dust emissions. This is currently under observation o identify if control is effective and sufficient.

During 2008 the following caused delays during commissioning:-

- Refractory repairs.
- Transformer problem causing power outage.

To reduce the risk of odour from the above events the waste was retained in the MSW & RDF bunkers. Kent Enviropower Ltd employed additional control and prevention measures to mitigate the impacts of the odour. These control measures consisted primarily of sealing the waste delivery area with sandbags. Installing rotating water misting systems with anti bacteriological additives to reduce odours. All operations were risk assessed to identify key problem areas and actions taken where required.

During these same periods there were increased complaints from the local community regarding increased fly activity. The EA issued enforcement notices requiring the monitoring and recording of fly activity in accordance with DEFRA guidance and to take control measures as advised by fly experts.

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Ash

4.1.6 By 31 January each year the Operator shall submit to the Agency an annual report on quantities of ash, their destinations and their components/compositions, which have been disposed of or recycled in the previous calendar year. The report shall review (with regard to BAT) opportunities for increasing waste recovery over the coming year, and report on progress with those identified in the previous years report.

During 2008 the plant has been in the commissioning, optimisation and take over phases. See attached Returns form 'R1' for details. Waste recovery has still to be optimised and no consideration has yet been given to increasing waste recovery. This will commence when the plant achieves stable running during 2009.

Energy

4.1.7 By 31 January each year the Operator shall submit to the Agency an annual report on the energy consumption and energy production of the Installation.

- 4.1.8 The report required by Condition 4.1.7 shall include the following:
 - a) A review (with regard to BAT) of opportunities for increasing the overall energy efficiency of the Installation over the coming year;
 - b) Identify progress with those opportunities identified in the previous report; and
 - c) Identify the <u>net</u> usable energy produced per tonne of waste processed i.e. energy consumption of the Installation and unused energy discharged from cooling operations to be deducted.

During 2008 the plant has been in the commissioning, optimisation and take over phases no opportunities have been identified to increase energy efficiency at this stage. Energy consumption is identified on attached for 'E1'.





Reporting of Waste Disposal and Recovery for the year 2008

Permit Reference Number : BR4551 Operator : Kent Enviropower Ltd

Installation: Allington Quarry Form Number: Agency Form / BR4551 / R1 / Form Dated 12 January 2006.

Waste Description	Disposal Route	Tonnes	Recovery Tonnes
1) Hazardous Wastes			
APC residues	Landfill	15619	0
Other hazardous wastes	N/A	0	0
Total hazardous waste		15619	
2) Non-Hazardous Wastes			
Bottom Ash	Recycle	13189	13189
Dirty Ferrous	Recycle	4812	4543
MRF Materials	Recycle	16126	12742
Other non-hazardous wastes	N/A	0	0
Total non-hazardous waste		34127	30474
TOTAL WASTE	-	49746	30474

Trends in Waste Disposal and Recovery			
	Named Waste	Total Waste	Waste per unit output
Total Haz 2006	APC Residue	6939	
Total Haz 2007	APC Residue	23184	
Total Haz 2008	APC Residue	15619	
Total Non Haz 2006	Bottom Ash & MRF	20365	
Total Non Haz 2007	Bottom Ash & MRF	39487	
Total Non Haz 2008	Bottom Ash & MRF	34127	

Operator's comments :		
Non haz waste – Dirty Ferrous 269 tonnes were landfilled reducing recov	ery to 4	543 tonnes.
MRF materials – 3384 tonnes rejected through the process reducing recovery to 12742 tonnes.		
Signed	Data	40 th === 00
Signed		
(authorised to sign as representative of Operator)		





Reporting of Water Usage for the year 2008

Permit Reference Number : BR4551 Operator : Kent Enviropower Ltd

Installation: Allington Quarry Form Number: Agency Form / BR4551 / WU1 / Form Dated 12 January 2006.

Water Source	Usage (m³)	Specific Usage (m³/t)
Mains water	17183	N/A
Site borehole	N/A	N/A
River abstraction	N/A	N/A
TOTAL WATER USAGE	17183	

Trends in W	ater Usage Parameter		
	Named Water source	Total Water usage	Water per unit output
2006	Mains	4323	
2007	Mains	8646	
2008	Mains	17183	

Signed ###	Date:	12 th Feb 09
(authorised to sign as representative of Operator)	Date.	.2 . 65 66

Operator's comments :

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Reporting of Energy Usage for the year 2008

Permit Reference Number : BR4551 Operator : Kent Enviropower Ltd

Installation: Allington Quarry Form Number: Agency Form / BR4551 / E1 / Form Dated 12 January 2006.

Energy Course	Energy Usage		
Energy Source	Quantity	Primary Energy (MWh)	CO ₂ Produced (tonnes)
Electricity *	MWh	28429	12224
Gas Oil	tonnes	N/A	N/A
Recovered Fuel Oil	tonnes	N/A	N/A

Trends in Energy Usage				
Year	Parameter			
	Primary Energy	CO ₂	CO ₂ per unit	
	usage	produced	output	
2006	6856	2,948		
2007	11276	4,848		
2008	28429	12224		

Operator's comments :	
CO2 based on Carbon Trust conversion of 0.43 KgCO2/Kwh	
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^{*} Conversion factor for delivered electricity to primary energy =





Reporting of Performance Indicators for the period Jan 2008 to Dec 2008

Permit Reference Number : BR4551 Operator : Kent Enviropower Ltd

Installation: Allington Quarry Form Number: Agency Form / BR4551 / PI1 / Form Dated 12 January 2006.

Annual Production/Treatment		
Total waste incinerated 132540.63 Tonnes		

Environmental Performance Indicators

Parameter	Quarterly Average	Units
Supplementary Fuel Oil	804685	litres
Mass of bottom ash produced	3297	Tonnes
Mass of boiler, FGT & ESP Ash.	3904	Tonnes
Mass of other solid residues	0	Tonnes
Mass of carbon used	23	Tonnes
Mass of lime used	543	Tonnes
Mass of urea used	23	Tonnes
Potable Water Use	9098	M3
Waste Hazard Score	N/A	
Waste Disposal Score	N/A	

Trends in Environmental Performance		
Year	Parameter	

Operator's comments :					
Signed(authoris	sed to sign as representative of Operator)	Date:	12 th Feb 09		