



Bastion Biomass (Northern) Limited

Non-Technical Summary: Amble Waste Treatment Facility

JACKSONS
ENVIRONMENTAL

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Oct 2018	1.0	New document	JH&S	R Telfer
Oct 2018	1.1	Updated following EA pre-application discussions – product use.	JH&S	R Telfer
Dec 2018	1.2	Updated to confirm site is 1km from designated habitats	JH&S	R Telfer

CONTENTS

1	Introduction	4
2	Waste Treatment Process.....	4
3	Environmental Protection & Control Measures	5
4	Environmental Management System	5
5	Special Sites.....	5
6	Product Use.....	6

1 Introduction

Bastion Biomass (Northern) Limited has been established to operate a waste treatment facility processing waste paper sludge into products for the equine sector. Pulp and paper mills typically generate significant quantities of non-hazardous solid waste which require management as a waste material or as a by-product. Most of these solids are removed after primary mechanical treatment, resulting in a de-inked sludge that contains large quantities of fibres, papermaking fillers, or both. It is this de-inked paper sludge that Bastion proposes to treat and convert into product.

The company is applying for an environmental permit for its site at Holywell Industrial Park, Coquet Enterprise Park, Amble, Northumberland, NE65 0PE. The waste treatment process involves the drying of waste paper sludge on an aerated (forced air) bed which reduces the moisture content from 50% to 25% within 24 hours. The application is for a bespoke environmental permit for the treatment of up to 30 tonnes of paper sludge per day and an annual limit of 10,950 tonnes per annum.

The site is located at Coquet Enterprise Park, Amble, Northumberland, NE65 0PE grid reference NU 26617 03934 which is accessed off the A1068 south of Amble. Site access and egress is via the circular enterprise park access road which joins the A1068 at Alnwick Way, Amble. The site is bordered to the north and west by the enterprise park access road. To the south of the site is derelict land of a former industrial unit. The enterprise park has a mix of light industrial and commercial premises.

This non-technical summary provides an overview of the application.

2 Waste Treatment Process

The site will accept non-hazardous de-inked paper sludge waste from paper mills for treatment. The waste will be delivered by lorries to the site and be deposited into the waste reception building. The paper sludge will then be spread using a telehandler onto the drying bed. The drying bed is constructed from concrete and has aeration slots at intervals of 30cm along its length. Once the paper sludge has been spread on the drying bed at a depth of 0.5m, warm air is forced through the slots thereby drying the sludge and reducing its moisture content. After a period of 24 hours, the moisture content in the sludge reduces from 50% to 25%. The treated sludge is then loaded onto lorries for onward transportation for sale as animal bedding and similar uses.

The treatment of paper sludge waste will be undertaken in a dedicated waste reception building equipped with an impermeable surface with sealed drainage. No paper sludge waste or resulting product will be stored externally.

3 Environmental Protection & Control Measures

A complete range of measures will eliminate or reduce the risk of nuisance from noise, dust, odour, litter and vermin. The waste will be stored and treated inside a building reducing the risk of dust and odour. The buildings and yard at the site benefit from concrete hardstanding with sealed drainage. The limited quantity of waste to be held on site and the type of waste being treated are not likely to give rise to odours from the activity. Masking agents will be available on site if any odours are identified.

A Fire Prevention Plan has been prepared in accordance with the Environment Agency's guidance to reduce the risk of fires occurring. Regular monitoring, inspections and maintenance shall be undertaken to ensure effective control.

4 Environmental Management System

The company is committed to operating at a high standard to ensure its activities do not impact upon the environment and local residents and neighbours. The company has developed an Environmental Management System in light of the proposed new processing activities to ensure that it has complete control over site operations, maintenance, staff competence and training, prevention of accidents, organisation, document management and records.

5 Special Sites

The site is located 1km from the Northumberland Coast Ramsar, Northumberland Shore SSSI and Amble Dunes LNR.

The Northumbria Coast Ramsar site comprises several discrete sections of rocky foreshore between Spittal, in the North of Northumberland, and an area just south of Blackhall Rocks in County Durham. These stretches of coast regularly support internationally important numbers of purple sandpiper and turnstone. The Ramsar site also includes an area of sandy beach at Low Newton, which supports a nationally important breeding colony of little tern, and parts of three artificial pier structures which form important roost sites for purple sandpiper.

The Northumberland Coast SSSI has a number of units with the Hauxley Haven unit relevant to this application. The site supports internationally important numbers of purple sandpiper and turnstone as well as ringed plover, golden plover, sanderling, redshank and little turn.

Amble Dunes LNR is designated for its nesting birds and reflects the protections detailed by the Ramsar and SSSI details above.

The risk to these designated sites is human disturbance, notably tourist activities. The proposed waste treatment site is 1km from these sites and it is not proposed that there will be any point source emissions from the site. Therefore, the proposed waste treatment site will have no impact on these special sites.

6 Product Use

The treatment process will transform a recyclable paper production waste into a highly valuable animal bedding. The paper manufacturing industry produce significant quantities of de-inked paper sludge waste each year which is in plentiful supply. Alternative animal bedding material such as straw and sawdust are becoming increasingly expensive and availability is limited. Using dried paper sludge as a highly absorbent bedding reduces costs, improves hygiene and improves animal wellbeing.

The use of treated paper sludge for animal bedding, particularly for dairy cows, cattle and livestock, has the following benefits;

- High moisture absorbency
- Superior animal hygiene
- Readily available and lower costs than other bedding products
- Provides a comfortable and practical bedding material
- The slight alkalinity of the material helps to control pathogens while reducing odours

The use of dried paper sludge as animal bedding is well established in the UK with one manufacturer providing 29,000 tonnes per annum to over 300 farms predominantly in the west of England - this supply provides bedding for 50,000 dairy cows per year.

The high organic content makes the product suitable for farm slurry systems after use as a bedding and, subsequent spreading to land, provides a closed loop waste recycling system for the waste stream.

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