ENVIRONMENTAL PERMIT APPLICATION

BAT CONCLUSIONS ASSESSMENT

ASPHALT RECYCLING FACILITY
HD RICKETTS
WEEFORD QUARRY
LONDON ROAD
SUTTON COLDFIELD
B75 5SY

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BAT Conclusions Assessment

The following presents a review of the relevant BAT for the operation of an Asphalt Recycling Facility at Weeford Quarry. The review considers the updated BAT conclusions presented in the Commission Implementing Decision (EU) 2018/1147 following publication of the revised BREF Document for Waste Treatment in 2018.

BAT Conclusion	Assessment Review
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)**.**	The Facility will operate under the effective system of management procedures already developed on a national basis by Tarmac Limited in accordance with ISO 9001, ISO 14001, and ISO 50001. The EMS incorporates all the features listed under this BAT conclusion.
BAT 2. In order to improve the overall environmental performance of the plant, BAT is to use all of the specified techniques**.**	
a) Set up and implement waste characterisation and pre-acceptance procedures	Tarmac have developed waste characterisation and pre-acceptance procedures that are implement nationally. The procedures ensure that the relevant information is provided to establish any hazardous properties and determine if they are permitted to be accepted at the facility.
b) Set up and implement waste acceptance procedures	Tarmac have developed waste acceptance procedures that are implemented nationally. These procedures will ensure that the wastes received correspond with the pre-acceptance characterisation information. Acceptance checks will principally comprise visual checks to confirm that only asphalt and tar-bound plannings are received and do not contain any significant levels of contamination.
c) Set up and implement a waste tracking system and inventory	Unprocessed wastes are stored in a designated stocking area tipping. They are subsequently processed on either a ongoing or campaign basis depending on input rates, depending on demand. The stocking area is filled and emptied from one-end to another to ensure that wastes received are not stored onsite for prolonged periods.
d) Set up and implement an output quality management system	Crushing and screened products undergo visual assessment during the treatment process. The final coated product is subject to quality controlled manufacturing process.
e) Ensure waste segregation	Hazardous and non-hazardous plannings are stored and process separately. Processed materials are stored separately in accordance with the material grading/specification.
f) Ensure waste compatibility prior to mixing or blending of waste	The wastes handled at the site are non-reactive and present no significant hazards.

BAT Conclusion	Assessment Review
g) Sort incoming solid waste	Waste received will be source-segregated and stored in designated stockpiles.
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).	Waste water emissions are limited to potentially contaminated surface water runoff. Procedures have been developed to manage these waters.
BAT 4. In order to reduce the environmental risk associated with the storage of waste, BAT is to use all of techniques specified.	The application site is remote from sensitive receptors. Adequate capacity is available to manage the predicted waste inputs and processing rates.
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.	Waste handling and transfer procedures form part of Tarmac's EMS
1.2 Monitoring	
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 pre-treatment, at the inlet to the final treatment, at the point where the emission leaves the installation).	There are no emissions to the water associated with the operation of the Asphalt Recycling Facility. All surface waters/leachates draining from the facility directed to an impervious catchment area with an engineered sump.
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.	Not applicable.
BAT 8. BAT is to monitor channelled emissions to air 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.	Not applicable
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.	Not applicable
BAT 10. BAT is to periodically monitor odour emissions.	The materials handled and processes carried out at the site are not a significant source of odours emissions. Precautionary olfactory monitoring will be carried out daily.

BAT Conclusion	Assessment Review
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.	The annual consumption of water, energy and raw materials form part of Tarmac's EMS. These are reported in accordance with the Environmental Permit.
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)**.**	Not applicable (see BAT 10).
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**.**	
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**.**	Fugitive emissions will be managed at source. The control of fugitive emissions at the site will be achieved largely through the implementation of good management practices and housekeeping e.g. maintaining haul roads free of debris, loads will be sheeted, use of water sprays to clean vehicles, processing will be carried out during ambient conditions.
BAT 15. BAT is to use flaring only for safety reasons or for non-routine operating conditions (e.g. start-ups, shutdowns).	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 outlined.	
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 noise and vibration sensitive receptors (closest is ~750m) and located in a operational quarry setting and close to a trunk road network.

BAT Conclusion	Assessment Review
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.	Noise and vibration generated by the Asphalt Recycling Facility do not pose significant risk to any receptors. Where appropriate measures will be implemented to further reduce the risk.
1.5 Emissions to water	
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 consumption figures for water use will be reviewed and assessed on an annual basis as part of the Environmental Permit reporting requirements. All wastes are stored and treated on impermeable surfaces. Surface water run-off will be managed as potentially contaminated water and routed over an impervious catchment area to an engineered collection sump, with surplus used within operations or tankered off site to a suitably permitted facility.
BAT 20. In order to reduce emissions to water, BAT is to treat waste water using an appropriate combination of the techniques given below.	All waste waters routed to the engineered sump are subsequently reused in the process with surplus tankered off site to a suitably permitted treatment facility.
1.6 Emissions from accidents and incidents	
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).	Accident risks and associated management procedures are included in the Environmental & Accidents Risk Assessment *(Doc. Ref.: TA1061/07).*
1.7 Material Efficiency	
BAT 22. In order to use materials efficiently, BAT is to substitute materials with waste	Reutilising recovered asphalt wastes and secondary aggregates back into a new road resurfacing scheme, helping recycle existing materials and avoid the generation of new Asphalt from primary aggregate.
1.8 Energy Efficiency	
BAT 23. In order to use energy efficiently, BAT is to use both of the techniques given below	The Installation will be managed to ensure that basic energy efficiency measures are undertaken during normal operations. An energy efficiency plan will be developed and implemented within 1 year of the issue of the latest version of the Environmental Permit.
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 (see BAT 1).	Not applicable
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.	Water sprays (bowser and/or fogs) will be utilised where required to dampen equipment and surfaces to reduce dust emissions.
BAT 26 – BAT 39.	Not applicable

BAT Conclusion	Assessment Review
3.2 BAT conclusions for the physico-chemical treatment of waste	
BAT 40. In order to improve the overall environmental performance, BAT is to monitor the waste input as part of the waste pre-acceptance and acceptance procedures (see BAT 2).	All wastes are fully characterised prior to acceptance at the site for treatment. Waste acceptance procedures will be implemented on site to verify and characterise the waste as it arrives at the waste facility.
BAT 41. In order to reduce emissions of dust, organic compounds and NH3 to air, BAT is to apply BAT 14d and to use one or a combination of the techniques given below.	Water sprays (bowser and/or fogs) will be utilised where required to dampen equipment and surfaces to reduce dust emissions.
BAT 42 – BAT 53.	Not relevant to application.