



Habitats Assessment

Port of Boston APCr Handling & Storage

The Dock, Boston, Lincolnshire, PE21 6BN

Beauparc

Introduction

New Earth Solutions (West) Ltd is applying to the Environment Agency (EA) for a waste permit to allow the delivery, storage and export of material known as Air Pollution Control residues (APCr) under EWC codes 19 01 07, 19 01 13, 19 01 15.

The New Earth Solutions (West) Ltd operation will occupy units 12 & 14 of a Large site operated by the Victoria Group at the Port of Boston.

It is proposed to accept up to 100,000 tonnes of air pollution control residues (APCr). The wastes will be accepted and handled in an existing unit inside a building (Shed 14), which is located near to the dockside.

The premises are situated in Boston, Lincolnshire

Location Map Drawing: *Attached appendix 2a*

The storage and bagging area to be used for the bespoke permit is specifically located as indicated in the attached appendix 2c.

The operation will take place in units 12 and 14. These buildings are steel frame construction with steel over – cladding. The floors in all buildings are concrete paved and there are no internal drains. There are 300mm ramps at the doors. The open yards surrounding the units and access roads are all paved.

The Port was built in 1884 and has been a commercial Port since that time, comprising of an enclosed Dock Basin, 137m West End quay, 252 North quay, 257 South quay, 82 East quay. Approximately 2.8 hectares, with the remaining port estate being some 26 hectares.

There are internal paved quays and traffic routes, with warehousing to facilitate the transit of cargo in and out of the Port.

The prevailing wind is from the South West.

A location map of the warehouses and their numbers is attached, in appendix 2e.

Site Engineering for Pollution Prevention & Control

Surface Water Drainage Management

By nature of the business as a Port we are alongside water. The quay edge is mostly protected by the Environment Agency flood defence wall which is raised by some 30cm and therefore acts as a bund to the quay edge and would prevent direct water run-off into the dock basin. The dock basin itself is closed by a lock, which in extreme circumstances could contain water in the dock basin.

The gullies in the immediate vicinity will be covered by metal plates so as to prevent the majority of water from entering same. It must however be appreciated that drainage must be allowed for rain water run off through the drains and to a certain extent via natural percolation. (See Site Drainage Plan diagram – appendix 2d)

Fuel/Oil Storage

Any fuel and oil tanks associated with the licenced operations are stored within bunded tanks. Any spillages will be contained and not allowed to contaminate surface drainage. Oil storage containers will be stored on fabricated double-skinned steel bunds such that any leakage will be contained up to 100% of the bunds storage capacity.

Being a Port, it is a statutory obligation to be covered by the Tier 2 Oil spill response regime, for which there is the necessary equipment and trained staff to participate in any oil spill. These staff would also be deployed for any other liquid spills.

Plant Maintenance and breakdown within Permitted Area

The APCr bagging plant is subject to a preventative maintenance programme and critical spares are kept at the site. The bagging unit will be shut down annually as part of a planned servicing schedule. The shut downs will be staggered so that there will always be a processing capacity available for the incoming APCr.

Other mobile plant and equipment is maintained according to statutory requirements. A container crane is located along the main dock side and contains hydraulic oil. This crane is subject to a port maintenance programme which includes the integrity inspection of hydraulic seals. The container crane is also subject to six monthly regulatory inspections according to the Lifting Operations Loading Equipment Regulations.

Risk Identification

Environmental liabilities arise from contamination or damage to environmental media (air, surface water, soils and groundwater), which can act as pathways to sensitive receptors.

The plausible risks identified at the site are presented in the table below. These take into account the facility history, the controls and mitigating measures that are already in place, with due regard for those controls to contain incidents and for the potential failure of the controls.

Risk ID	Process	Potential Risk
1	Waste Deliveries	ACPr leakage from trucks
2		Oil or fuel leakage from trucks
3	APCr Storage and Handling	Accidental release of APCr during delivery
		Accidental release of APCr during bagging

Risk analysis

An assessment of the risks presented by the facility operations was completed taking consideration of site specific characteristics and the Classification Tables for Likelihood and Consequence.

Risk	Category	Description
1	Very Low	Very low chance of hazard occurring
2	Low	Low chance of hazard occurring
3	Medium	Medium chance of hazard occurring
4	High	High chance of hazard occurring
5	Very High	Very high chance of hazard occurring

The Risk Analysis Form is presented below. The assignment of the severity rating scores takes into consideration the mitigation measures that are already in place. New Earth Solutions (West)Ltd does not consider it plausible that all of the containment and control measures already in place would fail at the time of an incident, as this would require:

a) New Earth Solutions (West) Ltd and the Port of Boston to wilfully disregard the permit conditions, accident prevention and emergency response provisions; inspection and repair of paved areas; maintenance of plant and equipment; staff levels and training, and

b) a failure by the Agency to properly regulate the facility to such an extent that allowed all the control and containment measures to fail.

Risk Analysis

Risk ID	Process	Potential Risks	Environmental Effect	Consequence Rating	Basis of Consequence	Likelihood Rating	Basis of likelihood Rating
1	Delivery of Waste Materials to Facility	Material leakage from trucks	Potential to impact water or soil quality	2	Waste is delivered in closed vehicles.	2	Trucks deliver directly to facility building and are on concrete road surface.
2	Delivery of Waste Materials to Facility	Oil or Fuel leakage from trucks	Potential to impact water or soil quality	3	Any loss of oil/fuel would be identified quickly and cleaned up.	2	Trucks receive scheduled maintenance. Major leak is unlikely
3	Accidental Release of APCR	Resulting in material spilling on ground	Emissions to air, surface water and groundwater	1	Relatively small volumes, contained inside building, floor paved, no pathway to surface water drains	2	Requires failure of transfer controls.

Environmental Monitoring and Control

APCR release

In the unlikely event of a failure in the powder transfer resulting in the release of the contents on the building floor, the residue will be collected using a dedicated industrial cleaning unit DISAB BagVac™ which will vacuum up the material and fill it into a Flexible Intermediate Bulk Container (FIBC). The key operational features are:

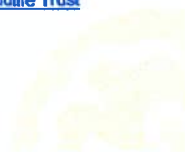
- A high performance rate of vacuum efficiency using side channel exhauster, enabling long suction distances and fast recovery rates.

- An integral hopper of 0.5 m³ capacity fitted with a 250mm chute for discharge into large capacity FIBC.
- Easily manoeuvrable using a standard forklift or crane.

Summary

Considering the location of units 12 & 14 and the various precautions and risk mitigation measures employed on the site, as detailed in the risk analysis above, it is extremely unlikely that this operation would result in environmental pollution that would impact any of the sites detailed below:

Nature and heritage conservation sites	Screening distance (km)	Further information
Special Areas of Conservation (eSAC or SAC) The Wash & North Norfolk Coast	10	Joint Nature Conservation Committee
Special Protection Area (pSPA or SPA) The Wash	10	Joint Nature Conservation Committee
Ramsar The Wash	10	Joint Nature Conservation Committee
Local Nature Reserve (LNR) Havenside	2	Natural England
Local Wildlife Sites (LWS) Boston Cemetery Maud Foster Drain, Cowbridge to Boston Havenside Slippery Gowt Sea Bank Westgate Wood and Meadow Tytton Lane West Pits, East Tytton Lane West Pits, West	2	Appropriate Local Record Centre (LRC) Appropriate Wildlife Trust
Porcher's Pit Witham Way, Anton's Gowt to Boston South Forty Foot Drain Witham Way Country Park Botolphs Park Pond		



Protected Species	Screening distance (m)	Further Information
Smelt European eel Spined loach River lamprey Water Vole	up to 500m	Natural England Appropriate Local Record Centre (LRC) National Biological Network (NBN) Environment Agency. Dial 03708 506 506 for your local Fisheries and Biodiversity team

Protected Habitats	Screening distance (m)	Further Information
Coastal Saltmarsh Mudflats	up to 500m	Natural England