

Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Swansea Drydocks Limited

Swansea Dry Docks
Swansea
SA1 1LY

Permit number
EPR/UP3298VL

Swansea Dry Docks

Permit number EPR/UP3298VL

Introductory note

This introductory note does not form a part of the permit

The main features of the permit are as follows.

This permit will allow the operator to accept end of life vessels (ships) and dismantle them to allow the recovery of scrap metal and other materials. The waste management and associated operations on site will include: dismantling of vessels, sorting and processing of waste, storage of hazardous and non-hazardous waste and associated discharges to surface water.

This permit allows the acceptance and dismantling of vessels with coatings containing tributyltin or triphenyltin; however the removal of coatings containing tributyltin or triphenyltin is not permitted.

The total amount of waste accepted under this permit is 150,000 tonnes per annum.

The status log of the permit sets out the permitting history, including any changes to the permit reference number.

Status log of the permit

Description	Date	Comments
Application EPR/UP3298VL/A001	Duly made 22/02/11	Application for ship dismantling facility.
Additional information received	11/03/11	Clarification on phasing and planning of the site.
Additional information received	04/05/11	Additional site condition analysis.
Additional information received	13/05/11	Response to information request, including amended operational techniques, environmental risk assessment and reduced site boundary.
Additional information received	31/05/11	Final site drainage strategy.
Additional information received	16/06/11	Amended site boundary plan.
Additional information received	05/07/11	Noise Management Plan.
Additional information received	05/07/11	Fugitive Emissions and Odour Management plan.
Additional information received	19/07/11	Planned Preventative Maintenance Strategy and covering letter.
Additional information received	28/07/11	Response to information request, including amendments to operational techniques and environmental risk assessment.

Status log of the permit		
Description	Date	Comments
Additional information received	15/08/11	Structural survey.
Additional information received	23/08/11	Revised site plan including sampling points.
Additional information received	26/08/11	Response to Schedule 5.
Additional information received	12/12/11	Amended operational techniques.
Permit determined	19/12/11	Permit for ship dismantling and associated treatment, issued to Swansea Drydocks Ltd.

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2010

Permit number

EPR/UP3298VL

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2010

Swansea Drydocks Limited (“the operator”),

whose registered office is

**No 4 Castle Court 2
Castlegate Way
Dudley
West Midlands
DY1 4RH**

company registration number **06925673**

to operate waste operations at

**Swansea Dry Docks
Swansea
SA1 1LY**

to the extent authorised by and subject to the conditions of this permit.

Name	Date
Mel Bischer	19/12/2011

Authorised on behalf of the Environment Agency

Conditions

Management

1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
- (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
 - (b) using sufficient competent persons and resources.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.
- 1.1.4 The operator shall comply with the requirements of an approved competence scheme.

1.2 Avoidance, recovery and disposal of wastes produced by the activities

- 1.2.1 The operator shall take appropriate measures to ensure that:
- (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and
 - (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
 - (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.
- 1.2.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

2 Operations

2.1 Permitted activities

- 2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the "activities").

2.2 The site

- 2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.

2.3 Operating techniques

- 2.3.1 (a) The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- (b) If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan specified in schedule 1, table S1.2 or otherwise required under this permit, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 Waste shall only be accepted if:
- (a) it is of a type and quantity listed in schedule 2 table S2.1[, S2.2 etc]; and
- (b) it conforms to the description in the documentation supplied by the producer and holder.

2.4 Technical requirements

- 2.4.1 The storage (including temporary storage) and treatment of WEEE shall be carried out in accordance with the technical requirements of Annex III of the WEEE Directive.
- 2.4.2 WEEE shall be treated using best available treatment, recovery and recycling techniques (BATRRRT).
- 2.4.3 All fluids contained within any WEEE shall be removed prior to further treatment.
- 2.4.4 Equipment shall be provided to record the weight of untreated WEEE accepted at, and components and materials leaving the site.
- 2.4.5 Hazardous waste shall not be mixed, either with a different category of hazardous waste or with other waste, substances or materials, unless it is authorised by schedule 1 table S1.1 and appropriate measures are taken.

2.5 Pre-operational conditions

- 2.5.1 The activities shall not be brought into operation until the measures specified in schedule 1 table S1.3A have been completed.
- 2.5.2 The operations specified in schedule 1 table S1.3B shall not commence until the measures specified in that table have been completed.

3 Emissions and monitoring

3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 table S3.1.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.

3.2 Emissions of substances not controlled by emission limits

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

3.3 Odour

- 3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.
- 3.3.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan;
 - (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.4 Noise and vibration

- 3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.

3.5 Monitoring

- 3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) point source emissions specified in tables S3.1;
 - (b) noise specified in table S3.2;
 - (c) ambient air monitoring specified in table S3.3.
- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.3.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.2 and S3.3 unless otherwise agreed in writing by the Environment Agency.

4 Information

4.1 Records

4.1.1 All records required to be made by this permit shall:

- (a) be legible;
- (b) be made as soon as reasonably practicable;
- (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
- (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
 - (i) off-site environmental effects; and
 - (ii) matters which affect the condition of the land and groundwater.

4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

4.2 Reporting

4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.

4.2.2 Within one month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.

4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:

- (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
- (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.2; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

4.3 Notifications

4.3.1 The Environment Agency shall be notified without delay following the detection of:

- (a) any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution;
- (b) the breach of a limit specified in the permit; or
- (c) any significant adverse environmental effects.

4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.

4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.

4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

- (a) any change in the operator's trading name, registered name or registered office address; and
- (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

- (a) any change in the operator's name or address; and
- (b) any steps taken with a view to the dissolution of the operator.

In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual);
- (b) any change in the operator's name(s) or address(es); and
- (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

- (a) the Environment Agency shall be notified at least 14 days before making the change; and
- (b) the notification shall contain a description of the proposed change in operation.

4.4 Interpretation

4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.

4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "without delay", in which case it may be provided by telephone.

Schedule 1 - Operations

Table S1.1 activities

	Description of activities for waste operations	Limits of activities
A1	<p>R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced).</p> <p>D15: Storage pending any of the operations numbered D01 to D14 (excluding temporary storage pending collection on the site where it is produced).</p>	<p>All hazardous and non-hazardous waste must be stored on an impermeable surface with sealed drainage.</p> <p>The following waste types must also be stored in a secure container within a building:</p> <ul style="list-style-type: none"> - any waste containing radioactive materials or substances - any waste containing polychlorinated biphenyls (PCBs) - any waste containing lead - any waste containing mercury - any waste containing in-organic chemicals <p>The following waste types must also be stored within sealed containers:</p> <ul style="list-style-type: none"> - marine growths - medicines - ballast water - foul waste - any waste containing paints and coatings <p>Asbestos waste shall be double bagged and kept within clearly identified, segregated, secure, lockable containers.</p> <p>The maximum quantity of hazardous waste and waste oils stored and treated at site by way of disposal operation shall not exceed 10 tonnes per day.</p>

Table continued overleaf

Table S1.1 activities

Description of activities for waste operations	Limits of activities
R3: Recycling/reclamation of organic substances which are not used as solvents.	<p>Treatment consisting of the dismantling of end of life vessels by:</p> <ul style="list-style-type: none"> - manual sorting - manual separation - hot and cold cutting - shredding - hydraulic sheering - power sawing
R4: Recycling/reclamation of metals and metal compounds.	
R5: Recycling/reclamation of other inorganic compounds.	
R11: Use of wastes obtained from any of the operations numbered R1 to R10	<p>The maximum quantity of hazardous waste subject to an R5 activity shall not exceed 10 tonnes per day.</p>
D9: Physico-chemical treatment resulting in final compounds or mixtures which are discarded by any of the operations numbered D1 to D12, e.g. evaporation, drying, calcination	<p>The maximum quantity of non hazardous waste subject to a D9 activity shall not exceed 50 tonnes per day.</p> <p>Prior to dismantling vessels with coatings containing tributyltin or triphenyltin, a method statement will be submitted in writing to and approved by the Environment Agency.</p> <p>Removal of coating materials containing tributyltin or triphenyltin is not permitted.</p> <p>Prior to dismantling vessels, polychlorinated biphenyls (PCBs) mixtures contained in the vessels, will be characterised in terms of the PCB formulations. These formulations will be submitted in writing to and approved by the Environment Agency.</p> <p>There shall be no further treatment of asbestos waste following removal as described within Operational Techniques Document.</p>
Discharge of site drainage from emission points SW1 and SW4.	<p>Waste types as specified in Table 2.1.</p> <p>Drainage consisting solely of:</p> <ul style="list-style-type: none"> - clean, rainfall dependant drainage from areas of the site used in connection with the storage or treatment of waste - bilge or ballast water in line with sections 3.7.19 of the Operational Techniques document as incorporated in table S1.2 - run-off from the processing of waste in connection with the dismantling of end of life vessels. <p>in accordance with the emission limits set out in Schedule 3 of this permit.</p> <p>Discharge from SW4 is only to be released on the ebb tide at a maximum rate of 30 litres/ second.</p>

Table S1.2 Operating techniques

Description	Parts	Date Received
Overview of ship recycling in the UK (DEFRA 2007)	Section 2.8 Preparation of the Ship Prior to Recycling	N/A
	Section 2.9 The Ship Dismantling Process	
	Section 2.10 Storage of Dismantled Materials	
How to comply with your environmental permit (EPR 1.00)	All	N/A
Response to request for additional information	Swansea Drydocks Limited Operational Techniques document December 2011 (reference CRM.018.001.R.001.E) Sections referenced below:	12/12/11
	Section 2.5 Accident Management	
	Section 3.2 Pre-acceptance Activities	
	Section 3.3 Waste Acceptance	
	Section 3.4 Preliminary Work	
	Section 3.5 Dismantling Work	
	Section 3.6 Dry Dock Inspection	
	Section 3.7.1 Ferrous Metals	
	Section 3.7.2 Non-Ferrous Metals	
	Section 3.7.5 Cabling	
	Section 3.7.6 PCBs	
	Section 3.7.7 Waste Electronic and Electrical Equipment (WEEE)	
	Section 3.7.10 Halons and Air Conditioning Units	
	Section 3.7.11 Marine Growth & Invasive Plant/Animal Material	
	Section 3.7.13 Residual Waste Oils and Fuels (including sludges)	
	Section 3.7.14 Fire Protection Equipment and Pressurised Containers	
	Section 3.7.15 Asbestos	
	Section 3.7.16 In-organic Chemicals	
	Section 3.7.17 Medicines	
	Section 3.7.18 Radioactive Wastes	
	Section 3.7.19 Ballast and Bilge Water	
	Section 3.7.20 Foul Waste	
	Section 3.7.21 Cargo residues	
	Section 3.7.24 Paints and Coatings	
	Section 3.7.25 Residual Solid and Liquid Wastes collected in the Dry Docks	
	Section 3.7.26 Tanks and Storage Vessels (including residual fuel tanks)	
	Section 4.12 Data Collection of Baseline Site Conditions	
	Section 4.3 Surface and Foul Water Drainage Sub sections headed: - Main Site Drainage (excluding references to table 4.2.1) - Sampling Procedures of Holding Tanks	
	Section 4.4 Fugitive or Diffuse Emissions to Water	

Table S1.2 Operating techniques

Description	Parts	Date Received
Additional information received (final versions of documents)	Noise Management Plan CRM.018.001.R.003.FINAL September 2011	23/09/11
	Fugitive Emissions and Odour Management Plan CRM.018.001.R.002.D September 2011	
	Planned Preventative Maintenance Strategy Version 1.0 July 2011	
Sector Guidance Note IPPC S5.06 Guidance for the Recovery and Disposal of Hazardous and Non Hazardous Waste	All	N/A
Pollution Prevention Guidelines: Above Ground Oil Storage Tanks: PPG2	All	N/A
Guidelines for ballast water management and developments of ballast water management plans (International Maritime Organization)	All	N/A
Guidelines on Ship Recycling (International Maritime Organization, 2003)	All	N/A
Ballast Performance Standards set by the Convention for the Control and Management of Ship Ballast Water and Sediments, (International Maritime Organization, 2004)	All	N/A

Table S1.3A Pre-operational measures

Reference	Pre-operational measures
1	The flood contingency plan will be submitted to the Environment Agency for written approval.
2	A report detailing the integrity of the dock gates will be submitted to the Environment Agency for written approval.
3	A report detailing the integrity of the impermeable pavement will be submitted to the Environment Agency for written approval.
4	A report detailing the installation of the interceptor and holding tanks will be sent to the Environment Agency for written approval. Discharge of site drainage via point SW4 shall not commence until the Environment Agency has approved the report.
5	A report detailing the current levels of polychlorinated biphenyls (PCBs) present in the intertidal estuarine sediments immediately downshore from emission point SW4 will be submitted to the Environment Agency for written approval.

Table S1.3B Pre-operational measures for future development		
Reference	Operation	Pre-operational measures
1	<p>Discharge of site drainage from emission point SW1, consisting solely of:</p> <ul style="list-style-type: none"> - clean, rainfall dependant drainage from areas of the site used in connection with the storage or treatment of waste, and/ or bilge or ballast water in line with sections 3.7.19 of the Operational Techniques document as incorporated in table S1.2 - run-off from the processing of waste in connection with the dismantling of end of life vessels <p>in accordance with the emission limits set out in Schedule 3 of this permit.</p>	The operator shall submit information on the proposed model and class of interceptor and the holding tank to the Environment Agency for written approval.
		A report detailing the installation of the interceptor and holding tanks will be sent to the Environment Agency for written approval.
		A report detailing the current levels of polychlorinated biphenyls (PCBs) present in the intertidal estuarine sediments immediately downshore from emission point SW1 will be submitted to the Environment Agency for written approval.
		Discharge of site drainage via point SW1 shall not commence until the Environment Agency has approved the report in writing.
		The operator shall notify the Environment Agency at least 7 days in advance of discharge via point SW1 commencing.
2	Discharge of site drainage without sampling during periods of down time.	A proposal detailing the measures taken to ensure site discharge will be clean and free of contaminants, so as not to require sampling, will be sent to the Environment Agency for written approval.
		Discharge of site drainage without prior sampling shall not commence until the Environment Agency has approved the proposal in writing.

Schedule 2 - Waste types, raw materials and fuels

Table S2.1 Permitted waste types and quantities for ship dismantling facility

Maximum quantity	The total quantity of waste accepted at the site shall be no more than 150,000 tonnes a year.
Waste code	Description
16	WASTES NOT OTHERWISE SPECIFIED IN THE LIST
16 01	end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)
16 01 04*	end-of-life vehicles
16 01 06	end-of-life vehicles, containing neither liquids nor other hazardous components

Schedule 3 – Emissions and monitoring

Table S3.1 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements

Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
Emission point SW4 - emission to harbour as marked on the site plan in schedule 7.	Site run-off and process effluent from the dismantling, treating and storage of permitted waste – from holding tanks marked as SP1 and SP2 on the plan in Schedule 7.	Micro organisms	less than 10 viable organisms per cubic metre greater than or equal to 50 micrometres in minimum dimension	Before each discharge from holding tanks marked as SP1 and SP2 on the plan in Schedule 7 or as otherwise agreed in writing with the Environment Agency.	Before each discharge from holding tanks marked as SP1 and SP2 on the plan in Schedule 7, or as otherwise agreed in writing with the Environment Agency.	As required by condition 3.5.3.
			less than 10 viable organisms per millilitre less than 50 micrometres in minimum dimension and greater than or equal to 10 micrometres in minimum dimension			
		Toxicogenic <i>Vibrio cholerae</i> (O1 and O139)	less than 1 colony forming unit (cfu) per 100ml or less than 1 cfu per 1 gram (wet weight) zooplankton samples			
		<i>Escherichia coli</i>	less than 250 cfu per 100ml; c. <i>Intestinal Enterococci</i> less than 100 cfu per 100ml			
		Oil and grease	No visible trace			
		Polychlorinated biphenyls (PCBs) ICES 7 and any other congener required based on the result of the ship survey.	0.02µg/l Or any other limit, as agreed in writing with the Environment Agency, if sampling for additional PCB congeners is required based on the result of the ship survey.			

Table S3.1 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements

Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
		Tributyltin compounds (tributhyltin-cation)	0.003 µg/l (total)			
		Triphenyltin and its derivatives	0.016 µg/l (total)			
		Cadmium	5 µg/l (total)			
		Chromium	33 µg/l (total)			
		Copper	190 µg/l (total)			
		Mercury	0.7 µg/l (total)			
		Nickel	103 µg/l (total)			
		Lead	10 µg/l (total)			
		Zinc	418 µg/l (total)			
		Iron	2000 µg/l (total)			
		Manganese	660 µg/l (total)			
		Aluminium	2000 µg/l (total)			
		Polyaromatic hydrocarbons	As agreed in writing with the Environment Agency if required based on the result of the ship survey.			

Table S3.2 Noise monitoring requirements

Location or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
In accordance with the approved Noise and Vibration Management Plan as incorporated in Table S1.2 of Schedule 2 to this permit.	Noise	During the dismantling of the first ship.	BS 4142:1997	None.
In accordance with the approved Noise and Vibration Management Plan as incorporated in Table S1.2 of Schedule 2 to this permit.	Noise	Annually.	BS 4142:1997	None.

Table S3.3 Ambient air monitoring requirements

Location or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
As agreed in writing with the Environment Agency no later than 1 month after permit issue.	Asbestos fibres	Quarterly when ships are being stored or dismantled at the site or when asbestos waste is being stored at the site.	As agreed in writing with the Environment Agency no later than 1 month after permit issue.	None.

Table S3.4 Estuarine sediments monitoring requirements

Location or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
As agreed in writing with the Environment Agency.	Polychlorinated biphenyls (PCBs) – number of congeners to be agreed in writing with the Environment Agency.	As agreed in writing with the Environment Agency based on the vessel dismantling programme.	As agreed in writing with the Environment Agency.	None.

Schedule 4 - Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

Table S4.1 Reporting of monitoring data

Parameter	Emission or monitoring point/ reference	Reporting period	Period begins
Emissions to water. Parameters as required by condition 3.5.1 and set out in table S3.1 of Schedule 3.	SW4 and SW1	Every 6 months.	1 April, 1 October
Noise monitoring. Parameters as required by condition 3.5.1 and set out in table S3.2 of Schedule 3.	In accordance with the approved Noise and Vibration Management Plan as incorporated in table S1.2 of Schedule 2 to this permit.	During the dismantling of the first ship and annually thereafter.	From date of permit issue.
Ambient air monitoring. Parameters as required by condition 3.5.1 and set out in table S3.3 of Schedule 3.	As agreed in writing with the Environment Agency no later than 1 month after permit issue.	As agreed in writing with the Environment Agency no later than 1 month after permit issue.	1 December, 1 March, 1 June, 1 October

Table S4.2 Reporting forms

Media/parameter	Reporting format	Date of form
Water and Land	Form water 1 or other form as agreed in writing by the Environment Agency.	19/12/11
Air	Form air 1 or other form as agreed in writing by the Environment Agency.	19/12/11

Schedule 5 - Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

Part A

Permit Number	
Name of operator	
Location of Facility	
Time and date of the detection	

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution

To be notified within 24 hours of detection	
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

(b) Notification requirements for the breach of a limit

To be notified within 24 hours of detection unless otherwise specified below	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

Time periods for notification following detection of a breach of a limit	
Parameter	Notification period

(c) Notification requirements for the detection of any significant adverse environmental effect	
To be notified within 24 hours of detection	
Description of where the effect on the environment was detected	
Substances(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

Part B - to be submitted as soon as practicable

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 - Interpretation

“accident” means an accident that may result in pollution.

“application” means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

“authorised officer” means any person authorised by the Environment Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

“best available treatment, recovery and recycling techniques” shall have the meaning given to it in the document published jointly by the Department for Environment, Food and Rural Affairs, the Welsh Assembly Government and the Scottish Executive on 27th November 2006, entitled “Guidance on Best Available Treatment, Recovery and Recycling Techniques (BATRR) and Treatment of Waste Electrical and Electronic Equipment (WEEE);

“building” means a construction that has the objective of providing sheltering cover and minimising emissions of noise, particulate matter, odour and litter.

“controlled substances” means chlorofluorocarbons, other fully halogenated chlorofluorocarbons, halons, carbon tetrachloride, 1,1,1-trichloroethane, methyl bromide, hydrobromofluorocarbons and hydrochlorofluorocarbons listed in Annex I of Regulation (EC) No 2037/2000 of the European Parliament and of the Council of 29 June 2000 on substances that deplete the ozone layer, including their isomers, whether alone or in a mixture, and whether they are virgin, recovered, recycled or reclaimed. This definition shall not cover any controlled substance which is in a manufactured product other than a container used for the transportation or storage of that substance, or insignificant quantities of any controlled substance, originating from inadvertent or coincidental production during a manufacturing process, from unreacted feedstock, or from use as a processing agent which is present in chemical substances as trace impurities, or that is emitted during product manufacture or handling.

“D” means a disposal operation provided for in Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“emissions to land” includes emissions to groundwater.

“emissions of substances not controlled by emission limits” means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission or background concentration limit.

“End-of-Life Vehicles Directive” means Directive 2000/53/EC of the European Parliament and Council of 18 September 2000 on end-of-life vehicles.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2010 No.675 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

“hazardous waste” has the meaning given in the Hazardous Waste (England and Wales) Regulations 2005 No.894, the Hazardous Waste (Wales) Regulations 2005 No. 1806 (W.138), the List of Wastes (England) Regulations 2005 No.895 and the List of Wastes (Wales) Regulations 2005 No. 1820 (W.148).

“MCERTS” means the Environment Agency’s Monitoring Certification Scheme.

“ozone-depleting substances” *“ODS”* means “controlled substances” contained in refrigeration, air-conditioning and heat pump equipment, equipment containing solvents, fire protection systems and fire extinguishers.

“quarter” means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

“R” means a recovery operation provided for in Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

"*Waste code*" means the six digit code referable to a type of waste in accordance with the List of Wastes (England) Regulations 2005, or List of Wastes (Wales) Regulations 2005, as appropriate, and in relation to hazardous waste, includes the asterisk.

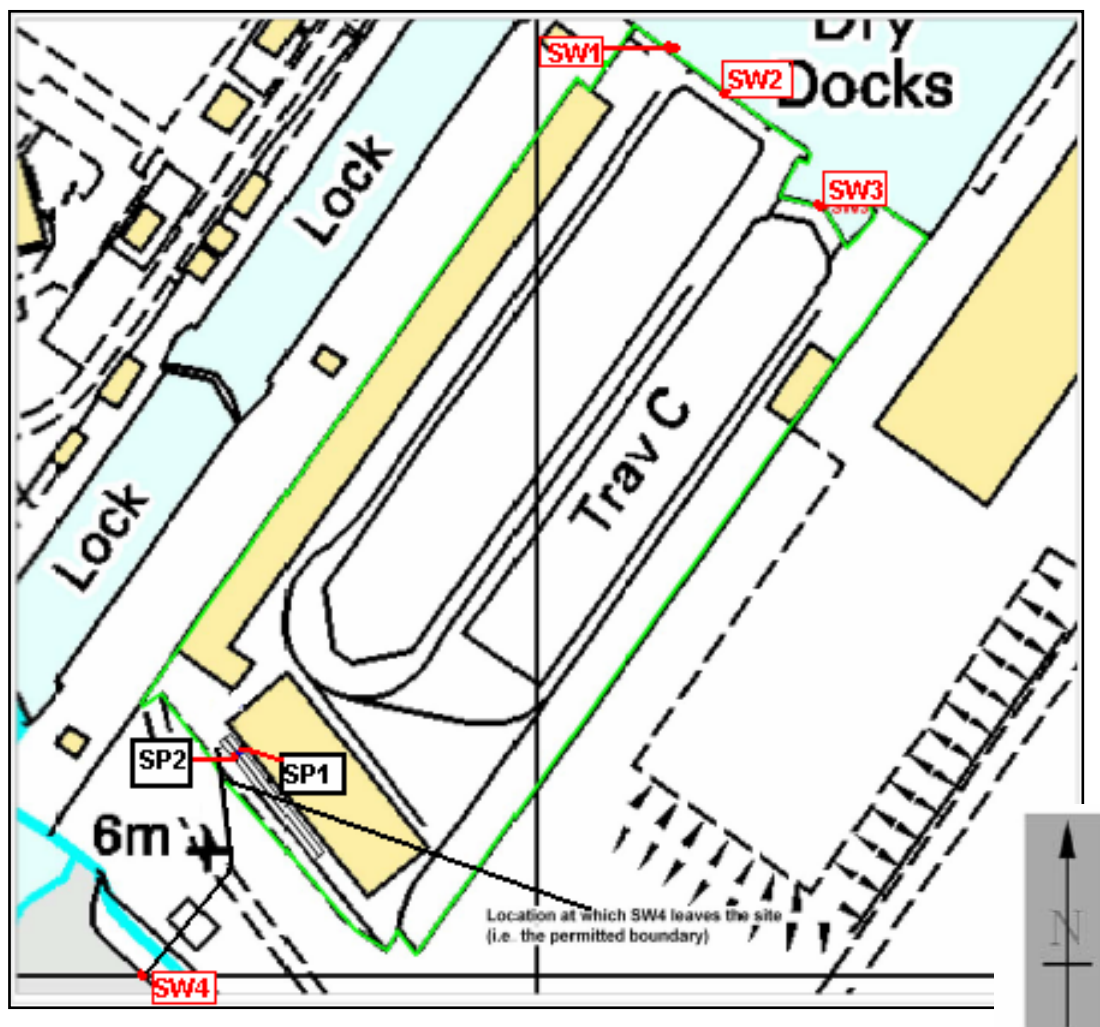
"*Waste Framework Directive*" or "*WFD*" means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste.

"*WEEE*" means waste electrical and electronic equipment.

"*WEEE Directive*" means Directive 2002/96/EC of the European Parliament and of the Council of 27th January 2003 on waste electrical and electronic equipment (WEEE) as amended by Directive 2003/108/EC of the European Parliament and of the Council of 8th December 2003 on waste electrical and electronic equipment (WEEE).

"*year*" means calendar year ending 31 December.

Schedule 7 - Site plan



KEY	
—	Site Boundary
★	Emission Points
●	Sampling Point
	Pipe
	Water Storage Tank

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END OF PERMIT.

Permit Number: EPR/UP3298VL

Operator: Swansea Drydocks Limited

Facility: Swansea Dry Docks

Form Number: Water 1 / 19/12/11

Reporting of emissions to water (other than to sewer) and land for the period from DD/MM/YYYY to DD/MM/YYYY

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
SW4	Micro organisms	less than 10 viable organisms per cubic metre greater than or equal to 50 micrometres in minimum dimension					
SW4		less than 10 viable organisms per millilitre less than 50 micrometres in minimum dimension and greater than or equal to 10 micrometres in minimum dimension					
SW4	Toxicogenic Vibrio cholerae (O1 and O139)	less than 1 colony forming unit (cfu) per 100ml or less than 1 cfu per 1 gram (wet weight) zooplankton samples					
SW4	Escherichia coli	less than 250 cfu per 100ml; c. Intestinal Enterococci less than 100 cfu per 100ml					
SW4	Oil and grease	No visible trace					
SW4	Polychlorinated biphenyls (PCBs)	None present.					
SW4	Tributyltin compounds (tributyltin-cation)	0.003 µg/l (total)					
SW4	Triphenyltin and its derivatives	0.016 µg/l (total)					
SW4	Cadmium	5 µg/l (total)					
SW4	Chromium	33 µg/l (total)					

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
SW4	Copper	190 µg/l (total)					
SW4	Mercury	0.7 µg/l (total)					
SW4	Nickel	103 µg/l (total)					
SW4	Lead	10 µg/l (total)					
SW4	Zinc	418 µg/l (total)					
SW4	Iron	2000 µg/l (total)					
SW4	Manganese	660 µg/l (total)					
SW4	Aluminium	2000 µg/l (total)					
SW4	Polyaromatic hydrocarbons	As agreed in writing with the Environment Agency if required based on the result of the ship survey.					

The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.

Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.

For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.

The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed
(Authorised to sign as representative of Operator)

Date.....

Permit Number: EPR/UP3298VL

Operator: Swansea Drydocks Limited

Facility: Swansea Dry Docks

Form Number: Air 1 / 19/12/11

Reporting of emissions to air for the period from DD/MM/YYYY to DD/MM/YYYY

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
In accordance with the approved Noise and Vibration Management Plan as incorporated in table S1.2 of Schedule 2 to this permit.	Noise				In accordance with the standards set out in BS 4142:1997		
As agreed in writing with the Environment Agency.	Asbestos fibres	Ambient monitoring			As agreed in writing with the Environment Agency.		

The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.

Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.

For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.

The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed
(Authorised to sign as representative of Operator)

Date.....