



**Schedule 13A Permit with introductory note**

**NORTH EAST LINCOLNSHIRE COUNCIL**

**POLLUTION PREVENTION AND CONTROL ACT 1999  
Environmental Permitting Regulations 2016 (as amended)**

**Installation address**

**Pyrenergy EP Ltd  
West Factory Bale Store  
Moody Lane  
Grimsby  
North East Lincolnshire  
DN31 2TT**

**Permit Ref. no: EP/20140001/V1**

### **Responsibility under workplace health and safety legislation**

This Permit is given in relation to the requirements of the EP regulations. It must not be taken to replace any responsibilities you may have under Workplace Health and Safety legislation.

### **Appeal against permit conditions**

#### **Right to Appeal**

You have the right of appeal against this permit within 6 months of the date of the decision. The Council can tell you how to appeal. You will normally be expected to pay your own expenses during an appeal.

You will be liable for prosecution if you fail to comply with the conditions of this permit. If found guilty, the maximum penalty for each offence if prosecuted in a Magistrates Court is £50,000 and/or 6 months imprisonment. In a Crown Court it is an unlimited fine and/or 5 years imprisonment.

Our enforcement of your permit will be in accordance with the Regulators "Compliance Code."

Anyone who is aggrieved by the conditions attached to a Permit can appeal to the Secretary of State for the Environment, Food and Rural Affairs. Appeals must be made in accordance with the requirements of Regulation 31 and Schedule 6 of the EP Regulations.

Appeals should be received by the Secretary of State for Environment, Food and Rural Affairs. The address is as follows:

The Planning Inspectorate  
Environmental Team, Major & Specialist Casework  
Room 4/04 – Kite Wing  
Temple Quay House  
2 The Square, Temple Quay  
BRISTOL  
BS1 6PN  
Tel: 0117 372 8726  
Fax: 0117 372 8139

### **Please Note**

An appeal brought under Regulation 31 (1) (b) and Schedule 6, in relation to the conditions in a permit will not suspend the effect of the conditions appealed against; the conditions must still be complied with.

In determining an appeal against one or more conditions, the Act allows the Secretary of State in addition to quash any of the conditions not subject to the appeal and to direct the local authority either to vary any of these other conditions.

**End of introductory note**

### Activity description

Small Waste Incineration Process as defined in Schedule 13A (Regulation 35(2)(g)) under the Environmental Permitting (England and Wales) Regulations 2016 (as amended)

Energy pyrolysis Ltd will utilise end-of-life vehicle tyres as feedstock in a pyrolysis reactor. All tyres will be delivered to site in sealed containers; either in skips or bulk tippers and shall only be discharged inside the process building.

The pyrolysis vessel is loaded with the feedstock and then sealed to prevent oxygen egress and the pyrolysis process commences. The Combustion chamber (located beneath the pyrolysis vessel) is fed with LPG to start the pyrolysis process within the vessel. No combustion takes place in the vessel. The oil, gas and carbon black exits the vessel once the pyrolysis temperature is reached, into the first of the separation stages, where the oil, gases and carbon black are separated. The heat exchangers cool down the various constituents prior to storage in each receptacle. The gas separator removes any remaining moisture from the gas stream. Once dried, the gases are fed back into the combustion chamber and the LPG supply is automatically switched off, and the gases that are produced continue the process.

The installation boundary mentioned in permit conditions are shown in the plan attached to this permit.

### Conditions

#### Management

- 1.1 The operator shall manage and operate the activities:
  - a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
  - b) using sufficient competent persons and resources
- 1.2 Records demonstrating compliance 1.1 shall be maintained.
- 1.3 Any person having duties that are or may be affected by the matters set out in these conditions shall have convenient access to a copy of them kept at or near the place where those duties are carried out.
- 1.4 The operator shall comply with the requirements of an approved competence scheme.

#### Delivery and reception of waste

- 2.1 The delivery and reception of waste shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2.
- 2.2 Emissions from the delivery and reception of waste shall be free from odour and noise at levels likely to cause pollution outside the site, as perceived by the Regulator, unless the operator has used appropriate measures, including, but not

7.2 Waste shall only be accepted if:

it is of a type and quantity listed in schedule 2 table S2.2; and it conforms to the description in the documentation supplied by the producer or holder.

7.3 Waste fuel shall not be charged, or shall cease to be charged, if:

- a) the combustion chamber temperature during combustion of the pyrolysis gases (as described within Appendix 4 of the Schedule 5 response – S13A/001/I01/14 ) is below, or falls below, 850°C, or
- b) any continuous emission limit value in schedule 3 table S3.1(a) is exceeded; or
- c) any continuous emission limit value in schedule 3 table S3.1 is exceeded, other than under “permissible periods of abnormal operation”; or
- d) monitoring results required to demonstrate compliance with any continuous emission limit value in schedule 3 table S3.1 are unavailable other than during “permissible periods of abnormal operation”.

7.4 The operator shall record the beginning and end of each “permissible period of abnormal operation”.

7.5 During a “permissible period of abnormal operation”, the operator shall restore normal operation of the failed equipment or replace the failed equipment as rapidly as possible.

7.6 Where, during “permissible periods of abnormal operation”, on an incineration line, any of the following situations arise, waste shall cease to be charged on that line until normal operation can be restored:

- a) continuous measurement shows that an emission exceeds any emission limit value in schedule 3 table S3.1 due to disturbances or failures of the abatement systems, or continuous emission monitors are out of service, as the case may be, for a total of 4 hours uninterrupted duration;
- b) the cumulative duration of “permissible periods of abnormal operation” over 1 calendar year has reached 60 hours;
- c) continuous measurement shows that an emission exceeds any emission limit value in schedule 3 table S3.1 (a) due to disturbances or failures of the abatement systems;
- d) continuous emission monitors to demonstrate compliance with the emission limit value(s) for particulates, TOC and / or CO in schedule 3 table S3.1 (a), as detailed in the application or as agreed in writing with the Regulator, are unavailable.

7.7 The operator shall interpret the end of the “permissible period of abnormal operation” as the earliest of the following:

- a) when the failed equipment is repaired and brought back into normal operation;
- b) when the operator initiates a shut-down of the waste fuel combustion activity, as described in the application or as agreed in writing with the Regulator;
- c) when a period of four hours has elapsed from the start of the “permissible period of abnormal operation”;
- d) when, in any calendar year, an aggregate of 60 hours has been reached for “permissible periods of abnormal operation”

7.8 Bottom ash and APC residues shall not be mixed.

- Particulate matter 30%
  - Total organic carbon (TOC) 30%
  - Hydrogen chloride 40%
- b) valid half-hourly average values or 10-minute averages shall be determined within the effective operating time (excluding the start-up and shut-down periods) from the measured values after having subtracted the value of the confidence intervals in condition 8.10 (a);
- c) where it is necessary to calibrate or maintain the monitor and this means that data are not available for a complete half-hour period, the half-hourly average or 10-minute average shall in any case be considered valid if measurements are available for a minimum of 20 minutes or 7 minutes during the half-hour or 10-minute period respectively. The number of half-hourly or 10-minute averages so validated shall not exceed 5 or 15 respectively per day;
- d) daily average values shall be determined as the average of all the valid half-hourly average or 10-minute average values within a calendar day. The daily average value shall be considered valid if no more than five half-hourly average or 15 10-minute average values in any day have been determined not to be valid;
- e) no more than ten daily average values per year shall be determined not to be valid.

### Records

9.1 All monitoring records required to be made by this permit shall:

- a) be legible;
- b) be made as soon as reasonably practicable;
- c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
- d) be retained, unless otherwise agreed in writing by the Regulator, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
  - off-site environmental effects; and
  - matters which affect the condition of the land and groundwater.

9.2 The operator shall keep on site all monitoring records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Regulator.

### Notifications

10.1 The Operator shall

- a) in the event that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately:
  - i. inform the Regulator,
  - ii. take the measures necessary to limit the environmental consequences of such an incident or accident, and
  - iii. take the measures necessary to prevent further possible incidents or accidents;
- b) in the event of a breach of any permit condition, the operator must immediately:
  - i. inform the Regulator, and
  - ii. take the measures necessary to ensure that compliance is restored within the shortest possible time;

## Schedule 3 – Emissions and monitoring

**Table S3.1 Point source emissions to air – emission limits and monitoring requirements**

Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard(s) or method(s)
SP001 (M)	Particulate matter		30 mg/m <sup>3</sup>	½-hr average	Continuous measurement	BS EN 14181
SP001 (M)	Particulate matter		10 mg/m <sup>3</sup>	daily average	Continuous measurement	BS EN 14181
SP001 (M)	Total Organic Carbon (TOC)		20 mg/m <sup>3</sup>	½-hr average	Continuous measurement	BS EN 14181
SP001 (M)	Total Organic Carbon (TOC)		10 mg/m <sup>3</sup>	daily average	Continuous measurement	BS EN 14181
SP001 (M)	Hydrogen chloride		20 mg/m <sup>3</sup>	periodic over minimum 1-hour period	Quarterly in first year. Then Bi-annual	BS EN 1911 Parts 1, 2 and 3
SP001 (M)	Hydrogen fluoride		2 mg/m <sup>3</sup>	periodic over minimum 1-hour period	Quarterly in first year. Then Bi-annual	BS ISO 15713
SP001 (M)	Carbon monoxide		150 mg/m <sup>3</sup>	95% of all 10-minute averages in any 24-hour period	Continuous measurement	BS EN 14181
SP001 (M)	Carbon monoxide		50 mg/m <sup>3</sup>	daily average	Continuous measurement	BS EN 14181
SP001 (M)	Sulphur dioxide		100 mg/m <sup>3</sup>	periodic over minimum 1-hour period	Quarterly in first year. Then Bi-annual	BS EN 14791
SP001 (M)	Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )		400 mg/m <sup>3</sup>	½-hr average	Continuous measurement	BS EN 14181
SP001 (M)	Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )		200 mg/m <sup>3</sup>	daily average	Continuous measurement	BS EN 14181

**Table S3.1(a) Point source emissions to air – emission limits and monitoring requirements during permissible periods of abnormal operation**

Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
SP001 (M)	Particulate matter		150 mg/m <sup>3</sup>	1/2-hr average	Continuous measurement	BS EN 15267-3 during abatement plant failure / during failure of the continuous emission monitor
SP001 (M)	Total Organic Carbon (TOC)		20 mg/m <sup>3</sup>	1/2-hr average	Continuous measurement	BS EN 15267-3 during abatement plant failure / during failure of the continuous emission monitor
SP001 (M)	Carbon monoxide		100 mg/m <sup>3</sup>	1/2-hr average	Continuous measurement	BS EN 15267-3 during abatement plant failure / during failure of the continuous emission monitor

### Appendix 1- Installation boundary

The operator is authorised to carry out the activities and/or associated as specified and within the boundary shown in red on the plan below

