BEST AVAILABLE TECHNIQUES (BAT) assessment for the processing of polymers received under 19 02 04*

Scope:

The treatment and processes for the processing of potentially hazardous polymers received to the site have been assessed under the following BAT conclusions for activities specified in Annex I to Directive 2010/75/EU, namely:

— 5.1. Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the following activities:

(a) biological treatment;

(b) physico-chemical treatment;

6.1.1 Overall environmental performance

BAT 1. Improve the overall environmental performance, BAT is to implement and adhere to an environmental management system (EMS) that incorporates all of the following features:

BAT 2. Improve the overall environmental performance of the plant

BAT 5. In order to reduce the environmental risk associated with the handling and transfer of waste, BAT is to set up and implement handling and transfer procedures.

BAT 11. BAT is to monitor the annual consumption of water, energy and raw materials as well as the annual generation of residues and waste water, with a frequency of at least once per year.

We continue to manage and operate our Internal Management Systems and are accredited with ISO 9001:2015, 14001:2015, and 45001:2018 and continually monitor and improve our environmental and quality performance. Ensuring that the procedures for the reception, identification, transfer and treatment of in bound material is in line with our permit and applicable activities on site and that our plant is being monitored and maintained correctly to achieve peak performance and outputs

BAT 3. Facilitate the reduction of emissions to water and air, BAT is to establish and to maintain an inventory of waste water and waste gas streams, as part of the environmental management system

The polymers (plastic) separation plant does not produce a waste water or gas stream as part of its process as the water used is recirculated and cleaned in the purpose built waste water treatment plant.

BAT 4. Reduce the environmental risk associated with the storage of waste

The storage of all waste streams is on an impermeable concrete pad with a class 1 full retention interceptor and within concrete bunds and specified areas as shown in the Fire Prevention Plan. To ensure safe storage and clearly defined areas.

6.1.2 Monitoring

BAT 8. BAT Monitor channelled emissions to air with at least the frequency given below, and in accordance with EN standards

There are no channelled emissions to air

BAT 9. BAT is to monitor diffuse emissions of organic compounds to air from the regeneration of spent solvents, the decontamination of equipment containing POPs with solvents.

No solvents used in the polymers plant

BAT 10. BAT is to periodically monitor odour emissions.

In line with the Environmental Procedures with the IMS, any odour, dust or noise is recorded twice a day

BAT 11. BAT is to monitor the annual consumption of water, energy and raw materials

In line with the procedures set in the IMS as Part of ISO 14001 performance is monitored against previous period levels to help focus and continually reduce use of Energy, Water and raw materials

6.1.3 Emissions to air

BAT 12. In order to prevent or, where that is not practicable, to reduce odour emissions, BAT is to set up, implement and regularly review an odour management plan, as part of the environmental management system (see BAT 1),

There is no organic matter in the plastic stream, however as part of the ongoing site inspections set out in our IMS See BAT 1 above we perform regular checks on odour from all site operations

BAT 14. In order to prevent or, where that is not practicable, to reduce diffuse emissions to air, in particular of dust, organic compounds and odour.

In addition to the activity carried out in relation to BAT 12 , Dust is monitored onsite. During delivery of plastic from other sites and appropriate action taken if required.
The polymer plant processing takes place within a building and there are no fugitive dust emissions arising.

6.1.4 Noise and vibrations

BAT 17. To prevent or, where that is not practicable, to reduce noise and vibration emissions, BAT is to set up, implement and regularly review a noise and vibration management plan, as part of the environmental management system (see BAT 1).

BAT 18. To prevent or, where that is not practicable, to reduce noise and vibration emissions.

Being located in the heart of an industrial estate there are no particular sensitive receptors. In addition to the activity carried being carried out in relation to BAT 14 and 12 Noise assessments are carried out periodically, with polymer processing being carried out during processing hours.

6.1.5 Emissions to water

BAT 19. To optimise water consumption, to reduce the volume of waste water generated and to prevent or, where that is not practicable, to reduce emissions to soil and water, BAT is to use an appropriate combination of the techniques given below.

BAT 20. Reduce emissions to water, BAT is to treat waste water.

There are no emissions to water as the sites sits on an impermeable concrete pad. The plant its own purpose built water treatment station using a mixture of physical separation, sedimentation and flocculation before the water is recirculated.

6.1.6 Emissions from accidents and incidents

BAT 21. Limit the environmental consequences of accidents and incidents, BAT is to use all of the techniques given below, as part of the accident management plan (see BAT 1).

Procedures are set up inline with our ISO 9001, 14001, Internal management system and are used to create the Accident Management Plan, Disaster Recovery Plan and Fire Prevention Plan

6.2 BAT conclusions for the mechanical treatment of waste

Unless otherwise stated, the BAT conclusions presented in Section 6.2 apply to the mechanical treatment of waste when it is not combined with biological treatment, and in addition to the general BAT conclusions in Section 6.1.

6.2.1 General BAT conclusions for the mechanical treatment of waste
6.2.1.1 Emissions to air

BAT 25. In order to reduce emissions to air of dust, and of particulate-bound metals, PCDD/F and dioxin-like PCBs, BAT is to apply BAT 14d and to use one or a combination of the techniques given below.

Throughout the polymers process we continually clean and separate the polymers form contaminates using Cyclones, into enclosed bags, with no direct channel to air

As there is no difference between the material created on site through existing processes prior to treatment in the polymers plant and that being received from other AATF and WEEE Processing Plants there is no greater risk of harm to the Environment.