BAT Assessment

This assessment provides a review of the relevant BAT for the operation of a hazardous waste soil treatment facility at Albright Industrial Estate, Ferry Lane North, Rainham, RM13 9BU. It refers to EU Decision 2018/1147 of 10 August 2018 establishing Best Available Techniques (BAT) Conclusions for Waste Treatment

BAT Conclusion	Assessment
1.1 Overall Environmental Performance	
BAT 1 In order to improve the overall environmental performance, BAT is to implement and adhere to an environmental management system (EMS) that	The company has an Environmental Policy which sets out the company's commitment to ensure continuous improvement. The company has also achieved ISO14001
incorporates the following: I. commitment of the management,	accreditation for its Environmental Management System (EMS).
including senior management; II. definition, by the management, of an environmental policy that includes the continuous improvement of the environmental performance of the installation;	There is an operational EMS detailing the procedures for waste management. It will be updated to include the revised operational procedures to receive and treat hazardous waste.
III. planning and establishing the necessary procedures, objectives and targets, in conjunction with financial planning and investment; IV. implementation of procedures paying particular attention to: (a) structure and responsibility, (b) recruitment, training, awareness and competence, (c) communication, (d) employee involvement, (e) documentation, (f) effective process control, (g) maintenance programmes, (h) emergency preparedness and response, (i) safeguarding compliance with environmental legislation;	The EMS includes documented management procedures including: Roles and responsibilities. Staffing Training Procedures Exceptions Investigations and Mitigation Accident Prevention and Management Plan Checking and Reviewing EMS The EMS refers to documents and procedures that form part of the EMS. Specific Operational Plans include the Dust Management Plan.
V. checking performance and taking corrective action, paying particular attention to:	
 (a) monitoring and measurement (b) corrective and preventive action, recruitment, training, awareness and competence, (c) maintenance of records, (d) independent (where practicable) internal or external auditing in order to determine 	

whether or not the EMS conforms to planned arrangements and has been properly implemented and maintained VI. review, by senior management, of the EMS and its continuing suitability, adequacy and effectiveness: VII. following the development of cleaner technologies; VIII. consideration for the environmental impacts from the eventual decommissioning of the plant at the stage of designing a new plant, and throughout its operating life; IX. application of sectoral benchmarking on a regular basis: X. waste stream management (see BAT 2); XI. an inventory of waste water and waste gas streams (see BAT 3); XII. residues management plan (see description in Section 6.5); XIII. accident management plan (see description in Section 6.5); XIV. odour management plan (see BAT 12) XV. noise and vibration management plan (see BAT 17). BAT 2 The Variation Document sets out the In order to improve the overall following procedures: environmental performance of the plant, BAT is to use all of the specified techniques Pre-acceptance including waste as follows: Characterisation and requirement (a) Set up and implement waste for pre-booking characterisation and pre-acceptance On-site checks including procedures; verification, confirmation of (b) Set up and implement waste acceptability. acceptance procedures; Waste storage including capacity (c) Set up and implement a waste tracking checks and labelling. system and inventory; Follow up testing to check outputs. (d) Set up and implement an output quality Tracking system to monitor all management system; waste on site (with hazardous (e) Ensure waste segregation; properties, date arrived, and on-(f) Ensure waste compatibility prior to going storage accepted) mixing or blending of waste; The building will be used for (g) Sort incoming solid waste hazardous and non-hazardous waste. The building will be divided to provide two operational areas that ensure segregation.

BAT 3

any non-compliant materials.

The existing site drainage will continue to be used for the non-hazardous waste

issues.

Specific waste to be received and treated will prevent incompatibility

Waste will be checked at the point of production and on-site to remove

	·
In order to 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 (see BAT 1)	operations. The hazardous waste treatment will take place a new building that will have separate drainage. The drainage will be a sealed tank to capture any liquids or spills. There are no waste gas streams.
BAT 4 In order to reduce the environmental risk associated with the storage of waste, BAT is to use all of techniques specified: Optimised Storage location Adequate storage capacity Safe storage operation Separate area for storage and handling of packaged hazardous waste	Specified storage areas are shown on the site plan. There will be storage bays for contaminated soils. All waste will be prebooked which allows the capacity to be checked and the delivery approved. Daily update of the storage capacity will be maintained. The site will not receive packaged hazardous waste.
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. 1.2 Monitoring	Waste handling procedures are set out in the supporting document.
BAT 6 For relevant emissions to water as identified by the inventory of waste-water streams (see BAT 3), BAT is to monitor key process parameters (e.g. waste water flow, pH, temperature, conductivity, BOD) at key locations (e.g. at the inlet and/or outlet of the pretreatment, at the inlet to the final treatment, at the point where the emission leaves the installation)	Hazardous waste area will be drained to a sealed tank. The contents will be classified prior to removal using testing. No point source emissions to surface water.
BAT 7 BAT is to monitor emissions to water with at least the frequency given below, and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality	No monitoring required.
BAT 8 is to monitor channelled emissions to air with at least the frequency given, and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.	There are no channelled emissions to air. Dust monitoring is carried out on site in accordance with existing procedures.
BAT 9 is to monitor diffuse emissions of organic compounds to air from regeneration of spent solvents	NOT RELEVANT
BAT 10 BAT is to periodically monitor odour emissions	NOT RELEVANT Odour is not associated with the proposed operations.

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	This is set out in the supporting documentation.
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)	Odour is not associated with the proposed operations. An Odour Management Plan is not required.
BAT 13 In order to prevent or, where that is not practicable, to reduce odour emissions, BAT is to use one or a combination of the specified techniques	NOT RELEVANT
BAT 14	A Dust Management Plan is provided for
In order to prevent or, where that is not practicable, to reduce diffuse emissions to air, in particular of dust, organic compounds and odour, BAT is to use an appropriate combination of the techniques	the operation. This has been updated to include the risk associated with the Hazardous waste. The waste will be received and treated inside a building.
BAT15 relates to flaring	NOT RELEVANT
BAT16 relates to flaring	NOT RELEVANT
1.4 Noise and Vibrations	THO T THELE VY HAT
BAT 17 In order 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), that includes all of the following elements I. a protocol containing appropriate actions and timelines; II. a protocol for conducting noise and vibration monitoring; III. a protocol for response to identified noise and vibration events, e.g. complaints; IV. a noise and vibration reduction programme designed to identify the source(s), to measure/estimate noise and vibration exposure, to characterise the contributions of the sources and to implement prevention and/or reduction measures.	The site is remote from sensitive receptors. The area is dominated by heavy industry including other waste operators and mineral processing. The Environmental Risk Assessment has set out that the proposed changes will not alter the risk associated with noise. A Noise Management Plan has not been required previously and is not required to support this application. The operator replaces old plant with new machinery. All subject to planned preventative maintenance. All staff trained to use machinery. Any defects will be reported, and corrective action taken.

DAT 40	A
BAT 18	As above.
In order to prevent or, where that is not	
practicable, to reduce noise and vibration	
emissions, BAT is to use one or a	
combination of the techniques given below. 1.5 Emissions to Water	
BAT 19	The entire site is concreted with drainege
I	The entire site is concreted with drainage.
In order to optimise water consumption, to reduce the volume of waste water	There will be no discharges to groundwater or soil.
generated and to prevent or, where that is	Of Soil.
not practicable, to reduce emissions to soil	
and water, BAT is to use an appropriate	
combination of the techniques given below.	
BAT 20	There is an interceptor for the existing
In order to reduce emissions to water, BAT	waste facility.
is to treat waste water using an appropriate	A sealed tank is provided for the hazardous
combination of the techniques given below	waste treatment area.
1.6 Emissions from Accidents and	wasto treatment area.
Incidents	
BAT 21	An Accident Management Plan forms part
In order to prevent or limit the	of the EMS for the site. A specific AMP has
environmental consequences of accidents	been provided to deal with the hazardous
and incidents, BAT is to use all of the	waste operation.
techniques given below, as part of the	made operation.
accident management plan (see BAT 1).	
1.7 Material Efficiency	
,	
BAT 22	NOT RELEVANT
In order to use materials efficiently, BAT is	
to substitute materials with waste	
1.8 Energy Efficiency	
BAT 23	Energy use will be recorded. Following 4
In order to use energy efficiently, BAT is to	years of data, the energy plan will be
use both of the techniques given below	reviewed. As part of the Environmental
	Policy, options for continuous improvement
	are considered.
1.9 Reuse of Packaging	
BAT24 BAT is to maximize the reuse of	NOT RELEVANT
packaging	
2.1 General BAT Conclusions for the	
mechanical treatment of waste	Links de DAT 44d The desired to
BAT25 In order to reduce emissions to air	Linked to BAT 14d. The hazardous waste
of dust and of particulate bound metals,	will be received and treated inside a
BAT is to use one or combination of	building. With controls in place. See Dust
techniques	Management Plan.
2.2 BAT Conclusions for the mechanical treatment in shredders of metal waste	NOT RELEVANT
BAT26	NOT RELEVANT
BAT27	
	NOT RELEVANT
BAT28	NOT RELEVANT
2.3 BAT Conclusions for the treatment of	NOT RELEVANT
WEEE containing VFCs	NOT DELEVANT
BAT29	NOT RELEVANT

DAT20	NOT DELEVANT
BAT30 2.4 BAT Conclusions for the mechanical	NOT RELEVANT NOT RELEVANT
treatment of waste with calorific value	INOT RELEVANT
	NOT RELEVANT
2.5 BAT Conclusions for the treatment of	NOT RELEVANT
	NOT RELEVANT
WEEE containing mercury BAT32	NOT DELEVANT
3.1 BAT conclusions for the biological	NOT RELEVANT NOT RELEVANT
treatment of waste	NOT RELEVANT
treatment of waste	
BAT 33	NOT RELEVANT
<i>B</i> /(1 00	THO I THELE VIIII
BAT 34	NOT RELEVANT
2711 01	THE TREE TO THE TENT OF THE TE
BAT35	NOT RELEVANT
3.2 BAT Conclusions for the aerobic	NOT RELEVANT
treatment of waste	
BAT36	NOT RELEVANT
BAT37	NOT RELEVANT
3.3 BAT conclusions for the anaerobic	NOT RELEVANT
treatment of waste	
BAT38	NOT RELEVANT
3.4 BAT conclusions for the mechanical	NOT RELEVANT
biological treatment of waste	
BAT39	NOT RELEVANT
4.1 BAT conclusions for the physico-	NOT RELEVANT
chemical treatment of solid and/or pasty	
waste	
BAT40	NOT RELEVANT
BAT41	NOT RELEVANT
4.2 BAT conclusions for the re-refining	NOT RELEVANT
of waste oil	
BAT42	NOT RELEVANT
BAT43	NOT RELEVANT
BAT44	NOT RELEVANT
4.3 BAT conclusions for the physico-	NOT RELEVANT
chemical treatment of waste with	
calorific value	NOT DELEVANT
BAT45 4.4 BAT conclusions for the	NOT RELEVANT
	NOT RELEVANT
regeneration of spent solvents BAT46	NOT RELEVANT
BAT47	INOT INCLEVAINT
4.5 BAT for emissions of organic	NOT RELEVANT
compounds to air from re-refining of	INC. INCLEVANAL
waste oil	
	NOT DELEVANT
4.6 BAT conclusions for the thermal	NOT RELEVANT
treatment of spent activated carbon	NOT DELEVANT
BAT48	NOT RELEVANT
BAT49	NOT RELEVANT
4.7 BAT conclusions for the water	NOT RELEVANT
washing of excavated contaminated soil	NOT DELEVANT
BAT50	NOT RELEVANT

4.8 BAT conclusions for the decontamination of equipment containing PCBs	NOT RELEVANT
BAT51	NOT RELEVANT
5.1 Overall Environmental Performance	NOT RELEVANT
(treatment of water-based liquid waste)	
BAT52	NOT RELEVANT
BAT53	NOT RELEVANT
6.1 Channelled Emissions to Air	NOT RELEVANT