

DOCUMENT 6



BEST AVAILABLE TECHNIQUES REPORT

INSTALLATION PERMIT APPLICATION

WOODSIDE DEPOT

Revision:	1.0	Approved by:	James Bailey
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1.0 Introduction

Hailsham Roadways Construction Co. Ltd (Roadways) are applying to the Environment Agency (EA) to vary the existing Standard Rules Environmental Permit for their facility at Woodside Depot, Polegate Road, Hailsham, East Sussex to a bespoke Installation Permit.

Installations are required to conform to best available techniques (BAT) requirements. The purpose of BAT is that the selection of techniques to protect the environment should achieve an appropriate balance between the environmental benefits they bring, and the costs to implement them. In addition, it should be demonstrated that no significant pollution is caused by an assessment of the environmental impact of emissions from the activity as a whole.

This Best Available Techniques report describes both the techniques that would be implemented at the facility to ensure compliance with the conditions of the Environmental Permit (EP) and demonstrate compliance with BAT where applicable. This BAT report only focuses on those activities related to the treatment and storage of hazardous waste as defined in the EPR. This report should therefore be read in conjunction with the separate Operating Techniques (OT) report which covers all site operations including those related to the non-hazardous waste operations.

In preparing this report reference has been had to the Best available techniques: environmental permits guidance on GOV.UK and Best Available Techniques (BAT) Reference Document for Waste Treatment (2018) as published by the European Commission.

Activity Summary

The proposed activity that falls under the scope of BAT is the utilisation of a bitumen emulsion or cementitious materials acting as binders to treat and fully encapsulate asphalt wastes containing coal tar (AWCCT).

The encapsulation process would be completed in a computer controlled, specialised, fully enclosed plant and would not result in any emissions to air, land or water. As a 'cold process' there would be no generation of combustion gases. After treatment and full encapsulation the resultant product would be utilised in highways works.

Other imported wastes arising from highways contracting works, such as soils, that are classified as hazardous due to levels of contamination would simply be accepted at site and bulked-up in a designated storage area before onward transportation to an appropriately licenced recovery, recycling or disposal facility.

Those road planings that are classified as non-hazardous would be processed through the 'waste operation'. This material would be crushed and/or screened to produce recycled products and stored ahead of re-use in future highways contracting works.

Hazardous and non-hazardous wastes would be imported to the facility in separate loads and would be stored and processed in different areas of the site to avoid the potential for any mixing of the two waste classifications in accordance with the requirements of the Hazardous Waste (England and Wales) Regulations.

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The encapsulated product would be re-used in highways contracting works as a sub-surface layer in road and pavement construction. This is in line with the Regulatory Position Statement (RPS) 75 which allows the use of these materials in the sub-base, base and binding layers for roads and pavements.

The Woodside Depot would have a maximum throughput of 75,000 tonnes per annum. Of this overall total the volume of hazardous waste would not exceed 30,000 tonnes per annum. In addition the maximum volume of hazardous waste stored on site at any time would not exceed 10,000 tonnes.

The hazardous waste would be stored and processed on an impermeable concrete pad measuring approximately 65m x 17.5m (1,137.5m²) that would have its own sealed drainage system.

Management System

As detailed in the Operating Techniques report Roadways have achieved ISO14001. As part of that certification is a commitment to continually check the environmental performance of plant and machinery. Roadways have a policy to ensure that when plant and machinery requires replacing it is upgraded with a more modern equivalent with a higher emission rating. This has included the recent replacement of the diesel generator with a new plant with improved emission performance.

The use of a recognised EMS complies with the requirements of BAT1.

Acceptance Procedures

The Pre-Acceptance, Waste Acceptance and Waste Rejection Procedures for all waste streams (hazardous and non-hazardous) are detailed in the Operating Techniques report. The comprehensive acceptance procedures ensure compliance with BAT2.

Storage

There would be separate storage areas and bays for hazardous and non-hazardous wastes. The hazardous waste storage area would comprise a concrete pad measuring 1,137.5m² with its own sealed drainage system.

The integrity of the storage area for hazardous wastes and its sealed drainage system would be inspected on a daily basis.

The maximum storage limit for hazardous wastes would be 10,000 tonnes with a maximum stockpile height of 6m.

The procedures for the storage of waste comply with BAT4.

Hazardous Waste Treatment

The treatment of hazardous waste (AWCCT) would comprise crushing, screening, and encapsulation using a bitumen emulsion or with cementitious binders. The treatment process would be used specifically for the following waste streams:

- EWC 17 03 01* bituminous mixtures containing coal tar

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2.0 Emissions Control

Point Source Emissions to Air

The only point source emission to air would be from the diesel generator. A 150kva diesel generator would be used to provide electricity for heating the bitumen product for use in the encapsulation process.

The generator meets the EU stage IIIA emission standard and no monitoring is required.

Point Source Emissions to Surface Water and Sewer

There would be no point source emissions to surface water or sewer. The drainage plan is included in the pack of drawings in Document 4.

The hazardous waste storage and treatment area would have a separate drainage system from the rest of the facility. The storage and treatment of hazardous waste would be undertaken on a concrete pad with a sealed drainage system. Surface water would drain from the concrete pad to a sealed collection tank.

The sealed tank would be emptied by a collection vehicle when two-thirds full and the water transported to a suitably licensed treatment facility. The sealed collection tank would be inspected daily and the levels of water within the tank monitored electronically.

Where feasible the stockpiles of hazardous waste in the storage area would be sheeted to reduce the volume of rainwater that passes through the stockpile before draining to the sealed collection tank.

BAT 6 and 7 are not relevant to this facility.

Point Source Emissions to Groundwater

There would be no point source emissions to groundwater. The hazardous waste storage and treatment area would be concreted to provide an impermeable surface.

Fugitive Emissions to Air

The principal source of fugitive emissions to air would be from the handling of the hazardous waste material.

A full Dust Management Plan for the site forms part of Roadways' Environmental Management System.

The Dust Management Plan details the measures to both prevent and mitigate the generation of dust, sets out the daily checks and monitoring to be undertaken on site, as well as detailing the investigation and reporting procedures in the event a dust complaint is received.

The measures are considered to be reasonable for the scale of the proposed operation and compliant with BAT 14.

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Fugitive Emissions to Surface Water, Sewer and Groundwater

No liquid waste would be permitted to be accepted at the site.

The site's drainage system would include hydrobrakes and penstocks which allow the system to be shut-off in the event of a spillage. The only source of liquid contamination would be from leaks or spillages of diesel or fuel. Diesel will be stored in a bunded tank and the condition of the tank will be inspected and recorded daily using the daily site inspection form. These will comply with Oil Storage Regulations 2001 (as amended). The bund tanks would be stored on a concrete pad. The drainage system will be checked on a daily basis.

As detailed above in respect of the hazardous waste stream this would be stored and treated on an impermeable concrete pad which drains to a sealed collection tank. No surface water run-off from the hazardous waste storage and treatment area would enter the main site drainage system.

Odour

Odour would not be associated with the operation. BAT 10, 12 and 13 are not applicable to the facility.

Noise

The impact from noise (associated with all site operations) has been fully assessed in the recent planning application for the facility (ref. WD/843/CM) determined by East Sussex County Council. The planning permission includes conditions placing limits on noise levels at the nearest receptors to the site and the site would be operated in accordance with a Noise Management Plan.

BAT 17 and 18 are not relevant.

Accidents/Incidents/Non Conformance

Roadways EMS includes an Accident Management Plan and an H1 Accident Risk Assessment has been submitted with the Permit application.

Raw Materials & Waste Minimisation

The selection of raw materials at the facility would take into account the environmental impact associated with their manufacture, use and recovery. Materials from sustainable and renewable sources would be used where technically and financially feasible. Consideration would be given to the recycling and recovery of spent materials after their use and to sourcing products as locally possible to minimise the environmental impact and costs associated with haulage.

Efficient use of raw materials would be maintained at all times, so that only the required quantity of products is used to ensure optimum performance and subsequent waste arisings are minimised.

A waste minimisation audit of the raw materials used on site would include preventive maintenance in accordance with manufacturers recommendations to ensure plant operates efficiently and any inadvertent leaks of lubricants, radiator coolant, antifreeze or fuel etc are quickly identified and remediated.

Fluid levels would be checked regularly to prevent overfilling and wastage. Spent raw materials would be recovered or recycled, to minimise waste disposal.

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A raw materials efficiency audit would be undertaken at the end of the first year and thereafter at intervals not exceeding 4 years.

Water Use

In respect of the management of hazardous wastes (the Installation activity) water would be required for the treatment of AWCCT. Water would be supplied from the site mains.

The wider site drainage system would include water harvesting to enable water to be captured and re-used in the process or for dust suppression. This is compliant with BAT 19 which supports water recirculation.

Energy

Roadways only use green electricity. The site would have low levels of energy usage. A review of energy consumption would be completed 12 months after operations commence. In accordance with BAT 11, Roadways would monitor the yearly consumption of water, energy, raw materials, and any waste residues, on an annual basis.

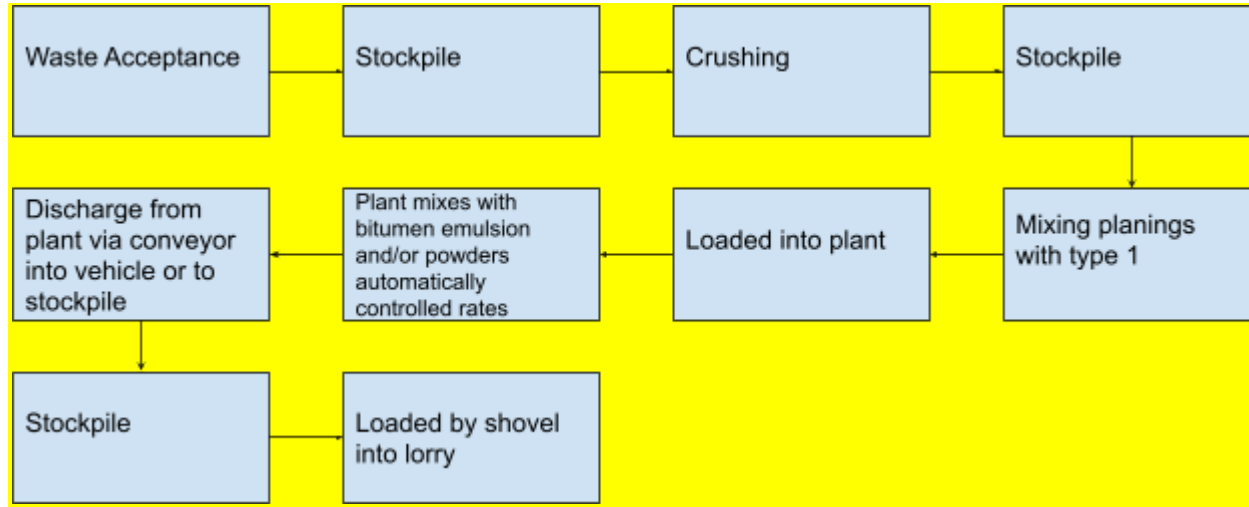
Energy efficiency measures would be incorporated where possible into the day to day activities of the installation. However, the energy requirements are essential to the continued operation of the installation to prevent pollution and minimise environmental risks.

Roadways would employ an anti-idling campaign to ensure all plant and machinery is switched off when not in use. In order to fulfil the requirements of the EMS, a procedure is in place that ensures the continual improvement of techniques used on site, as well as the long-term monitoring of innovative techniques that appear on the market during the life of the site. These may include further energy efficient measures, potential 'cleaner' fuel options and energy efficient systems for environmental protection.

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Process Flow Diagram

The proposed treatment process for AWCCT is shown in a flow diagram:



The raw materials for this process would include:

- EWC 17 03 01* bituminous mixtures containing coal tar
- Recycled Type 1
- Bitumen emulsion
- GGBS
- Lime
- Cement

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With reference to the Process Flow Diagram the following emission points have been identified:

STAGE	PROCESS	EMISSION	CONTROL
1	Waste Acceptance (Unloading)	Dust Particles to Atmosphere	Unloading in the dedicated storage area only. Storage area kept damped down in dry conditions with sprinkler coverage. (See H1 Risk Assessment & Dust Management Plan).
2	Crushing & Screening	Dust Particles to Atmosphere	Minimising drop heights. Only undertaking crushing and screening of AWCCT in a dedicated area fitted with dust suppression measures. (See H1 Risk Assessment & Dust Management Plan).
3	Transfer to Treatment Plant (Vertical Silo)	Dust Particles to Atmosphere	Transfer using dedicated loading equipment. Material placed in a bay using minimum drop height. Area subject to dust suppression measures. Maintenance of Silo filter system (See H1 Risk Assessment & Dust Management Plan).
4	Addition of Cementitious Powders or Bitumen	Dust Particles to Atmosphere	The addition of bitumen emulsion and powders would take place in a fully enclosed system. The addition of materials would be automatically controlled at a set rate.
5	Production and storage of HBM	Dust Particles to Atmosphere	The HBM would be stored in a dedicated bay. The cold lay asphalt also stored in dedicated bay

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3.0 Conclusion - Demonstrating BAT

This section cross-references the BAT measures outlined in sections 1.0 and 2.0 with the relevant BAT conclusions for Waste Treatment activities specified in Annex I to Directive 2010/75/EU.

<p>BAT 1. In order to improve the overall environmental performance, BAT is to implement and adhere to an environmental management system (EMS) that incorporates all of the following features:</p> <p>I. commitment of the management, including senior management;</p> <p>II. definition, by the management, of an environmental policy that includes the continuous improvement of the environmental performance of the installation;</p> <p>III. planning and establishing the necessary procedures, objectives and targets, in conjunction with financial planning and investment;</p> <p>IV. implementation of procedures paying particular attention to:</p> <ul style="list-style-type: none">(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>V. checking performance and taking corrective action, paying particular attention to:</p> <ul style="list-style-type: none">(a) monitoring and measurement (see also the JRC Reference Report on Monitoring of emissions to air and water from IED installations – ROM),(b) corrective and preventive action,	<p>Roadways have an Environmental Management System (EMS) accredited to ISO14001.</p> <p>The EMS sets out a clear structure for the management of the facility, the monitoring of operations to prevent and mitigate any environmental effects, maintaining and improving standards through the training of site staff, and a clear commitment to deliver improvements to the environmental performance of the site and the business overall.</p> <p>A summary of the EMS is provided with the Environmental Permit application and a full copy is available for inspection by the Environment Agency upon request.</p>
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<p>(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;</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 6.6.5);</p> <p>XIII. accident management plan (see description in Section 6.6.5);</p> <p>XIV. odour management plan (see BAT 12);</p> <p>XV. noise and vibration management plan (see BAT 17).</p>	
<p>BAT 2. In order to improve the overall environmental performance of the plant, BAT is to use all of the techniques given below.</p> <ul style="list-style-type: none"> A) Set up and implement waste characterisation and preacceptance procedures B) Set up and implement waste acceptance procedures C) Set up and implement a waste tracking system and inventory D) Set up and implement an output quality management system E) Ensure waste segregation F) Ensure waste compatibility prior to mixing or blending of waste G) Sort incoming solid waste 	<p>As detailed in Section 1.0 and Section 2.0 and the Operating Techniques report Roadways employ strict procedures and checks in the pre-acceptance and acceptance stages for imported hazardous wastes. The recording system employed by Roadways ensures that all wastes can be tracked.</p> <p>The hazardous waste (AWCCT) is processed in accordance with a quality management system to ensure the encapsulated material is fit for purpose in its re-use in highways contracting projects.</p> <p>The onsite operations also ensure that hazardous and non-hazardous</p>

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	<p>waste streams are kept separate at all times.</p> <p>Incoming waste is inspected prior to tipping and again once tipped to ensure it meets acceptance criteria prior to being placed in the stockpile.</p> <p>Incoming waste will be sent to allocated bays upon acceptance by Roadways staff. Any small amount of foreign material will be handpicked and disposed</p>
<p>BAT 3. 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), that incorporates all of the following features:</p> <p>(i) information about the characteristics of the waste to be treated and the waste treatment processes, including: (a) simplified process flow sheets that show the origin of the emissions; (b) descriptions of process-integrated techniques and waste water/waste gas treatment at source including their performances; (ii) information about the characteristics of the waste water streams, such as: (a) average values and variability of flow, pH, temperature, and conductivity; (b) average concentration and load values of relevant substances and their variability (e.g. COD/TOC, nitrogen species, phosphorus, metals, priority substances / micropollutants); (c) data on bioeliminability (e.g. BOD, BOD to COD ratio, Zahn-Wellens test, biological inhibition potential (e.g. inhibition of activated sludge)) (see BAT 52); (iii) information about the characteristics of the waste gas streams, such as: (a) average values and variability of flow and temperature; (b) average concentration and load values of relevant substances and</p>	<p>A process flow diagram is presented in this BAT Report. This identifies that the only emissions are those to air in the form of dust particles. The on site waste treatment processes do not generate wastewater or waste gases.</p>

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<p>their variability (e.g. organic compounds, POPs such as PCBs); (c) flammability, lower and higher explosive limits, reactivity; (d) presence of other substances that may affect the waste gas treatment system or plant safety (e.g. oxygen, nitrogen, water vapour, dust).</p>	
<p>BAT 4. In order to reduce the environmental risk associated with the storage of waste, BAT is to use all of the techniques given below.</p> <p>Technique: a. Optimised storage location Description: This includes techniques such as: the storage is located as far as technically and economically possible from sensitive receptors, watercourses, etc.; the storage is located in such a way so as to eliminate or minimise the unnecessary handling of wastes within the plant (e.g. the same wastes are handled twice or more or the transport distances on site are unnecessarily long). Applicability: Generally applicable to new plants.</p> <p>Technique: b. Adequate storage capacity Description: Measures are taken to avoid accumulation of waste, such as: the maximum waste storage capacity is clearly established and not exceeded taking into account the characteristics of the wastes (e.g. regarding the risk of fire) and the treatment capacity; the quantity of waste stored is regularly monitored against the maximum allowed storage capacity; the maximum residence time of waste is clearly established. Applicability: Generally applicable.</p> <p>Technique: c. Safe storage operation Description: This includes measures such as: equipment used for loading, unloading and storing waste is clearly documented and labelled; wastes known to be sensitive to heat, light, air, water, etc. are protected from such ambient conditions; containers and drums are fit for purpose and stored securely. Applicability: Generally applicable.</p> <p>Technique:d. Separate area for storage and handling of packaged hazardous waste Description:When relevant, a dedicated area is used for storage and</p>	<p>The details set out in Sections 1.0 and 2.0 and the Operating Techniques report demonstrate that Roadways have applied techniques to adhere to the requirements of all 4 parts of BAT4. The site has been designed to provide safe and adequate storage of hazardous and non-hazardous waste streams, with clear separation to ensure the different streams are not mixed.</p> <p>The site layout plan highlights the proposed storage and treatment areas which have separate drainage systems for hazardous and non-hazardous storage and treatment areas (as shown on the drainage plan).</p>

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<p>handling of packaged hazardous waste. Applicability: Generally applicable.</p>	
<p>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.</p> <p>Description: Handling and transfer procedures aim to ensure that wastes are safely handled and transferred to the respective storage or treatment. They include the following elements: handling and transfer of waste are carried out by competent staff; handling and transfer of waste are duly documented, validated prior to execution and verified after execution; measures are taken to prevent, detect and mitigate spills; operation and design precautions are taken when mixing or blending wastes (e.g. vacuuming dusty/powdery wastes). Handling and transfer procedures are risk-based considering the likelihood of accidents and incidents and their environmental impact.</p>	<p>The site would be operated in accordance with the techniques described in Sections 1.0 and 2.0 of this report and the separate Operating Techniques report.</p> <p>The site has a qualified TCM overseeing operations with two additional qualified TCMs providing cover in periods of absence.</p> <p>In accordance with the described techniques as well as according with the ISO14001 EMS for Roadways there would be continual monitoring and recording of all waste processes, as well as a commitment to staff training and improved performance to ensure risks to the environment continue to be minimised.</p>
<p>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).</p>	<p>BAT6 is not applicable in that the hazardous waste storage and processing operations would not generate wastewater. As described in Section 1.0 and 2.0 incident surface water (e.g. rainwater) on the impermeable hazardous waste storage and treatment pad would drain to a sealed storage tank with the contents tankered away for off-site treatment at an appropriately licenced facility.</p> <p>Surface water drainage from the non-hazardous waste storage and treatment area would discharge from site after passing through the site drainage system, which includes interceptors, traps, and swales to ensure the quality and flow of water discharging from site is acceptable.</p>
<p>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.</p>	<p>BAT7 is not applicable.</p>
<p>BAT 8. BAT is to monitor channelled emissions to air with at least the frequency given below, and in accordance with EN standards.</p>	<p>The only applicable parameter from BAT8 is the monitoring of dust emissions on a recommended 6 monthly basis. As detailed in Sections</p>

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<p>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>1.0 and 2.0 and the separate Operating Techniques report Roadways employs a robust dust management and monitoring regime in line with industry best practice. The site has its own weather station providing real time data on wind speed, direction, precipitation, temperature and pressure to enable operational decisions to be well informed and provide information to assist any investigation of a complaint about dust.</p>
<p>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, and the physico-chemical treatment of solvents for the recovery of their calorific value, at least once per year using one or a combination of the techniques given below.</p>	<p>BAT9 is not applicable.</p>
<p>BAT 10. BAT is to periodically monitor odour emissions.</p>	<p>BAT10 is not applicable. No malodorous wastes are accepted on site.</p>
<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>These parameters (where relevant) are monitored by Roadways under the provisions of their ISO14001 EMS which seeks to achieve a continual betterment in environmental impact and performance.</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</p>	<p>BAT12 is not applicable. No malodorous wastes are accepted on site.</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 techniques.</p>	<p>BAT13 is not applicable. No malodorous wastes are accepted on site and there is no aerobic treatment of wastes.</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 given below.</p>	<p>A number of the techniques identified in BAT14 are applicable to the control and management of dust emissions associated with the hazardous waste storage and processing operations, and these form a central part of the Dust Management Plan for the site. These techniques include: i) Minimising the number of potential diffuse emission sources by limiting the drop height of material, limiting traffic speed, and using wind barriers; ii) Dampening potential sources of diffuse dust emissions (e.g. waste storage, traffic areas, and open</p>

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	handling processes) with water; and iii) Cleaning of waste treatment and storage areas and trafficking routes.
BAT 15. BAT is to use flaring only for safety reasons or for non-routine operating conditions (e.g. start-ups, shutdowns).	BAT15 is not applicable.
BAT 16. In order to reduce emissions to air from flares when flaring is unavoidable, BAT is to use both of the techniques given below.	BAT16 is not applicable.
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>A noise impact assessment (NIA) has been undertaken of the site operations alongside preparation of a Noise Management Plan. Together with the ISO14001 EMS this provides for mitigation to minimise the impact of noise on the closest receptors.</p> <p>In addition the planning permission for the site conditions the requirement for noise monitoring and ensuring set noise levels at the closest receptors are not exceeded.</p>
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 techniques.	Measures consistent with BAT18 are employed on site to prevent and/or minimise noise emissions. These include the appropriate location of equipment and buildings, operational measures (such as inspection and maintenance of equipment, equipment operation by experienced staff, avoidance of noisy activities at night, if possible, and provisions for noise control during maintenance, traffic, handling and treatment activities) and noise attenuation through the use of existing boundary bunding.
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 techniques.	As previously described the site would utilise an impermeable surface with a sealed storage tank to capture and contain surface water run-off from the hazardous waste storage and treatment area.
BAT 20. In order to reduce emissions to water, BAT is to treat waste water using an appropriate combination of techniques.	BAT 20 is not applicable.

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<p>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).</p> <p>a) Protection measures b) Management of incidental/accidental emissions c) Incident/accident registration and assessment system</p>	<p>Roadways have an Environmental Management System (EMS) accredited to ISO14001.</p> <p>The EMS sets out a clear structure for the management of the facility, the monitoring of operations to prevent and mitigate any environmental effects, maintaining and improving standards through the training of site staff, and a clear commitment to deliver improvements to the environmental performance of the site and the business overall.</p> <p>A summary of the EMS is provided with the Environmental Permit application and a full copy is available for inspection by the Environment Agency upon request.</p>
<p>BAT 22. In order to use materials efficiently, BAT is to substitute materials with waste.</p>	<p>Roadways utilise waste materials in the creation of recycled 'end of waste' products for re-use in highways contracting and construction works.</p> <p>The products would be reduce the need for primary aggregates, such as HBM replacing primary type 1 sub base Bitumen encapsulate aggregate replacing hot asphalt</p>
<p>BAT 23. In order to use energy efficiently, BAT is to use both of the techniques given below.</p> <p>a. Energy efficiency plan b. Energy balance record</p>	<p>Energy consumption in the storage and processing of hazardous waste on site is not high. More broadly energy efficiency measures across the site and Roadways operations form a central part of the ISO14001 accredited EMS. Records of energy consumption and energy efficiency measures are reviewed by management with a target to continually improve energy performance.</p>
<p>BAT 24. In order to reduce the quantity of waste sent for disposal, BAT is to maximise the reuse of packaging, as part of the residues management plan.</p>	<p>The storage and processing of hazardous waste does not generate waste packaging. However, the reduction in packaging across the Roadways operations forms part of the environmental improvement targets within the ISO14001 EMS.</p>
<p>BAT25 - BAT51</p>	<p>BAT25 - BAT51 are not applicable to the hazardous waste storage and processing operations undertaken by Roadways.</p>