

## Recycled Material Supplies Limited

### BAT Assessment

This assessment provides a review of the relevant BAT for the operation of a hazardous waste soil treatment facility at RMS Dagenham. It refers to EU Decision 2018/1147 of 10 August 2018 establishing Best Available Techniques (BAT) Conclusions for Waste Treatment

BAT Conclusion	Assessment
<b>1.1 Overall Environmental Performance</b>	
<p><b>BAT 1</b>            In order to improve the overall environmental performance, BAT is to implement and adhere to an environmental management system (EMS) that incorporates the following:</p> <p>I. commitment of the management, including senior management;            II. definition, by the management, of an environmental policy that includes the continuous improvement of the environmental performance of the installation;            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:</p> <p>(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;</p> <p>V. checking performance and taking corrective action, paying particular attention to:</p> <p>(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</p>	<p>The company has an Environmental Policy which sets out the company's commitment to ensure continuous improvement.</p> <p>An EMS is provided for operations at the site. It will be updated to include the revised operational procedures to receive and treat hazardous waste.</p> <p>The EMS includes documented management procedures including:</p> <ul style="list-style-type: none"> <li>• Roles and responsibilities.</li> <li>• Staffing</li> <li>• Training</li> <li>• Procedures</li> <li>• Exceptions Investigations and Mitigation</li> <li>• Accident Prevention and Management Plan</li> <li>• Checking and Reviewing EMS</li> </ul> <p>The EMS refers to documents and procedures that form part of the EMS.</p> <p>Specific Operational Plans include the Dust Management Plan.</p>

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<p>planned arrangements and has been properly implemented and maintained</p> <p>VI. review, by senior management, of the EMS and its continuing suitability, adequacy and effectiveness;</p> <p>VII. following the development of cleaner technologies;</p> <p>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;</p> <p>IX. application of sectoral benchmarking on a regular basis;</p> <p>X. waste stream management (see BAT 2);</p> <p>XI. an inventory of waste water and waste gas streams (see BAT 3);</p> <p>XII. residues management plan (see description in Section 6.5);</p> <p>XIII. accident management plan (see description in Section 6.5);</p> <p>XIV. odour management plan (see BAT 12)</p> <p>XV. noise and vibration management plan (see BAT 17).</p>	
<p><b>BAT 2</b></p> <p>In order to improve the overall environmental performance of the plant, BAT is to use all of the specified techniques as follows:</p> <p>(a) Set up and implement waste characterisation and pre-acceptance procedures;</p> <p>(b) Set up and implement waste acceptance procedures;</p> <p>(c) Set up and implement a waste tracking system and inventory;</p> <p>(d) Set up and implement an output quality management system;</p> <p>(e) Ensure waste segregation;</p> <p>(f) Ensure waste compatibility prior to mixing or blending of waste;</p> <p>(g) Sort incoming solid waste</p>	<p>The Variation Document sets out the following procedures:</p> <ul style="list-style-type: none"> <li>• Pre-acceptance including waste Characterisation and requirement for pre-booking</li> <li>• On-site checks including verification, confirmation of acceptability.</li> <li>• Waste storage including capacity checks and labelling.</li> <li>• Follow up testing to check outputs.</li> <li>• Tracking system to monitor all waste on site (with hazardous properties, date arrived, and on-going storage accepted)</li> <li>• The building will be used for hazardous and non-hazardous waste. The building will be divided to provide two operational areas that ensure segregation.</li> <li>• Specific waste to be received and treated will prevent incompatibility issues.</li> <li>• Waste will be checked at the point of production and on-site to remove any non-compliant materials.</li> </ul>
<p><b>BAT 3</b></p> <p>In order to facilitate the reduction of emissions to water and air, BAT is to</p>	<p>The existing site drainage will continue to be used for the non-hazardous waste operations. The hazardous waste treatment</p>

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<p>establish and to maintain an inventory of waste water and waste gas streams, as part of the environmental management system (see BAT 1)</p>	<p>will take place in part of the building that has separate drainage. The drainage will be a sealed tank to capture any liquids or spills. There are no waste gas streams.</p>
<p><b>BAT 4</b> In order to reduce the environmental risk associated with the storage of waste, BAT is to use all of techniques specified:</p> <ul style="list-style-type: none"> <li>• Optimised Storage location</li> <li>• Adequate storage capacity</li> <li>• Safe storage operation</li> <li>• Separate area for storage and handling of packaged hazardous waste</li> </ul>	<p>Specified storage areas are shown on the site plan. There will be a reception area for asbestos contaminated waste and storage bays for other contaminated soils. All waste will be pre-booked 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.</p>
<p><b>BAT 5</b> 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.</p>	<p>Waste handling procedures are set out in the supporting document.</p>
<p>1.2 Monitoring</p>	
<p><b>BAT 6</b> 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 pre-treatment, at the inlet to the final treatment, at the point where the emission leaves the installation)</p>	<p>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.</p>
<p><b>BAT 7</b> 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</p>	<p>No monitoring required.</p>
<p><b>BAT 8</b> 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.</p>	<p>There are no channelled emissions to air. Dust monitoring is carried out on site in accordance with existing procedures.</p>
<p><b>BAT 9</b> is to monitor diffuse emissions of organic compounds to air from regeneration of spent solvents</p>	<p>NOT RELEVANT</p>
<p><b>BAT 10</b> BAT is to periodically monitor odour emissions</p>	<p>NOT RELEVANT Odour is not associated with the proposed operations.</p>

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<p>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</p>	<p>This is set out in the supporting documentation.</p>
<p><b>1.3 Emissions to Air</b></p>	
<p>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)</p>	<p>Odour is not associated with the proposed operations. An Odour Management Plan is not required.</p>
<p>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</p>	<p>NOT RELEVANT</p>
<p>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, BAT is to use an appropriate combination of the techniques</p>	<p>A Dust Management Plan is provided for the operation. An addendum has been provided to include the risk associated with the Hazardous waste. The waste will be received and treated inside a building.</p>
<p>BAT15 relates to flaring</p>	<p>NOT RELEVANT</p>
<p>BAT16 relates to flaring</p>	<p>NOT RELEVANT</p>
<p><b>1.4 Noise and Vibrations</b></p>	
<p>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.</p>	<p>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.</p>

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BAT 18 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.	As above.
<b>1.5 Emissions to Water</b>	
BAT 19 In order 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.	The entire site is concreted with drainage. There will be no discharges to ground water or soil.
BAT 20 In order to reduce emissions to water, BAT is to treat waste water using an appropriate combination of the techniques given below	There is an interceptor to storage attenuation tanks. A sealed tank is provided for the hazardous waste treatment area.
<b>1.6 Emissions from Accidents and Incidents</b>	
BAT 21 In order to prevent or 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).	An Accident Management Plan forms part of the EMS for the site. A specific AMP has been provided to deal with the hazardous waste operation.
<b>1.7 Material Efficiency</b>	
BAT 22 In order to use materials efficiently, BAT is to substitute materials with waste	NOT RELEVANT
<b>1.8 Energy Efficiency</b>	
BAT 23 In order to use energy efficiently, BAT is to use both of the techniques given below	Energy use will be recorded. Following 4 years of data, the energy plan will be reviewed. As part of the Environmental Policy, options for continuous improvement are considered.
<b>1.9 Reuse of Packaging</b>	
BAT24 BAT is to maximize the reuse of packaging	NOT RELEVANT
<b>2.1 General BAT Conclusions for the mechanical treatment of waste</b>	
BAT25 In order to reduce emissions to air of dust and of particulate bound metals, BAT is to use one or combination of techniques	Linked to BAT 14d. The hazardous waste will be received and treated inside a building. With controls in place. See Dust Management Plan.
<b>2.2 BAT Conclusions for the mechanical treatment in shredders of metal waste</b>	
BAT26	NOT RELEVANT
BAT27	NOT RELEVANT
BAT28	NOT RELEVANT
<b>2.3 BAT Conclusions for the treatment of WEEE containing VFCs</b>	
BAT29	NOT RELEVANT

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BAT30	NOT RELEVANT
<b>2.4 BAT Conclusions for the mechanical treatment of waste with calorific value</b>	NOT RELEVANT
BAT31	NOT RELEVANT
<b>2.5 BAT Conclusions for the treatment of WEEE containing mercury</b>	NOT RELEVANT
BAT32	NOT RELEVANT
<b>3.1 BAT conclusions for the biological treatment of waste</b>	NOT RELEVANT
BAT 33	NOT RELEVANT
BAT 34	NOT RELEVANT
BAT35	NOT RELEVANT
<b>3.2 BAT Conclusions for the aerobic treatment of waste</b>	NOT RELEVANT
BAT36	NOT RELEVANT
BAT37	NOT RELEVANT
<b>3.3 BAT conclusions for the anaerobic treatment of waste</b>	NOT RELEVANT
BAT38	NOT RELEVANT
<b>3.4 BAT conclusions for the mechanical biological treatment of waste</b>	NOT RELEVANT
BAT39	NOT RELEVANT
<b>4.1 BAT conclusions for the physico-chemical treatment of solid and/or pasty waste</b>	NOT RELEVANT
BAT40	NOT RELEVANT
BAT41	NOT RELEVANT
<b>4.2 BAT conclusions for the re-refining of waste oil</b>	NOT RELEVANT
BAT42	NOT RELEVANT
BAT43	NOT RELEVANT
BAT44	NOT RELEVANT
<b>4.3 BAT conclusions for the physico-chemical treatment of waste with calorific value</b>	NOT RELEVANT
BAT45	NOT RELEVANT
<b>4.4 BAT conclusions for the regeneration of spent solvents</b>	NOT RELEVANT
BAT46	NOT RELEVANT
BAT47	
<b>4.5 BAT for emissions of organic compounds to air from re-refining of waste oil</b>	NOT RELEVANT
<b>4.6 BAT conclusions for the thermal treatment of spent activated carbon</b>	NOT RELEVANT
BAT48	NOT RELEVANT
BAT49	NOT RELEVANT
<b>4.7 BAT conclusions for the water washing of excavated contaminated soil</b>	NOT RELEVANT
BAT50	NOT RELEVANT

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