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WASTE RESOURCE MANAGEMENT



NORTHUMBERLAND COUNTY COUNCIL

APPLICATION FOR AN ENVIRONMENTAL PERMIT

WASTE MINIMISATION

SEPTEMBER 2021

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WASTE MINIMISATION

SEPTEMBER 2021

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1 INTRODUCTION

- 1.1.1 The Powburn Depot is currently permitted to store and treat inert and excavation wastes generated from the construction, maintenance and improvement of existing and new roads and other structures. The treatment comprises of sorting, separation, screening and crushing operations and the treated waste is reused/recycled for road construction/improvements. The facility is operated and managed by Northumberland County Council (NCC).
- 1.1.2 NCC now intends to expand its current recycling program to include asphalt waste containing coal tar (AWCCT) by storing and treating it at Powburn Depot. The new permit will allow the facility to accept up to 20,000 tonnes per annum of AWCCT and store a maximum of 3,000 tonnes of AWCCT. The treatment/processing will include crushing and screening of the material and encapsulation of the asphalt waste using a cold foam treatment process using bitumen as a binder.
- 1.1.3 Because AWCCT is a hazardous waste the permit is being varied to include two listed activities:
- Section 5.3 Part A (1) (a) - Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the following activities—(ii) Physico-chemical treatment
 - Section 5.6 Part A (1) (a) -Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes pending any of the activities listed in Sections 5.1, 5.2, 5.3
- 1.1.4 Listed activities must be carried out in accordance with Chapter 2 of the Industrial Emissions Directive, which includes a requirement to minimise waste as far as possible and utilise waste in accordance with the Waste Hierarchy.
- 1.1.5 This report provides a commentary on waste minimisation for the site.

2 WASTE ACCEPTANCE

- 2.1.1 Waste for disposal from the listed activities is expected to be minimal. The whole purpose of the new activity is to enhance recycling rates and enable all types of incoming material to be treated for reuse in road schemes.

2.1.2 Good waste acceptance procedures are in place, which ensure will that incoming wastes are suitable for treatment and can be effectively recycled. The site will not be open to the public but will be used to manage materials from Northumberland County Council's own road maintenance activities. This being the case, all donor sites will be surveyed before the roadworks take place, to ascertain the quantity of road planings arising and confirm whether any coal tar containing materials are present.

2.1.3 Any materials that are identified as not suitable for recycling will not be brought to the site but will be directed to other permitted sites for recycling or disposal. Only suitable materials from roadworks will be accepted at the site.

3 WASTE TREATMENT

3.1.1 In order to maximise the quantity of waste that can be recycled, screening and crushing equipment is provided at the site. This means that any material that is unsuitable for road building, due to particle size, can be pre-treated to alter its profile and form aggregate of the correct specification.

4 RAW MATERIAL STORAGE

4.1.1 AWCCT will be treated on a campaign basis and raw materials will be brought to site as and when needed. All raw materials will be stored in an appropriate manner in order to maintain quality and minimise wastage.

4.1.2 The system is computer controlled and raw materials will be fed into the process at a controlled rate adjusted to the needs of the mix to avoid wastage.

5 OUTGOING WASTE

5.1 It is expected that the vast majority of waste material brought onto site will be sorted, screened, crushed or treated as necessary and will then be taken off site for direct use in road maintenance schemes around the County.

5.2 The waste acceptance procedures in place are expected to keep out unsuitable materials. However, should small quantities of unsuitable material (such as plastic or wood) be incorporated in the stone and soil these will be picked out following

screening of the material. Any such waste will be placed in a suitable container pending removal to a permitted facility.

6 WASTE MINIMISATION REVIEW

6.1 The whole purpose of the site is to maximise the reuse of materials by recycling road planings and associated excavation waste to render them suitable for use in road maintenance or road building projects.

6.2 However, at least once every four years a waste minimisation review will be carried out to investigate whether further improvements can be made. This will examine:

- The quantity of material successfully recycled and whether there are any opportunities to increase this,
- The quantity of non-conforming waste present in waste loads (eg small pieces of plastic or wood incorporated in excavation waste) and whether further measures can be taken to prevent this,
- Whether disposal options for non-conforming waste still represent the best environmental option, for example where they are landfilled, could they be diverted for energy recovery?

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