

Notice of variation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Twinwoods Heat and Power Limited

Twinwoods Co-incinerator

Unit 16

Twinwoods Business Park

Thurleigh Road

Milton Ernest

Bedford

MK44 1FD

Variation application number

EPR/SP3638KV/V006

Permit number

EPR/SP3638KV

Twinwoods Co-incinerator

Permit number EPR/SP3638KV

Introductory note

This introductory note does not form a part of the notice

The following notice gives notice of the variation of an environmental permit.

The variation amends the permit to

- Add the waste code 19 12 06 (Wood containing hazardous substances)
- Increase the annual throughput of the plant from 30,000 to 32,500 tonnes to take into account a higher moisture content of the supplied wood
- Add discharge of process water as an emission to sewer
- Update operating techniques to include the use of sodium bicarbonate rather than hydrated lime as flue gas abatement and
- The installation of six closed loop dry air cooling units for process cooling.

The schedules specify the changes made to the original 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		
Detail	Date	Comments
Application (EPR/SP3638KV/A001)	Duly made 21/08/2009	
Further Information Requested (ADMS Input Files)	Requested 02/11/2009	Received 05/11/2009
Schedule 5 notice (Further Information Requested)	Requested 12/11/2009	Received 26/11/2009
Further Information Requested (Assessment of Chromium (VI) Emissions)	Requested 13/01/2010	Received 25/01/2010
E-mail confirmation of fuel source	Requested 26/01/2010	Received 03/03/2010
Permit determined (EPR/SP3638KV)	25/05/2010	
Variation application (EPR/SP3638KV/V002)	Received 16/12/2010	
Variation and consolidation Issued (EPR/SP3638KV/V002)	17/01/2011	
Agency variation determined (EPR/SP3638KV/V003)	11/12/2013	Agency variation to implement the changes introduced by IED
Variation application (EPR/SP3638KV/V004)	Withdrawn	
Variation application (EPR/SP3638KV/V005)	Withdrawn	
Variation application (EPR/SP3638KV/V006)	Duly Made 31/05/2018	
Schedule 5 notice (dated 12/09/2018)	19/10/2018	
Variation and consolidation Issued (EPR/SP3638KV/V006) Billing reference JP3030QT	30/11/2018	

End of introductory note

Notice of variation

The Environmental Permitting (England and Wales) Regulations 2016

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies

Permit number

EPR/SP3638KV

Issued to

Twinwoods Heat and Power Limited (“the operator”)

whose registered office is

**15th Floor
33 Cavendish Square
London
England
W1G 0PW**

company registration number 06799288

to operate a regulated facility at

**Twinwoods Co-incinerator
Unit 16
Twinwoods Business Park
Thurleigh Road
Milton Ernest
Bedford
MK44 1FD**

to the extent set out in the schedules.

The notice shall take effect from 30/11/2018

Name	Date
David Griffiths	30/11/2018

Authorised on behalf of the Environment Agency

Schedule 1 – conditions to be deleted

None

Schedule 2 – conditions to be amended

Table S1.1 as referenced by condition 2.1.1 is amended to reference that lime abatement system, has been replaced with sodium bicarbonate abatement system.

Table S1.1 Activities		
Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity and waste types
Section 5.1 A(1) (a)	The incineration of hazardous waste incineration or co-incineration plant with a capacity exceeding 10 tonnes per day.	From receipt of waste and raw materials to emission of exhaust gases and export of wastes from the installation. The installation includes operation of the sodium bicarbonate abatement system, activated carbon addition for the control of heavy metals, dioxins & furans, bag filter and selective non catalytic reduction, 6 dry air radiators for 9MW of cooling plus an additional 6 x 500kW dry air liquid coolers units. Waste types as specified in table S3.2.
Section 5.1 A(1)(b)	The incineration of non-hazardous waste in an incineration or co-incineration plant with a capacity exceeding 3 tonnes per hour.	From receipt of waste and raw materials to emission of exhaust gases and export of wastes from the installation. The installation includes operation of the sodium bicarbonate abatement system, activated carbon addition for the control of heavy metals, dioxins & furans, bag filter and selective non catalytic reduction, 6 dry air radiators for 9MW of cooling plus an additional 6 x 500kW dry air liquid coolers. Waste types as specified in table S3.2.
Directly Associated Activity		
Electrical power supply	Generation of electricity in a steam turbine.	Use of electricity on site and export to the national grid.

Table S1.2 as referenced by condition 2.3.1 is amended to update the operating techniques

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	Sections 2.1 and 2.2 of the application document, excluding use of biodiesel from table 2.2.1.2 of the application.	21/08/2009
Response to Schedule 5 Notice dated 12/11/09	Response to question 1 about not running on one combustion chamber. The response to questions 3, 7, 8, 10, 11 & 13. Twinwoods BAT assessment report Sections 1.1.1, 1.1.2, 1.1.3 & 1.1.6.	26/11/2009
Application for variation EPR/SP3638KV/V006	Response to, question 3 Part C3 of the application form Operating techniques, Existing permit EPR/SP3638KV and Main application.	31/05/2018
Schedule 5 response	Waste Analysis, Waste Acceptance, Abatement, Bottom Ash testing also associated data in Appendix A, B & C.	19/10/2018
Additional information received	Clarification on operating techniques regarding discharge to sewer and use of cooling units.	13/11/2018

Table S3.2 as referenced by condition 2.3.3 is amended to include one extra waste code 19 12 06* and increase throughput from 30,000 to 32,500 tonnes per annum

Table S3.2 Permitted waste types and quantities for co-incineration	
Maximum quantity	32,500 tonnes per annum
Waste code	Description
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE
19 12	Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 06*	wood containing hazardous substances
19 12 07	wood other than that mentioned in 19 12 06

Table S4.3 as referenced by condition 3.1 is amended to reference the discharge of process water to sewer

Table S4.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements						
Emission point ref. & location	Parameter	Source	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
S1	No parameters listed	Reverse Osmosis reject, cooling tower discharge and boiler blowdown	-	-	-	-

Table S5.2 as referenced by condition 4.2.2 is amended to include the reporting of hazardous waste wood combusted.

Table S5.2: Annual production/treatment	
Parameter	Units
Non-hazardous waste wood combusted	tonnes
Hazardous waste wood combusted	tonnes
Electricity generated	MWh
Electricity exported	MWh
Electricity generated efficiency	%

Table S5.3 as referenced by condition 4.2.2 is amended to reference the reporting of the use of sodium bicarbonate rather than hydrated lime.

Table S5.3 Performance parameters		
Parameter	Frequency of assessment	Units
Total raw material used, including urea usage, sodium bicarbonate usage, activated carbon usage and gas oil usage	Annually	Tonnes (of each raw material) / MW produced
Availability to grid	Annually	Hours

Schedule 3 – conditions to be added

The following conditions are added as a result of the application made by the operator

- 2.1.2 Hazardous waste shall not be mixed, either with a different category of hazardous waste or with other waste, substances or materials, unless it is authorised by schedule 1 table S1.1 and appropriate measures are taken.
- 2.3.6 The operator shall burn only those hazardous wastes where the throughputs, calorific values and pollutant compositions are within the ranges specified in table S3.2 of schedule 2.
- 2.3.7 The operator shall ensure that prior to accepting waste subject to condition 2.3.6 at the site, it has obtained sufficient information about the hazardous wastes to be burned to demonstrate compliance with the characteristics described in condition 2.3.6.
- 2.3.8 The operator shall take representative samples of all hazardous waste deliveries to the site unless otherwise agreed in writing with the Environment Agency and test a representative selection of these

samples to verify conformity with the information obtained as required by condition 2.3.7. These samples shall be retained for inspection by the Environment Agency for a period of [at least 1 month] after the material is incinerated and results of any analysis made of such samples will be retained for at least 2 years after the material is incinerated.

Schedule 6 – Interpretation

'Hazardous waste' has the meaning given in the Hazardous Waste (England and Wales) Regulations 2005 (as amended)