

STENOR ENVIRONMENTAL SERVICES LTD

**WASTE RECLAMATION & RECYCLING CENTRE
GRAIGOLA WHARF
KING'S DOCK
SWANSEA**

WORKING PLAN

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1.0 INTRODUCTION

- 1.1 The proposed development involves the storage and reclamation of controlled waste comprising inert waste (soils, hardcore and concrete) at a 5 acre site at Graigola Wharf, Swansea. Currently there are exemptions in place on the site in accordance with Paragraph 9A of the Waste Management Licensing Regulations. This exemption allows for the input of construction and demolition material in order to reclaim an area of former sand dredgings to use as a cargo storage facility.
- 1.2 The site is surrounded by King's Dock to the north and west, and Queen's Dock to the south with the A483 trunk road further north, approximately 600m away. The closest residential properties are located around the Port Tennant area, approximately 900m to the north of the site.
- 1.3 This Working Plan is produced in support of the Waste Management Licence Application for the materials reclamation and waste transfer facility and is accompanied by an Environmental Risk Assessment as presented in Appendix 1. This assessment takes account of the waste types to be accepted, the proposed operations, the site infrastructure and the environmental sensitivity and has concluded that a formal Regulation 15 Hydrogeological Risk Assessment is not required for this facility.
- 1.4 The WP/1.1, WP/1.2 etc references found in the contents section and following headings, where relevant, relate to the working plan specifications as presented in the Library of Licence Conditions and Working Plan Specifications; Working Plan Guidance and Specifications, 2002.
- 1.5 The site licensee will be Stenor Environmental Services Ltd of King's Dock, Burrow Road, Swansea, West Glamorgan, SA1 8QY and they will be responsible for the manning and operation of the site.
- 1.6 The operations at the site go a long way to achieving the basic requirements of sustainable waste management through the reclamation of demolition and builder's waste for processing as a recycled aggregate for re-use in South Wales and elsewhere, thus, reducing the quantities going to landfill. It is anticipated that as a whole the facility will achieve a net environmental benefit for the area.

2.0 THE SITE

2.1 Site Location (WP/1.1)

- 2.1.1 The site is located on a wharf, primarily constructed for the shipment of coal, approximately 1.5 miles south-west of central Swansea. The Ordnance Survey National Grid Reference for the approximate centre of the site is SS 6764 9242. The location of the site is shown in Figure 1.
- 2.1.2 Access to the site is off Fabian Way (A483) to the south via a dock access road approximately 1800m long. This road also provides vehicular access to other properties in this area of the port. The site is flanked on the north and south by Queen's Dock and King's Dock, to the east by the remainder of Graigola Wharf currently used for cargo storage, and to the west by a coal processing operation.
- 2.1.3 The location is ideally situated for transport of materials in and out of Swansea. Junction 42 of the M4 motorway is approximately 3 miles away for road transport and, if ever required, rail sidings are present in the port.

2.2 Site Description (WP/1.1)

- 2.2.1 The application site extends to approximately 5 acres rented by Stenor Environmental Services Ltd from Associated British Ports. The land boundary of the application site is shown in Drawing No. 5040219/200/001.
- 2.2.2 The site is contained within the secure area of Swansea Docks. Access is through the main dock security gate where the vehicles will progress along a concrete/bitumen dock road for some 1.8km.
- 2.2.3 The site is broadly rectangular in shape, with the main access point on the western boundary. The site currently consists of an area of elevated land bounded to the east by restored land (currently used by Transco for pipe storage). To the west is a coal screening and packing plant and to the north, a cargo area used for timber storage. The reclamation station comprises a waste delivery area, waste storage area, a crusher and a screener. The site has no impermeable hardstanding and is covered in a mixture of compacted stone and hardcore with all surface water drainage soaking/percolating through the unmade-up areas of the site.
- 2.2.4 A portacabin will be placed on site to act as the site control office (including welfare facilities) and there will be a variety of reclamation plant.
- 2.2.5 The industrial and commercial Port site extends to approximately 500m to the north, south and west, and approximately 1000m to the east. The closest residential properties are approximately 400m from the northern site boundary.

2.3 Site History

- 2.3.1 The site has had a long history of industrial use, with Stenor operating at the site under an exemption since 2002. Historic records show the docks were constructed in the early 20th century with the surrounding railway lines also constructed around this time. The site was previously used for loading coal onto ships and also contained a coal briquetting plant.
- 2.3.2 The waste reclamation and recycling centre does not occupy the whole of the Graigola Wharf site. A number of neighbouring properties undertake other commercial and industrial operations.

2.4 Permitted Wastes (WP/1.2)

- 2.4.1 The waste types permitted for storage and reclamation at the Graigola Wharf site are set out in Appendix 2 of this Working Plan, and include inert waste from construction and demolition processes.
- 2.4.2 The waste classification used in Appendix 2 is taken from the European Waste Catalogue (Council Decision 2001/118/EC). A copy of this catalogue is also included in Appendix 2 to identify specific inclusions and exclusions to the specified waste types.

2.5 Waste Volumes (WP/1.2)

2.5.1 The waste transfer and reclamation site has a planned capacity to handle up to 74,999 tonnes per annum. This equates to an average of approximately 260 tonnes per day and allows for 26 vehicle movements into the site at an average of 20 tonnes capacity. This number of vehicle movements is considered to have little impact on the current local road network capacity due to the nature of the Port and associated industry and traffic movements.

2.5.2 The proposed limits on waste are as follows:

Permitted Waste Category	Maximum Permitted Quantities
Inert waste Waste Types Specified in Appendix 2	74,999 tonnes per annum

2.5.3 The minimum operational storage capacity of the site using the layout as indicated in Drawing No. 5040219/200/002 is 50,000 tonnes.

2.5.4 Maximum storage for quarantined or other unacceptable wastes identified whilst sorting will be one 36m³ roll-on-off container and one 11m³ enclosed skip container.

2.5.5 The maximum quantity of waste leaving the site will not exceed 1,000 tonnes per working day.

2.6 Specific Waste Management Operations (WP/1.1)

2.6.1 Waste management operations taking place at the site shall consist of waste storage and reclamation of the materials specified in Section 2.4. It is anticipated that little, or no, residual waste will be generated that will require landfilling. These waste operations broadly follow the definition of a waste transfer and recycling station and come under the following classifications as listed in Part III of Schedule 4 of the Waste Management Licensing Regulations, 1994:

D9 Physico-chemical treatment of wastes not listed elsewhere in Part III including screening, separation and sorting of wastes which results in final mixtures which are disposed of by means of any other disposal operations (D1-D12) for example landfill. This would include the sorting of wastes at the site leaving a component that is not recyclable and therefore disposed of to a licensed landfill.

D15 Storage of wastes pending any other operations numbered D1 to D14, where storage is an inherent part of the specified waste management operations. This is known as 'operational storage' and involves the storage of permitted waste types in specific areas as described in the Working Plan prior to activities under D9 or final disposal to landfill.

R4 Recycling or reclamation of other inorganic materials. This relates to the major part of the operations carried out at the site, whereby inert materials such as hardcore and soil etc are reclaimed for re-use in the construction industry.

R13 Storage of waste consisting materials intended for submission to R4 above. Some storage of waste will be required before reclamation can take place.

2.6.2 Specific procedures addressing the reclamation and recycling operations are addressed in Section 4 (Site Operations) of this Working Plan.

3.0 SITE INFRASTRUCTURE

3.1 Provision of Site Identification Board (WP/3.1)

3.1.1 A site identification board shall be positioned in a prominent position at the access to the site, and display the following information:

- i. the site name and address,
- ii. the site operators name, address and telephone number,
- iii. the Waste Management Licence number,
- iv. the Environment Agency national numbers, 06459 333111 and 0800 807060
- v. the operating hours of the site,
- vi. contact telephone numbers in the event of an out-of-hours emergency
- vii. health and safety PPE required i.e. hardhat site/hi-vis clothing.

3.1.2 The site identification board will be kept updated and maintained in a legible condition.

3.2 Site Access

- 3.2.1 The Port site will be accessed through the main gate located on the spur road off Fabian Way (A483) as shown on Drawing No. 5040219/200/003. Vehicles will then proceed around the internal road to the Stenor Environmental site with access through the site entrance on the west boundary as shown on Drawing No. 5040219/200/002. This entrance has a security barrier.
- 3.2.2 This access road will provide adequate queuing distance for haulage vehicles during peak hours, without impeding the flow of traffic within the dock site or on Fabian Way and also allow for any mud or other material to be removed from vehicle wheels before leaving the site and entering the public road system.

3.3 Offices

- 3.3.1 Site accommodation will comprise a site control office (portacabin) with welfare facilities. The site control office will be situated so as to provide good visibility to both incoming and outgoing vehicles. The location of these facilities is shown on Drawing No. 5040219/200/002.
- 3.3.2 The site control office will accommodate the site supervisor and be suitably equipped to allow efficient control and recording of waste deliveries and removals.
- 3.3.3 A mess room of a suitable size to accommodate all site operatives will be provided with sufficient welfare and first aid facilities to meet HSE requirements.

3.4 Weighbridge (WP/4.230)

- 3.4.1 A weighbridge will not be installed or used on this site. The recording of waste input and output will be undertaken on a volumetric basis. The delivery and collection of material will be by pre-arranged method only with maximum vehicle volumes being specified at the outset. Vehicles entering and leaving the site will be visually inspected to verify the estimated volume of waste in the vehicle. The recording of waste deliveries is presented in more detail in Section 4.7.

3.5 Site Security (WP/3.2)

- 3.5.1 The site will be manned at all times during working hours, however, due to the nature of the site and its location (within the area of the secure Port Site) no security will be provided outside of normal working hours.
- 3.5.2 Keys to all plant stored on site out of normal working hours will be removed from the site at the end of each working day.
- 3.5.3 Emergency contact numbers will be posted on the notice board in the Site Control/ Administration office. The numbers cover all eventualities and include:
- Environment Agency
 - Local Hospital
 - Local Police
 - Local Fire
 - Emergency Gas
 - Emergency Electricity
 - Emergency Water
 - Stenor Contact – Steve Norman (Director)
 - Associated British Ports Contact
- 3.5.4 Mobile lighting will be used, if necessary, during winter months and times of darkness. The lighting will be positioned such that it does not cause nuisance to other operations close to the site.

3.6 Storage Areas (WP/4.301)

- 3.6.1 The types of waste for temporary storage at the site are covered under Section 2.5 of this Working Plan, and the site containment and drainage systems under Section 6.1.
- 3.6.2 The method of operation at the site and the materials to be handled means that a number of storage areas are utilised. Incoming waste is dropped off at a designated waste reception area where sorting begins. The incoming waste vehicle will be directed to one of three stockpiles (soil, mixed hardcore, concrete) depending on the vehicle's load. The remaining site area is divided up to hold primary and recycled aggregates as well as a crushing and screening area. The proposed position of these storage areas is shown on Drawing No. 5040219/200/002. The amount of product or waste stored and the size of the storage areas is likely to vary from week to week depending on the supply and demand for materials as well as the weather conditions.
- 3.6.3 Although the site is not licensed to accept any waste with hazardous properties, if such waste, or waste suspected to be hazardous is discovered during the sorting operations, this waste will be segregated and placed in a small contained skip. The waste will remain in this designated skip whilst tests are carried out to establish the nature of the material and the best method for its disposal.
- 3.6.4 Similarly, if any deleterious materials are discovered during the sorting of demolition waste, these fragments will be handpicked with the operators wearing the appropriate PPE and be double bagged as required or placed in the enclosed container.

3.7 Potentially Polluting Leaks and Spills (WP/4.151)

- 3.7.1 No fuel will be permanently stored within the WML boundary. Fuel is situated in a service compound to the north of the site in an area adjacent to the junction with Fabian Way. The location of this compound is shown on Drawing No. 5040219/200/003. All storage will follow the guidance provided in Pollution Prevention Guideline (PPG) 2: Above Ground Oil Storage Tanks. Fuel storage tanks will be of double skin construction and bunded to hold 110% of their capacity. All delivery hoses, valves and gauges will be contained within the bunded area and the tanks will be securable against accidental or malicious damage. The oil storage tanks will meet the requirements of the Control of Pollution (Oil Storage) (England) Regulations 2001 (SI 2954).
- 3.7.2 Other potentially polluting liquids such as hydraulic and engine oil will also be stored in the main Stenor compound within a secure container provided specifically for this purpose. The drums will be contained within miniature bunds able to hold 110% of their combined volume and appropriate warning and guidance notices displayed. The storage of a container for such liquids will be on an area of the hardstanding where any spill can be contained and cleaned up.
- 3.7.3 Fuel will be delivered to the Graigola Wharf site from the fuel compound via the means of a dedicated fuel bowser.
- 3.7.4 More detail on site containment and drainage is included in Section 6.1.
- 3.7.5 An emergency plan has been formulated for dealing with spills of polluting liquids. All site operatives will be made aware of the procedures described within this plan. This action plan attached as Appendix 3.

4.0 SITE OPERATIONS

4.1 Hours of Operation (WP/1.3)

4.1.1	Monday to Friday	0700-1900 hours
	Saturday	0700-1400 hours
	Sundays, Bank and Public Holidays	No operation

- 4.1.2 It is possible that some site operations such as maintenance of vehicles or plant will be required outside of the above hours, but the plant will not be used for processing.

4.2 Staffing and Supervision (WP/1.5)

- 4.2.1 The number of employees on the site will be sufficient to permanently man the site control office and to manage and record the incoming wastes and outgoing materials whilst other sorting and loading operations are carried out. During operating hours, the site will normally be manned by a minimum of one person.
- 4.2.2 Employees will be competent, well-trained and adequately supervised where necessary. The site manager will attain a Level 3 WAMITAB Certificate of Technical Competence (COTC) for the management of inert waste transfer operations. The appropriate documentation with which to assess the technically competent person will be forwarded to the Environment Agency for their approval.
- 4.2.3 All existing and new staff will receive appropriate induction and technical training and all staff will be kept informed of current best practice, as appropriate to their tasks. In accordance with the Health and Safety at Work Act, all staff will receive full health and safety training as appropriate to their operations. The site staff to receive induction/training will include:
- Site Supervisor/ Site Office Controller
 - Plant Operators
 - General Labourers
- 4.2.4 All site personnel will be made aware of the operating conditions of the facility, with copies of the Working Plan and Waste Management Licence available for consultation in the site control office. A training log will be kept up to date in the site office.
- 4.2.5 Any changes in the technically competent person managing the site will be reported to the Environment Agency in writing within 5 working days of the change in management.

4.3 Plant and Equipment (WP/1.1)

4.3.1 Based upon the estimated input of waste, the site equipment may consist of:

- 1 Crusher or similar
- 1 Screener or similar
- 1 Wheeled Front Loading Shovel
- 1 360° Excavator fitted with Standard Backhoe and additional Grapple attachment

4.3.2 Other small plant and machinery, such as a fuel bowser and water bowser for dust suppression or pumps will be employed as necessary to deal with site-specific issues. Dust suppression will be available at all times.

4.3.3 The details relating to each piece of plant and equipment including the constraints on use, operating procedures and the maintenance schedules, will be held in the site control office. Associated with each piece of plant and equipment will be an authorised users registration indicating which personnel are qualified to use it. Plant operators will be certified to the appropriate CITB (Construction Industry Training Board) standard or equivalent.

4.3.4 Servicing and inspection of vehicles is carried out on a regular basis. This includes basic daily checks, a weekly operator inspection filed as a F91, a planned maintenance program every 250 machine hours and a twelve-monthly insurance inspection by an independent assessor.

4.3.5 The crusher and any screener used on site will be permitted as a prescribed process by the Local Authority (Swansea Bay Port Health Authority) under LAPPC.