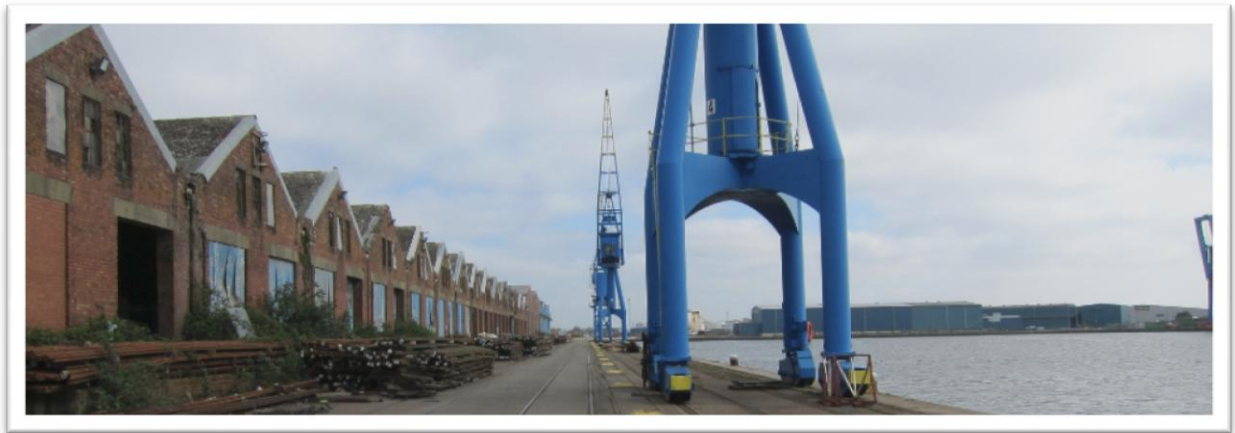




Non-technical Summary

Cargo Services (UK) Limited, Port of Cardiff, Cardiff, CF10 4LA, Wales

On behalf of:
Cargo Services Limited

Project Reference:
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Contents

	Page
1 Introduction	1
1.1 Background	1
2 Non-technical Summary	2
2.1 Process Description	2
2.2 Emissions Control	2
2.3 Noise and Vibration	2
2.4 Odour	2
2.5 Management Techniques	3
2.6 Material Inputs	3
2.7 Waste Handling	3
2.8 Energy	3
2.9 Accidents and their Consequences	3
2.10 De-commissioning (Future Installation Closure)	3
2.11 Environmental Impact Assessment	3
2.12 Site Condition Report	7

Abbreviations

ABP	Associated British Ports
BAT	Best Available Technique
EA	Environment Agency
EAF	Electric Arc Furnace
EPR	Environmental Permit
EU	European Union
EWC	European Waste Catalogue
HGV	Heavy Goods Vehicle
HSE	Health and Safety Executive
IED	Industrial Emissions Directive
ISPS	International Ship and Port Security
NRW	Natural Resources Wales
SAC	Special Areas of Conservation
SCR	Site Condition Report
SOP	Standard Operating Procedure
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
UN	United Nations
VOC	Volatile Organic Compounds

1 Introduction

1.1 Background

This document has been prepared by Cargo Services (UK) Limited (Cargo Services) and its environmental consultant Earth and Marine Environmental Consultants Limited (EAME) in support of a Part A1 Environmental Permit application as required under Regulation 20 of the *Environmental Permitting (England and Wales) Regulations 2010* (as amended).

This application is to allow Cargo Services to store up to 3,500 tonnes of Electric Arc Furnace (EAF) waste (EWC Ref. 100207*) within a dock side warehouse (*Figure 1.1*) (leased from Associated British Ports (ABP)) prior to loading and transportation to Italy for recovery.

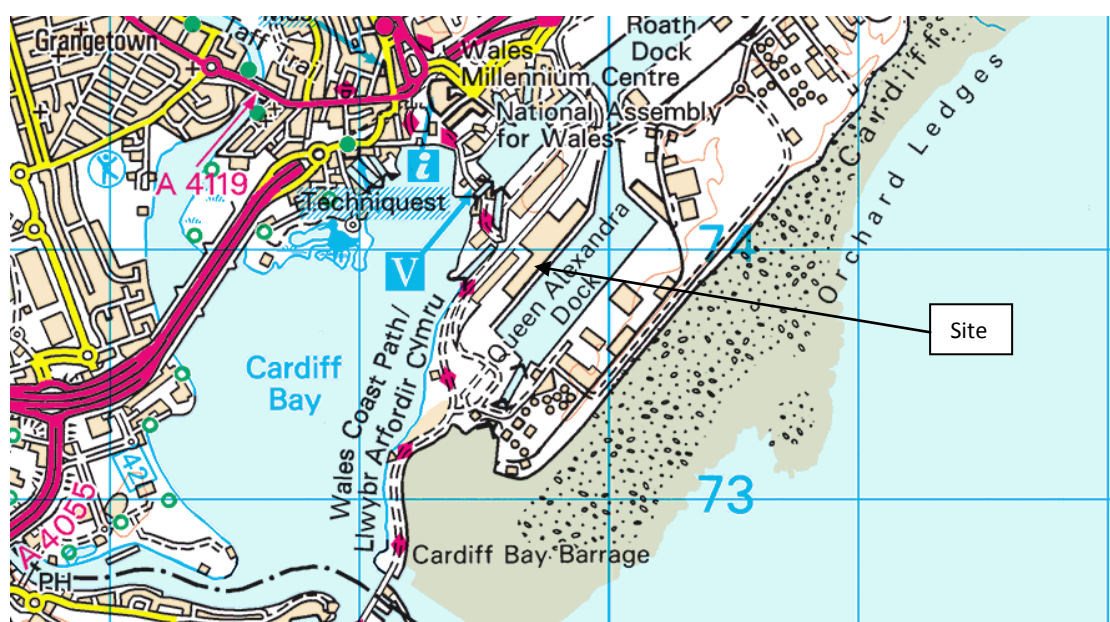


Figure 1.1: Site Location

Ordnance Survey 1: 50,000 scale map with the permission of The Controller of Her Majesty's Stationery Office, Crown Copyright. Earth and Marine Environmental Consultants Ltd, Licence No. 100050755BAE

The document represents the Non-technical Summary (NTS) submitted as part of the application package to Natural Resources Wales (NRW) (EAME Ref. 015-1347). The application package includes completed application forms that are cross-referenced to the technical submission, which is intended to address all of the areas required by the application and a Site Condition Report (SCR) with supporting appendices. These items should be regarded as constituting the application. Where additional or more in-depth information is required please refer to the main report held at the NRW offices.

2 Non-technical Summary

2.1 Process Description

The storage of EAF waste has previously been undertaken at the current location through the use of an S2 Waste Exemption (EPR/ZE5584PL/A001) that was last issued on 05/08/13 and was to remain valid until 04/08/16. As a result of the Industrial Emissions Directive (IED) the *Environmental Permitting (England and Wales) (Amendment) Regulations 2013* amended the 2010 Regulations by inserting a new Part A(1) activity in relation to the temporary storage of hazardous waste (Section 5.6).

The key points are:

- the material is stored in lined UN approved big bags (1 tonne);
- the materials are moved, by road, to the docks for storage prior to removal, by vessel, to Italy for recover; and
- all bags are sealed when they arrive at the storage location. There is no handling or bulking activities undertaken (*i.e.* it is a pure storage activity);

2.2 Emissions Control

There are no point source emissions to surface water, groundwater, sewer or atmosphere associated with the storage of the EAF material.

There are no fugitive emissions to surface water, sewer or groundwater from any part of the installation. As the storage and handling takes place wholly within a dock-side building any EAF dust located on the outside of the bags is wholly contained within the storage building *i.e.* there is no evidence of fugitive emissions to air from the activity. Cargo Services employs (on an *ad-hoc* basis) a road sweeper to ensure the internal storage surfaces are kept clean.

2.3 Noise and Vibration

Based upon the nature of the proposed operations and their location (*i.e.* located internally within an existing building) no noise or vibration issues have previously occurred or are anticipated.

2.4 Odour

EAF is an odourless material. Cargo Services believe that the temporary storage of the material (within fully enclosed bags wholly within a building) gives no reasonable cause for offence or annoyance with regard to odour.

2.5 Management Techniques

Cargo Services operates a Standard Operating Procedure (SOP) for the storage, handling and movement of the EAF waste.

2.6 Material Inputs

No raw materials are used within the installation.

2.7 Waste Handling

No waste is generated as a result of the activity *i.e.* it relates just to the temporary storage of the EAF material.

2.8 Energy

No energy is used during the storage of the material.

2.9 Accidents and their Consequences

Safe operation of the installation and the prevention accidents is of paramount concern to Cargo Services. All materials are stored and handled in accordance with safe working practices as required by statute and outlined within the Health and Safety Executive (HSE), Approved Code of Practice, Safety in Docks (L148, 2014).

If damage occurs to the big bags (reportedly a rare occurrence) over-bags are available to contain any potential loss of material.

2.10 De-commissioning (Future Installation Closure)

Upon cessation of the EAF contract Cargo Services shall remove all stored EAF materials either via vessel for recovery or via road back to the originating facility and A-Shed shall be subject to clean-up via the use of a road sweeper.

2.11 Environmental Impact Assessment

This section provides an assessment of the environmental significance of the emissions from the installation by looking at the site in the context of its environmental setting and UK guidance for such assessments.

An assessment has been undertaken (*Table 2.1*) through the use of the Generic Risk Assessment for Standard Rules Set No. SR2009 No2 v4.0 (Low Impact Part A Installation).

Table 2.1: Environmental Risk Assessment

Source	Pathway	Receptor	Risk Management	Residual Risk
Releases of particulate matter (dusts) and volatile organic compounds (VOCs).	Air transport then inhalation.	Local human population	There are no VOCs associated with the material. The bags are fully sealed at the point of generation and are not opened again until receipt in Italy (<i>i.e.</i> there is no further bulking within the installation). All materials are moved to and stored within a building at the dock side. The bags are lined and (in exceptional circumstances) where bags become damaged large over-bags are available for use.	Very Low
Releases of particulate matter (dusts).	Air transport then deposition.	Local human population	Control measures as detailed above.	Very Low
Odour	Air transport then inhalation.	Local human population	The EAF material is an odourless material.	Very Low
Noise and vibration	Noise through the air and vibration through the ground	Local human population	There is no processing of the material within the installation just unloading, storage and movement of big bags. All vehicle unloading is undertaken within an enclosed building located within the confines of Cardiff Docks. The closest residential receptors are 590 metres north.	Very Low

Table 2.1: Environmental Risk Assessment

Source	Pathway	Receptor	Risk Management	Residual Risk
Flooding of site	Flood waters	Local human population and local environment	The site is not within a flood zone (Rivers or Sea). There have been no losses of material associated with the installation due to the ingress of water.	Very Low
All on-site hazards: materials; machinery and vehicles.	Direct physical contact	Local human population and / or livestock after gaining unauthorised access to the installation	The installation is located wholly within Cardiff Docks. Access to the Docks is fully controlled via a manned security point. The ABP run Cardiff Docks has to comply with the International Ship and Port Security (ISPS) Code including operation of a port security plan.	Very Low
Arson and/or vandalism causing the release of polluting materials to air (smoke or fumes), water or land.	Air transport of smoke. Spillages and contaminated firewater by direct run-off from site and via surface water drains and ditches.	Local human population and local environment	The EAF material is insoluble. The installation is located wholly within Cardiff Docks. Access to the Docks is fully controlled via a manned security point. The ABP run Cardiff Docks has to comply with the International Ship and Port Security (ISPS) Code including operation of a port security plan.	Very Low

Table 2.1: Environmental Risk Assessment

Source	Pathway	Receptor	Risk Management	Residual Risk
Accidental fire causing the release of polluting materials to air (smoke or fumes), water or land.	Air transport of smoke. Spillages and contaminated firewater by direct run-off from site and via surface water drains and ditches.	Local human population and local environment	The EAF material is insoluble. The EAF material is solely stored within A-Shed. There are no flammable materials stored in the building and the sources of ignition are minimal.	Very Low
Spillage of liquids, contaminated rainwater run-off from materials.	Direct run-off from site across ground surface, via surface water drains, ditches etc	All surface waters close to and downstream of site.	The EAF material is in a solid form. There are no liquids associated with the installation.	Very Low
Spillage of liquids, contaminated rainwater run-off from materials.	Direct run-off from site across ground surface, via surface water drains, ditches etc.	Abstraction from watercourse downstream of facility (for agricultural or potable use).	The EAF material is in a solid form. There are no liquids associated with the installation. There is no water abstraction from the Cardiff Docks.	Very Low
Spillage of liquids, contaminated rainwater run-off from materials.	Transport through soil/groundwater then extraction at borehole	Groundwater	The EAF material is in a solid form. There are no liquids associated with the installation. No obvious pathway for the material to impact groundwater.	Very Low
Contaminated waters used for recreational purposes	Direct contact or ingestion	Local human population	The EAF material is in a solid form. There are no liquids associated with the installation. No obvious pathway for the material to impact water used for recreational purposes.	Very Low

Table 2.1: Environmental Risk Assessment				
Source	Pathway	Receptor	Risk Management	Residual Risk
All sources identified	All pathways identified	Protected nature conservation sites	The proposed activity is undertaken approximately 510 metres NNE from the edge of the statutory defined Severn Estuary (<i>i.e.</i> SPA, SAC, SSSI, Ramsar). However, as the installation wholly contained within a building located at the dock side there is no obvious pollution linkage by which the operation could impact any of the protected habitats. The operations have very low capacity to cause harm to and deterioration of nature conservation sites as their capacity to cause pollution is insignificant.	Very Low

2.12 Site Condition Report

A Site Condition Report (SCR) has been prepared in support of the application. The objective of the report is to create "a point of reference against which later determinations can be made as to whether or not deterioration of the site has taken place through the operations covered by the Permit".

Given the insoluble nature of the EAF material and the fact that it is wholly contained within sealed bags no ground condition information is to be collected.

2.13 Conclusions

Based on the information provided it is clear that the operation is undertaken in a manner that controls and prevents the release of a hazardous waste into the local environment during the associated transport, storage and handling activities. The risks to the environmental have been assessed as Very Low.

Although nature conservation sites (*i.e.* Severn Estuary SPA, SAC, SSSI, Ramsar) are adjacent to the site (510 metres NNE), there are no impacts associated with the historic or current uses of the facility for the storage of bagged EAF waste.

In conclusion, Cargo Services operates an installation that meets or possibly exceeds current Best Available Technique (BAT) requirements. The activity has indeed a positive environmental outcome through the active recovery of a hazardous waste stream *i.e.* application of the waste hierarchy as outlined in Section 12 of the *Waste (England and Wales) Regulations 2011*.