Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Atlantic Recycling Limited

Atlantic Recycling Limited
Atlantic Eco Park
Newton Road
Rumney
Cardiff
CF3 2EJ

Permit number
EPR/PP3993VS

DRAFT

Atlantic Recycling Limited
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Introductory note

This introductory note does not form a part of the permit

The main features of the regulated facilities are as follows:

Waste transfer station with treatment

The waste transfer station accepts non-hazardous and hazardous wastes. Fines from the treatment process pass to the refuse derived fuel production activity on site, where suitable.

Soil processing facility:

No hazardous waste is to be accepted for storage or treatment as part of the soil processing activity. All storage and treatment of waste will take place on impermeable surface with sealed drainage unless otherwise agreed in writing with Natural Resources Wales.

Wood processing facility:

No hazardous waste is to be accepted for storage or treatment as part of the wood processing. All storage and treatment of waste will take place on impermeable surface with sealed drainage.

Refuse Derived Fuel (RDF) and Solid Recovered Fuel (SRF) facility:

Waste is stored (prior to treatment) and treated within a building. Treated, loose, wrapped or baled RDF and SRF is permitted to be stored outside on impermeable surface with sealed drainage. No hazardous waste is to be accepted for storage or treatment as part of the refuse derived fuel processing facility.

Waste Water treatment plant

The WWTP is designed to process 3.5 litres/second, equivalent to approximately 100,000 tonnes per annum of surface water from the waste storage and treatment areas of the site, and includes biological treatment stages. The actual capacity of the WWTP is approximately 70,000 tonnes per annum to allow for maintenance, breakdowns and repeat treatment of batches if required. The bespoke WWTP is designed to treat surface water to meet the numerical limits already specified in Table S3.2 of the permit. The treated waters will continue to discharge via the existing outfall point D1, and the compliance monitoring point is at D2 where water enters the SSSI reen system.

Small Waste Wood Co-Incineration Plant (SWCP)

The SWCP is a directly associated activity suppying thermal energy in the form of 85ºC hot water for use in the WWTP and it is subject to Chapter IV of the Industrial Emissions Directive.. The boiler is located within a new building and burns either untreated waste wood or treated (non-hazardous) waste wood, recycled wood chip fuel, or mixtures thereof, sourced from other on-site recycling activities, at a feed rate of up to 330 kg/hr, depending upon the moisture content of the fuel. It is fitted with an SNCR (selective non-catalytic rediction) abatement system to reduce emissions of $NO_{X.}$ In addition it uses Activated Carbon to control Dioxin emissions and a ceramic filter to further clean the emissions and remove fine particulates. The SWCP adds a point source emission to air at point A1 shown on plan JCD0170-PER-002, from an 11m high stack.

The The recycled wood chip is sourced from the on-site waste wood operation . If sufficient fuel is not available from on-site operations it is sourced from other local recycling operations.

This permit does has one discharge point for treated drainage water from the WWTP to discharge to the Reens SSSI. As well as being treated in the WWTP, this water is held in a quality control ditch and tested before discharge and must meet the limits specified within the permit.

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**
EAWML 30347 issued	14/10/05	Licence issued to Neal Soil Suppliers Limited for a waste transfer station and Soil recycling facility
Variation issued ERP/VP3395FK	02/12/09	Permit varied to include additional EWC codes to be allowed under the permit
Transfer issued EPR/PP3993VS (full transfer of EPR/VL3395FK)	15/11/10	Permit transferred from Neal Soil Suppliers Limited to Atlantic Recycling Limited
Variation determined EPR/PP3993VS/V002	02/03/12	Varied and consolidated permit issued to include in-vessel composting facility, waste transfer station with treatment and wood processing activities and update the permit to modern conditions.
Variation determined EPR/PP3993VS/V003	16/08/12	Administrative variation to remove EWC codes.
Variation determined EPR/PP3993VS/V004	10/04/13	Variation issued to allow external storage of RDF and SRF, SRF production, removal of ten tonne a day limit for asbestos and amendments to monitoring tables.
EPR/PP3993VS/S005	Duly Made 12/09/16	Application to surrender the permit in part – to surrender the in-vessel composting facility

Status log of the permit		
Description	**Date**	**Comments**
Surrender determined EPR/PP3993VS/S005	03/11/16	Part surrender of permit to surrender the in-vessel composting facility
Application EPR/PP3993VS/V007	Duly made 01/06/17	Application to add a WWTP, biomass boiler and RDF/SRF processing facility.
Schedule 5 Notice request for information issued	15/09/17	
Additional information received	27/10/17	Information received in response to Schedule 5 Notice, Fire prevention and mitigation plan.
Schedule 5 Notice request for information issued	14/12/18	Risk assessment for air emissions, BAT assessment, drainage details, site condition, waste water treatment and RDF/SRF
Additional information received	18/01/19	Risk assessment for air emissions, BAT assessment, drainage details, site condition, waste water treatment, Fire prevention and mitigation plan and RDF/SRF
Application EPR/PP3993VS/V006	Duly made 22/03/19	Application to increase annual throughput and add treatment method to the wood waste facility.
Variation determined EPR/PP3993VS/V006	16/05/19	Varied permit issued.
Additional information received	15/10/19	Additional information clarifying operating techniques.
Variation determined EPR/PP3993VS/V007		

End of introductory note.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number
EPR/PP3993VS

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/PP3993VS/V007 authorising

Atlantic Recycling Limited ("the operator"),

whose registered office is
Atlantic Ecopark
Newton Road
Rumney
Cardiff
CF3 2EJ

company registration number **05788239**

to operate an installation and waste operations at
Atlantic Recycling Limited
Atlantic Ecopark
Newton Road
Rumney
Cardiff
CF3 2EJ

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

Name	Date
	XX XX 2020

Authorised on behalf of Natural Resources Wales

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Conditions

1 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 Energy efficiency

1.2.1 For the following activities referenced in schedule 1, table S1.1 (A1 and A2), the operator shall:

(a) take appropriate measures to ensure that energy is used efficiently in the activities;

(b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and

(c) take any further appropriate measures identified by a review.

1.2.2 For the following activities referenced in schedule 1, table S1.1 (A3), the operator shall:

(a) take appropriate measures to ensure that energy is recovered with a high level of energy efficiency and energy is used efficiently in the activities;

(b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and

(c) take any further appropriate measures identified by a review.

1.3 Efficient use of raw materials

1.3.1 For the following activities referenced in schedule 1, table S1.1 (A1, A2 and A3), the operator shall:

(a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;

(b) maintain records of raw materials and water used in the activities;

(c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and

(d) take any further appropriate measures identified by a review.

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

1.4.1 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.

1.4.2 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").

2.1.2 For the following activity referenced in Schedule 1, Table S1.1 (A3), waste authorised by this permit shall be clearly distinguished from any other waste on site.

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 Natural Resources Wales.

(b) If notified by Natural Resources Wales that the activities are giving rise to pollution, the operator shall submit to Natural Resources Wales for approval within the period specified, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan , and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.

2.3.2 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.

2.3.3 Waste shall only be accepted if:

(a) it is of a type and quantity listed in schedule 2 tables S2.2, S2.3, S2.4, S2.5, S2.6 and S2.7

(b) it conforms to the description in the documentation supplied by the producer and holder.

2.3.4 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:

(a) the nature of the process producing the waste;

(b) the composition of the waste;

(c) the handling requirements of the waste;

(d) the hazardous property associated with the waste, if applicable; and

(e) the waste code of the waste.

2.3.5 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

2.3.6 The SWCP shall not be charged with waste, or shall cease to be charged, if:

(a) the combustion chamber temperature is below, or falls below, 850°C;or

(b) any continuous emission limit value in schedule 3 table S3.1(a) is exceeded; or

(c) any continuous emission limit value in Schedule 3 table S3.1 is exceeded , other than under abnormal operating conditions; or

(d) monitoring results required to demonstrate compliance with any continuous emission limit value in schedule 3 table S3.1 are unavailable other than under abnormal operating conditions; or

(e) there is a stoppage, disturbance or failure of the activated carbon abatement system other than under abnormal operating conditions.

2.3.7 The SWCP shall have at least one auxiliary burner in each line which shall be operated at start up, shut down and as required during operation to ensure that the operating temperature specified in condition 2.3.6 is maintained as long as incompletely burned waste is present in the combustion chamber. Unless the temperature specified in condition 2.3.6 is maintained in the combustion chamber, such burner(s) shall be fed only with fuels which result in emissions no higher than those arising from the use of gas oil, liquefied gas or natural gas.

2.3.8 The operator shall record the beginning and end of each period of “abnormal operation” of the SWCP.

2.3.9 During a period of “abnormal operation” of the SWCP, the operator shall restore normal operation of the failed equipment or replace the failed equipment as rapidly as possible.

2.3.10 Where, during “abnormal operation” of the SWCP, any of the following situations arise, waste shall cease to be charged on that line until normal operation can be restored:

(a) Continuous measurement shows that an emission exceeds any emission limit value in schedule 3 table S3.1 due to stoppages, disturbances of failures of the abatement plant, or continuous emission monitor(s) are out of service, as the case may be, for a total of 4 hours uninterrupted duration;

(b) There is a technically unavoidable stoppage, disturbance or failure of the activated carbon abatement system for a total of 4 hours uninterrupted duration;

(c) The cumulative duration of “abnormal operation” periods over 1 calendar year has reached 60 hours;

(d) Continuous measurement shows that an emission exceeds any emission limit value in Schedule 3 table S3.1(a);

(e) Continuous emission monitors or alternative techniques to demonstrate compliance with the emission limit value(s) for particulates, TOC and / or CO in Schedule 3 table S3.1(a) as agreed in writing with Natural Resources Wales, are unavailable.

2.3.11 The operator shall interpret the end of the period of “abnormal operation” of the SWCP as the earliest of the following:

(a) When the failed equipment is repaired and brought back into normal operation;

(b) When the operator initiates a shut down of the waste combustion activity, as described in the application or as agreed in writing with Natural Resources Wales;

(c) When a period of four hours has elapsed from the start of the “abnormal operation”;

(d) When, in any calendar year, an aggregated period of 60 hours “abnormal operation” has been reached on the SWCP.

2.3.12 Bottom ash and APC residues from the SWCP shall not be mixed.

2.4 Technical requirements

Hazardous waste storage and treatment

2.4.1 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.

WEEE treatment

2.4.2 The storage (including temporary storage) and treatment of WEEE shall be carried out in accordance with the technical requirements of Annex VIII of the WEEE Directive.

2.5 Improvement programme

2.5.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by Natural Resources Wales.

2.5.2 Except in the case of an improvement which consists only of a submission to Natural Resources Wales, the operator shall notify Natural Resources Wales within 14 days of completion of each improvement.

2.6 Pre-operational conditions

2.6.1 Activity A3 in Table S1.1 shall not be brought into operation until the measures specified in schedule 1 table S1.4 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 tables S3.1 and S3.2 [except in “abnormal operation” of the SWCP, when there shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1(a), S3.2 and S3.3].

3.1.2 The limits given in schedule 3 shall not be exceeded.

3.1.3 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

3.1.4 Wastes produced at the site by the SWCP shall, as a minimum, be sampled and analysed in accordance with schedule 3 table S3.4 Additional samples shall be taken and tested and appropriate action taken, whenever:

(a) disposal or recovery routes change; or

(b) it is suspected that the nature or composition of the waste has changed such that the route currently selected may no longer be appropriate.

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 The operator shall:

(a) if notified by Natural Resources Wales that the activities are giving rise to pollution, submit to Natural Resources Wales for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;

(b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.

3.2.3 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 Natural Resources Wales, 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.

3.4 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 Natural Resources Wales, 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.

3.4.2 The operator shall:

(a) if notified by Natural Resources Wales that the activities are giving rise to pollution outside the site due to noise and vibration, submit to Natural Resources Wales for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;

(b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.

3.5 Pests

3.5.1 The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.

3.5.2 The operator shall:

(a) if notified by Natural Resources Wales, submit to Natural Resources Wales for approval within the period specified, a pests management plan which identifies and minimises risks of pollution, hazard or annoyance from pests;

(b) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by Natural resources Wales.

3.6 Monitoring

3.6.1 The operator shall, unless otherwise agreed in writing by Natural Resources Wales, undertake the monitoring specified in the following tables in schedule 3 to this permit:

(a) point source emissions specified in table S3.1, S3.1(a) and S3.2;

(b) process monitoring specified in table S3.3

(c) residue quality in table S3.4

3.6.2 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.

3.6.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.6.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by Natural Resources Wales. Newly installed CEMs, or CEMs replacing existing CEMs, shall have MCERTS certification and have an MCERTS certified range which is not greater than 1.5 times the daily emission limit value (ELV) specified in schedule 3 table S3.1. The CEM shall also be able to measure instantaneous values over the ranges which are to be expected during all operating conditions. If it is necessary to use more than one range setting of the CEM to achieve this requirement, the CEM shall be verified for monitoring supplementary, higher ranges.

3.6.4 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, [S3.1(a)] and S3.2 unless otherwise agreed in writing by Natural Resources Wales.

3.6.5 Where Continuous Emission Monitors are installed to comply with the monitoring requirements in schedule 3 table S3.1 and S3.1(a); the Continuous Emission Monitors shall be used such that;

(a) the values of the 95% confidence intervals of a single measured result at the daily emission limit value shall not exceed the following percentages of the emission limit values:

- Carbon monoxide 10%
- Sulphur dioxide 20%
- Oxides of nitrogen (NO & NO2 expressed as NO2) 20%
- Particulate matter 30%
- Total organic carbon (TOC) 30%

- Hydrogen chloride 40%

(b) valid half-hourly average values shall be determined within the effective operating time (excluding the start-up and shut-down periods) from the measured values after having subtracted the value of the confidence intervals in condition 3.6.5 (a);

(c) where it is necessary to calibrate or maintain the monitor and this means that data are not available for a complete half-hour period , the half-hourly average shall in any case be considered valid if measurements are available for a minimum of 20 minutes during the half-hour. The number of half-hourly averages so validated shall not exceed 5 per day;

(d) daily average values shall be determined as the average of all the valid half-hourly average values within a calendar day. The daily average value shall be considered valid if no more than five half-hourly average values in any day have been determined not to be valid;

(e) no more than ten daily average values per year shall be determined not to be valid.

3.7 Fire

3.7.1 The operator shall manage and operate the activities in accordance with a written fire prevention plan using the current, relevant fire prevention and mitigation plan guidance.

3.7.2 The operator shall:

(a) if notified by Natural Resources Wales that the activities could cause a fire risk, submit to Natural Resources Wales a fire prevention and mitigation plan which identifies and minimises the risks of fire;

(b) Operate the activity in accordance with the fire prevention and mitigation plan, from the date of submission, unless otherwise agreed in writing by Natural Resources Wales.

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 Natural Resources Wales, 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 Natural Resources Wales.

4.2 Reporting

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

4.2.2 For the following activities referenced in schedule 1, table S1.1 (A1 A2 and A3), a report or reports on the performance of the activities over the previous year shall be submitted to Natural Resources Wales by 31 January (or other date agreed in writing by Natural Resources Wales) each year. The report(s) shall include as a minimum:

(a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;

(b) the annual production /treatment data set out in schedule 4 table S4.2; and

(c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.

(d) the functioning and monitoring of the SWCP in a format agreed with Natural Resources Wales. The report shall, as a minimum requirement (as required by Chapter IV of the Industrial Emissions Directive) give an account of the running of the process and the emissions into air and water compared with the emission standards in the IED.

4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by Natural Resources Wales, 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 S4.4; and

(c) giving the information from such results and assessments as may be required by the forms specified in those tables.

4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to Natural Resources Wales, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

4.2.5 Within one month of the end of each quarter, the operator shall submit to Natural Resources Wales 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.

4.3 Notifications

4.3.1 (a) In the event that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—

(i) inform Natural Resources Wales,

(ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and

(iii) take the measures necessary to prevent further possible incidents or accidents;

(b) in the event of a breach of any permit condition the operator must immediately—

(i) inform Natural Resources Wales, and

(ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;

(c) in the event of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.

4.3.2 Any information provided under condition 4.3.1(a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, 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 Natural Resources Wales has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform Natural Resources Wales when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to Natural Resources Wales at least 14 days before the date the monitoring is to be undertaken.

4.3.4 Natural Resources Wales 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) Natural Resources Wales 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.

4.3.6 Natural Resources Wales shall be given at least 14 days notice before implementation of any part of the site closure plan.

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 "immediately", in which case it may be provided by telephone.

Schedule 1 – Operations

Table S1.1 activities

Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity and waste types
A1: Refuse derived fuel and solid recovered fuel processing facility	S5.4 A1 (b)(ii) Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving pre-treatment of waste for incineration or co-incineration	**R13**: Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced) **R3:** Recycling/ reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes) **R5:** Recycling/ reclamation of other inorganic materials	Storage of all non-hazardous waste prior to treatment shall take place inside a building on an impermeable surface with sealed drainage. Treatment of all non-hazardous waste shall take place inside a building on an impermeable surface with sealed drainage. Treatment consisting only of: - mechanical and manual sorting (including optical sorting) - separation/segregation - screening - shredding - baling - wrapping of non-hazardous waste for the purpose of recovery only. Treated, loose, wrapped or baled RDF and SRF can be stored either inside a building or outside on an impermeable surface with sealed drainage. Waste types as specified in Table S2.2 Notwithstanding the waste types permitted in table S2.2 wastes which have any of the following characteristics shall not be accepted; - hazardous wastes - wastes consisting solely or mainly of dusts or powders - wastes which are odour producing or likely to be odourous

Table S1.1 activities			
Activity reference	**Activity listed in Schedule 1 of the EP Regulations**	**Description of specified activity and WFD Annex I and II operations**	**Limits of specified activity and waste types**
A2: Water treatment	S5.4 A(1)(a)(i) – Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day (100 tonnes per day if the waste treatment activity is anaerobic digestion) involving one or more of the following activities; (i) biological treatment	Treatment of water run off	From receipt of water into the waste water treatment plant to discharge to the surface water via the discharge point D2
Directly Associated Activity			
A3: Small Waste Wood co-Incineration Plant (SWCP)_	Waste wood co-incineration plant for the co-incineration of waste wood for the purposes of generating heat for use in the waste water treatment plant	The co-incineration of non-hazardous waste wood in a co-incineration plant with a capacity of less than 3 tonnes per hour using a single co-incineration line.	From receipt of waste to emission of exhaust gas and disposal of waste arising. Waste types and quantities as specified in table S2.3 of this permit.
Waste Activities			
A4: Waste Transfer Station with Treatment		**D15**: Storage pending any of the operations number D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced) **R13**: Storage of wastes pending any of the operations number R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced) **D9**: Physico-chemical treatment not specified elsewhere in Annex IIA which result in final compounds or mixtures which are discarded by means of any the operations number D1 to D8 and D10 to D12	Storage of all hazardous and non-hazardous wastes shall be on an impermeable surface with sealed drainage. No waste shall be stored within 10 metres of a reen or ditch and no trafficking of vehicles should occur within this buffer zone. The buffer zones should be clearly defined with a fence or bund. The maximum quantity of hazardous waste received and stored at the site for recovery or disposal shall not exceed 50 tonnes per day. No more than a total of 50 tonnes of intact and shredded waste vehicle tyres (waste codes 16 01 03 and 19 12 04) shall be stored at the site. Treatment consisting only of: - manual and mechanical sorting

Table S1.1 activities			
Activity reference	**Activity listed in Schedule 1 of the EP Regulations**	**Description of specified activity and WFD Annex I and II operations**	**Limits of specified activity and waste types**
		R3: Recycling/ reclamation of organic substances which are not used as solvents **R4**: Recycling/ reclamation of metals and metal compounds **R5**: Recycling/ reclamation of other inorganic materials	- separation - screening - baling - shredding - crushing - compaction of non-hazardous waste as set out in Table S2.4 into different components for disposal (no more than 50 tonnes per day), or recovery. There shall be no treatment of hazardous wastes or wastes specified in Table S2.5, other than bulking up for onward transport. Treatment of all non-hazardous wastes shall be on an impermeable surface with sealed drainage. Asbestos waste shall be stored within clearly identified segregated, secure lockable containers on an impermeable surface with sealed drainage and where not accepted on to the site within already secured containers, shall be double bagged. Waste types as specified in Tables S2.4 and S2.5. Notwithstanding the waste types permitted in table S2.4 and S2.5 wastes which have any of the following characteristics shall not be accepted; - wastes consisting solely or mainly of dusts or powders - wastes which are odour producing or likely to be odourous - wastes consisting of or contaminated with Japanese Knotweed.
A5 Soil Processing activity		**R13**: Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced) **D15:** Storage pending any of the operations numbered D1 – D14	Storage of all non-hazardous wastes shall be on an impermeable surface with sealed drainage, unless otherwise agreed in writing with the Natural Resources Wales Maximum storage shall not exceed 100,000 tonnes at any one time.

Table S1.1 activities			
Activity reference	**Activity listed in Schedule 1 of the EP Regulations**	**Description of specified activity and WFD Annex I and II operations**	**Limits of specified activity and waste types**
		R3: Recycling/ reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes) **R5:** Recycling/ reclamation of other inorganic materials	No waste shall be stored or spread within 10 metres of a reen or ditch and no trafficking of vehicles should occur within this buffer zone. The buffer zones should be clearly defined with a fence or bund. Waste shall not be stored to a height greater than 4 metres and spread to a depth not exceeding 300mm, unless otherwise agreed in writing with Natural Resources Wales. Maximum storage time of one year prior to disposal or three years prior to recovery. Treatment consisting only of: - physical sorting or separation of waste into different components - screening - blending - crushing of waste for recovery only. Treatment of all non-hazardous wastes shall be on an impermeable surface with sealed drainage unless otherwise agreed in writing with the Natural Resources Wales, as set out in pre-operational. Waste types as specified in Table S2.6 Notwithstanding the waste types permitted in table S2.6 wastes which have any of the following characteristics shall not be accepted; - hazardous wastes - wastes consisting solely or mainly of dusts or powders - wastes which are odour producing or likely to be odourous - wastes consisting of or contaminated with Japanese Knotweed.
A6: Wood processing activity		**R13**: Storage of wastes pending any of the operations numbered R1 to R12 (excluding	Storage of all non-hazardous wastes prior to treatment shall be on an impermeable surface with sealed drainage.

Table S1.1 activities			
Activity reference	**Activity listed in Schedule 1 of the EP Regulations**	**Description of specified activity and WFD Annex I and II operations**	**Limits of specified activity and waste types**
		temporary storage, pending collection, on the site where it is produced) **D15:** Storage pending any of the operations numbered D1 – D14 **R3:** Recycling/ reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes) **R4**: Recycling/ reclamation of metals and metal compounds **R5:** Recycling/ reclamation of other inorganic materials	No waste shall be stored within 10 metres of a reen or ditch and no trafficking of vehicles should occur within this buffer zone. The buffer zones should be clearly defined with a fence or bund. Treatment consisting only of: - manual and mechanical sorting -manual and mechanical (overband magnet and eddy current) separation - cutting - pulverising - shredding - chipping - screening of wood waste for recovery only. Treatment of all non-hazardous wastes shall be on an impermeable surface with sealed drainage. No waste shall be treated within 10 metres of a reen or ditch and no trafficking of vehicles should occur within this buffer zone. Waste types as specified in Table S2.7 Notwithstanding the waste types permitted in table S2.7 wastes which have any of the following characteristics shall not be accepted; - hazardous wastes - wastes consisting solely or mainly of dusts or powders - wastes which are odour producing or likely to be odourous.

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Response to Schedule 5 Notice dated 04/11/11	Odour management plan reference JER5040	06/01/12

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Variation Application EPR/PP3993VS/V007	Response to Part C3 Q3a Technical Standards - Technical Guidance Document: 'How to comply with your environmental permit' Response to Part C3 Q3a Technical Standards – Environmental Permitting Guidance The Waste Framework Directive, DEFRA March 2010 Response to Part C3 Q3a Technical Standards – Sector Guidance Note S5.06: Guidance on the Recovery and Disposal of Hazardous and Non-Hazardous Waste For the SWCP, the application also includes a description of: Co-incineration capacity The waste feed cessation system Start-up and shut-down Temperature monitoring in the combustion chamber Energy recovery from the SWCP Energy Efficiency Temperature, oxygen, water vapour an dpressure at Air release sampling points	01/06/17
Response to schedule 5 notice dated 14/12/18	Response to Part C3 Q3a Technical Standards - Fire Prevention and Mitigation Plan Guidance Waste Management Response to Part C3 Q3a Technical Standards - Best Available Techniques (BAT) conclusions for waste treatment, under Directive 2010/75/EU of the European Parliament and of the Council Response to Part C3 Q3a Technical Standards - R JCD0170 FB OperatingTechniques v2 – Appendix 4	18/01/19
Email received	Clarification of waste types, emissions and storage	15/10/2019
Additional information received	Waste Water treatment Procedure, document reference IMS14-08	27/01/2020

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
1	Submit the relevant section(s) of the updated management system (required in condition 1.1.1) for the soil and aggregate processing activity to demonstrate how you will comply with the updated, outcome focused conditions in the consolidated permit, in particular, condition 1.2 - Avoidance, recovery and disposal of wastes produced by the activities. The updated Environmental Management System should include information on, but not limited to: - detailed process descriptions of the activity - suitability of the wastes to be treated via the prescribed method - how wastes that are deemed unsuitable to be treated via the prescribed method will be processed through the site - pollution prevention measures - how the wastes are tracked and monitored whilst on site and undergoing treatment - reporting process for confirming end of waste status for each process product recovered for re-use on or off site.	Completed
IC2	The Operator shall submit a written report to Natural Resources Waleas on the commissioning of the installation. The report shall summarise the environmental performance of the plant as installed against the design parameters set out in the Application. The report shall also include a review of the performance of the facility against the conditions of this permit and details of procedures developed during commissioning for achieving and demonstrating compliance with permit conditions and confirm that the Environmental Management System (EMS) has been updated accordingly.	Within 4 months of the completion of commissioning.
IC3	The operator shall notify Natural Resources Wales of the proposed date(s) that validation testing is planned for.	Notification at least 3 weeks prior to validation testing
IC4	During commissioning the operator shall carry out validation testing to validate the residence time, minimum temperature and oxygen content of the gases in the furnace whilst operating under normal load and most unfavourable operating conditions. The validation shall be to the methodology as approved through pre-operational condition PO4.	Validation tests completed before the end of commissioning
IC5	The Operator shall submit a written report to Natural Resources Wales describing the performance and optimisation of: • The Selective Non Catalytic Reduction (SNCR) system and combustion settings to minimise oxides of nitrogen (NOx).The report shall include an assessment of the level of NOx, N_2O and NH_3 emissions that can be achieved under optimum operating conditions...	Within 4 months of the completion of commissioning.

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC6	The Operator shall submit a written summary report to Natural Resources Wales to confirm that the performance of Continuous Emission Monitors for parameters as specified in Table S3.1 and Table S3.1(a) complies with the requirements of BS EN 14181, specifically the requirements of QAL1, QAL2 and QAL3. The report shall include the results of calibration and verification testing,	Initial calibration report to be submitted to the Natural Resources Wales within 3 months of completion of commissioning. Full summary evidence compliance report to be submitted within 18 months of completion of commissioning.

Table S1.4 Pre-operational measures	
Reference	**Pre-operational measures**
PO1	Prior to the commencement of commissioning of the SWCP, the Operator shall submit to Natural Resources Wales, and obtain Natural Resources Wales's written approval to it, a protocol for the sampling and testing of incinerator bottom ash for the purposes of assessing its hazard status. Sampling and testing shall be carried out in accordance with the protocol as approved.
PO2	Prior to the commencement of commissioning of the SWCP, the Operator shall submit to Natural Resources Wales, and obtain Natural Resources Wales's written approval to it, a written commissioning plan for the SWCP, including timelines for completion, for approval by Natural Resources Wales. The commissioning plan shall include the expected emissions to the environment during the different stages of commissioning, the expected durations of commissioning activities and the actions to be taken to protect the environment and report to Natural Resources Wales in the event that actual emissions exceed expected emissions. Commissioning shall be carried out in accordance with the commissioning plan as approved.
PO3	At least one month prior to operation as a chapter IV SWCP plant, the operator shall submit a written report to Natural Resources Wales, and obtain Natural resources Wales's written approval to it, of the details of the computational fluid dynamic (CFD) modelling or other method as agreed in writing by Natural Resources Wales. The report shall explain how the furnace has been designed to comply with the residence time and temperature requirements as defined by Chapter IV and Annex VI of the IED whilst operating under normal load and the most unfavourable operating conditions (including minimum turn down and overload conditions), and that the design includes sufficient monitoring ports to support subsequent validation of these requirements during commissioning.
PO4	At least one month before the commencement of commissioning (or other date agreed in writing with Natural Resources Wales) the Operator shall submit, for approval by Natural Resources Wales, a methodology (having regard to Technical Report P4-100/TR Part 2 Validation of Combustion Conditions) to verify the residence time, minimum temperature and oxygen content of the gases in the furnace whilst operating under normal load, minimum turn down and overload conditions.

Schedule 2 - Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	**Specification**
Diesel	<0.1% sulphur content

Table S2.2 Waste types and quantities for refused derived fuel and solid recovered fuel processing	
Maximum Quantities The total quantity of waste accepted shall be less than 100,000 tonnes a year.	
Waste Code	**Description**
19	**WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE**
19 12	**wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified**
19 12 10	combustible waste (refuse derived fuel)
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11

Table S2.3 Waste types and quantities for for co-incineration in the SWCP	
Maximum Quantities The total quantity of waste accepted shall be less than 2,899 tonnes a year	
02	**WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING**
02 01	**wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing**
02 01 07	wastes from forestry
03	**WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD**
03 01	**wastes from wood processing and the production of panels and furniture**
03 01 01	waste bark and cork
03 01 05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04
03 03	**wastes from pulp, paper and cardboard production and processing**
03 03 01	waste bark and wood
15	**WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED**
15 01	**packaging (including separately collected municipal packaging waste)**
15 01 03	wooden packaging

Table S2.3 Waste types and quantities for for co-incineration in the SWCP	
Maximum Quantities The total quantity of waste accepted shall be less than 2,899 tonnes a year	
17	**CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)**
17 02	**wood, glass and plastic**
17 02 01	wood
19	**WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE**
19 12	**wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified**
19 12 07	wood other than that mentioned in 19 12 06
20	**MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS**
20 01	**separately collected fractions (except 15 01)**
20 01 38	wood other than that mentioned in 20 01 37
20 02	**garden and park wastes (including cemetery waste)**
20 02 01	biodegradable waste

Table S2.4 Waste types and quantities for waste transfer station with treatment	
Maximum Quantities The total quantity of waste accepted in total shall be less than 112,000 tonnes a year.	
01	**WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS**
01 04	**wastes from physical and chemical processing of non-metalliferous minerals**
01 04 09	waste sand and clays
02	**WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING**
02 01	**wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing**
02 01 07	wastes from forestry
02 01 10	waste metal
02 03	**wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation**
02 03 04	materials unsuitable for consumption or processing
02 04	**wastes from sugar processing**
02 04 01	soil from cleaning and washing beet
02 04 02	off-specification calcium carbonate
03	**WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD**
03 01	**wastes from wood processing and the production of panels and furniture**

Table S2.4 Waste types and quantities for waste transfer station with treatment	
Maximum Quantities The total quantity of waste accepted in total shall be less than 112,000 tonnes a year.	
03 01 01	waste bark and cork
03 01 05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04
03 03	**wastes from pulp, paper and cardboard production and processing**
03 03 01	waste bark and wood
03 03 07	mechanically separated rejects from pulping of waste paper and cardboard
03 03 08	wastes from sorting of paper and cardboard destined for recycling
04	**WASTES FROM THE LEATHER, FUR AND TEXTILE INDUSTRIES**
04 01	**wastes from the leather and fur industry**
04 01 08	waste tanned leather (blue sheetings, shavings, cuttings, buffing dust) containing chromium
04 01 09	wastes from dressing and finishing
04 02	**wastes from the textile industry**
04 02 21	wastes from unprocessed textile fibres
04 02 22	wastes from processed textile fibres
07	**WASTES FROM ORGANIC CHEMICAL PROCESSES**
07 02	**wastes from the MFSU of plastics, synthetic rubber and man-made fibres**
07 02 13	waste plastic
09	**WASTES FROM THE PHOTOGRAPHIC INDUSTRY**
09 01	**wastes from the photographic industry**
09 01 07	photographic film and paper containing silver or silver compounds
09 01 08	photographic film and paper free of silver or silver compounds
09 01 12	single-use cameras containing batteries other than those mentioned in 09 01 11
10	**WASTES FROM THERMAL PROCESSES**
10 03	**wastes from aluminium thermal metallurgy**
10 03 02	anode scraps
10 03 05	waste alumina
10 03 16	skimmings other than those mentioned in 10 03 15
10 03 18	carbon-containing wastes from anode manufacture other than those mentioned in 10 03 17
11	**WASTES FROM CHEMICAL SURFACE TREATMENT AND COATING OF METALS AND OTHER MATERIALS; NON-FERROUS HYDRO-METALLURGY**
11 05	**wastes from hot galvanising processes**
11 05 01	hard zinc
15	**WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED**
15 01	**packaging (including separately collected municipal packaging waste)**
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 03	wooden packaging
15 01 04	metallic packaging

Table S2.4 Waste types and quantities for waste transfer station with treatment	
Maximum Quantities The total quantity of waste accepted in total shall be less than 112,000 tonnes a year.	
15 01 05	composite packaging
15 01 06	mixed packaging
15 01 07	glass packaging
15 01 09	textile packaging
15 02	**absorbents, filter materials, wiping cloths and protective clothing**
15 02 03	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02
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 03	end-of-life tyres
16 02	**wastes from electrical and electronic equipment**
16 02 14	discarded equipment other than those mentioned in 16 02 09 to 16 02 13
16 02 16	components removed from discarded equipment other than those mentioned in 16 02 15
16 03	**off-specification batches and unused products**
16 03 04	inorganic wastes other than those mentioned in 16 03 03
16 03 06	organic wastes other than those mentioned in 16 03 05
16 06	**batteries and accumulators**
16 06 04	alkaline batteries (except 16 06 03)
16 06 05	other batteries and accumulators
17	**CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)**
17 01	**concrete, bricks, tiles and ceramics**
17 01 01	concrete
17 01 02	Bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02	**wood, glass and plastic**
17 02 01	wood
17 02 02	glass
17 02 03	plastic
17 03	**bituminous mixtures, coal tar and tarred products**
17 03 02	bituminous mixtures other than those mentioned in 17 03 01
17 04	**metals (including their alloys)**
17 04 01	copper, bronze, brass
17 04 02	aluminium
17 04 03	lead
17 04 04	zinc

Table S2.4 Waste types and quantities for waste transfer station with treatment	
Maximum Quantities The total quantity of waste accepted in total shall be less than 112,000 tonnes a year.	
17 04 05	iron and steel
17 04 06	tin
17 04 07	mixed metals
17 04 11	cables other than those mentioned in 17 04 10
17 05	**soil (including excavated soil from contaminated sites), stones and dredging spoil**
17 05 04	soil and stones other than those mentioned in 17 05 03
17 06	**insulation materials and asbestos-containing construction materials**
17 06 04	insulation materials other than those mentioned in 17 06 01 and 17 06 03
17 09	**other construction and demolition wastes**
17 09 04	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03
19	**WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE**
19 02	**wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)**
19 02 03	premixed wastes composed only of non-hazardous wastes
19 02 10	combustible wastes other than those mentioned in 19 02 08 and 19 02 09
19 04	**vitrified waste and wastes from vitrification**
19 04 01	vitrified waste
19 05	**wastes from aerobic treatment of solid wastes**
19 05 01	non-composted fraction of municipal and similar wastes
19 05 02	non-composted fraction of animal and vegetable waste
19 05 03	off-specification compost
19 10	**wastes from shredding of metal-containing wastes**
19 10 04	fluff-light fraction and dust other than those mentioned in 19 10 03
19 10 06	other fractions other than those mentioned in 19 10 05
19 12	**wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified**
19 12 01	paper and cardboard
19 12 02	ferrous metal
19 12 03	non-ferrous metal
19 12 04	plastic and rubber
19 12 05	glass
19 12 07	wood other than that mentioned in 19 12 06
19 12 08	textiles
19 12 09	minerals (for example sand, stones)
19 12 10	combustible waste (refuse derived fuel)
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11

Table S2.4 Waste types and quantities for waste transfer station with treatment	
Maximum Quantities The total quantity of waste accepted in total shall be less than 112,000 tonnes a year.	
20	**MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS**
20 01	**separately collected fractions (except 15 01)**
20 01 01	paper and cardboard
20 01 02	glass
20 01 08	biodegradable kitchen and canteen waste
20 01 10	clothes
20 01 11	textiles
20 01 34	batteries and accumulators other than those mentioned in 20 01 33
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	plastics
20 01 40	metals
20 02	**garden and park wastes (including cemetery waste)**
20 02 01	biodegradable waste
20 02 02	soil and stones
20 03	**other municipal wastes**
20 03 01	mixed municipal waste
20 03 02	waste from markets
20 03 07	bulky waste

Table S2.5 Waste types and quantities for waste transfer station – storage only	
Maximum Quantities The total quantity of waste accepted shall be less than 18,000 tonnes a year.	
Waste Code	**Description**
01	**WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS**
01 01	**wastes from mineral excavation**
01 01 01	wastes from mineral metalliferous excavation
01 01 02	wastes from mineral non-metalliferous excavation
01 03	**wastes from physical and chemical processing of metalliferous minerals**
01 03 06	tailings other than those mentioned in 01 03 04 and 01 03 05
01 03 08	dusty and powdery wastes other than those mentioned in 01 03 07
01 03 09	red mud from alumina production other than the wastes mentioned in 01 03 07
01 04	**wastes from physical and chemical processing of non-metalliferous minerals**
01 04 11	wastes from potash and rock salt processing other than those mentioned in 01 04 07
01 04 12	tailings and other wastes from washing and cleaning of minerals other than those mentioned in 01 04 07 and 01 04 11

Table S2.5 Waste types and quantities for waste transfer station – storage only	
Maximum Quantities The total quantity of waste accepted shall be less than 18,000 tonnes a year.	
Waste Code	**Description**
01 04 13	wastes from stone cutting and sawing other than those mentioned in 01 04 07
02	**WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING**
02 01	**wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing**
02 01 01	sludges from washing and cleaning
02 03	**wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation**
02 03 01	sludges from washing, cleaning, peeling, centrifuging and separation
02 03 04	materials unsuitable for consumption or processing
02 05	**wastes from the dairy products industry**
02 05 01	materials unsuitable for consumption or processing
02 06	**wastes from the baking and confectionery industry**
02 06 01	materials unsuitable for consumption or processing
02 06 02	wastes from preserving agents
02 07	**wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)**
02 07 01	wastes from washing, cleaning and mechanical reduction of raw materials
02 07 02	wastes from spirits distillation
02 07 04	materials unsuitable for consumption or processing
03	**WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD**
03 03	**wastes from pulp, paper and cardboard production and processing**
03 03 10	fibre rejects, fibre-, filler- and coating-sludges from mechanical separation
03 03 11	sludges from on-site effluent treatment other than those mentioned in 03 03 10
06	**WASTES FROM INORGANIC CHEMICAL PROCESSES**
06 09	**wastes from the MSFU of phosphorous chemicals and phosphorous chemical processes**
06 09 02	phosphorous slag
06 09 04	calcium-based reaction wastes other than those mentioned in 06 09 03
06 11	**wastes from the manufacture of inorganic pigments and opacificiers**
06 11 01	calcium-based reaction wastes from titanium dioxide production
08	**WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS**
08 01	**wastes from MFSU and removal of paint and varnish**
08 01 12	waste paint and varnish other than those mentioned in 08 01 11
08 01 18	wastes from paint or varnish removal other than those mentioned in 08 01 17
10	**WASTES FROM THERMAL PROCESSES**

Table S2.5 Waste types and quantities for waste transfer station – storage only	
Maximum Quantities The total quantity of waste accepted shall be less than 18,000 tonnes a year.	
Waste Code	**Description**
10 01	**wastes from power stations and other combustion plants (except 19)**
10 01 01	bottom ash, slag and boiler dust (excluding boiler dust mentioned in 10 01 04)
10 01 02	coal fly ash
10 01 03	fly ash from peat and untreated wood
10 01 05	calcium-based reaction wastes from flue-gas desulphurisation in solid form
10 01 07	calcium-based reaction wastes from flue-gas desulphurisation in sludge form
10 01 15	bottom ash, slag and boiler dust from co-incineration other than those mentioned in 10 01 14
10 01 17	fly ash from co-incineration other than those mentioned in 10 01 16
10 01 19	wastes from gas cleaning other than those mentioned in 10 01 05, 10 01 07 and 10 01 18
10 01 24	sands from fluidised beds
10 01 26	wastes from cooling-water treatment
10 02	**wastes from the iron and steel industry**
10 02 01	wastes from the processing of slag
10 02 02	unprocessed slag
10 02 08	solid wastes from gas treatment other than those mentioned in 10 02 07
10 02 10	mill scales
10 02 12	wastes from cooling-water treatment other than those mentioned in 10 02 11
10 02 14	sludges and filter cakes from gas treatment other than those mentioned in 10 02 13
10 02 15	other sludges and filter cakes
10 03	**wastes from aluminium thermal metallurgy**
10 03 20	flue-gas dust other than those mentioned in 10 03 19
10 03 22	other particulates and dust (including ball-mill dust) other than those mentioned in 10 03 21
10 03 24	solid wastes from gas treatment other than those mentioned in 10 03 23
10 03 26	sludges and filter cakes from gas treatment other than those mentioned in 10 03 25
10 03 28	wastes from cooling-water treatment other than those mentioned in 10 03 27
10 03 30	wastes from treatment of salt slags and black drosses other than those mentioned in 10 03 29
10 04	**wastes from lead thermal metallurgy**
10 04 10	wastes from cooling-water treatment other than those mentioned in 10 04 09
10 05	**wastes from zinc thermal metallurgy**
10 05 01	slags from primary and secondary production
10 05 04	other particulates and dust
10 05 09	wastes from cooling-water treatment other than those mentioned in 10 05 08
10 05 11	dross and skimmings other than those mentioned in 10 05 10
10 06	**wastes from copper thermal metallurgy**
10 06 01	slags from primary and secondary production
10 06 02	dross and skimmings from primary and secondary production

Table S2.5 Waste types and quantities for waste transfer station – storage only

Maximum Quantities

The total quantity of waste accepted shall be less than 18,000 tonnes a year.

Waste Code	Description
10 06 04	other particulates and dust
10 06 10	wastes from cooling-water treatment other than those mentioned in 10 06 09
10 07	**wastes from silver, gold and platinum thermal metallurgy**
10 07 01	slags from primary and secondary production
10 07 02	dross and skimmings from primary and secondary production
10 07 03	solid wastes from gas treatment
10 07 04	other particulates and dust
10 07 05	sludges and filter cakes from gas treatment
10 07 08	wastes from cooling-water treatment other than those mentioned in 10 07 07
10 08	**wastes from other non-ferrous thermal metallurgy**
10 08 04	particulates and dust
10 08 09	other slags
10 08 11	dross and skimmings other than those mentioned in 10 08 10
10 08 13	carbon-containing wastes from anode manufacture other than those mentioned in 10 08 12
10 08 14	anode scrap
10 08 16	flue-gas dust other than those mentioned in 10 08 15
10 08 18	sludges and filter cakes from flue-gas treatment other than those mentioned in 10 08 17
10 08 20	wastes from cooling-water treatment other than those mentioned in 10 08 19
10 09	**wastes from casting of ferrous pieces**
10 09 03	furnace slag
10 09 06	casting cores and moulds which have not undergone pouring other than those mentioned in 10 09 05
10 09 08	casting cores and moulds which have undergone pouring other than those mentioned in 10 09 07
10 09 10	flue-gas dust other than those mentioned in 10 09 09
10 09 12	other particulates other than those mentioned in 10 09 11
10 09 14	waste binders other than those mentioned in 10 09 13
10 09 16	waste crack-indicating agent other than those mentioned in 10 09 15
10 10	**wastes from casting of non-ferrous pieces**
10 10 03	furnace slag
10 10 06	casting cores and moulds which have not undergone pouring, other than those mentioned in 10 10 05
10 10 08	casting cores and moulds which have undergone pouring, other than those mentioned in 10 10 07
10 10 10	flue-gas dust other than those mentioned in 10 10 09
10 10 12	other particulates other than those mentioned in 10 10 11
10 10 14	waste binders other than those mentioned in 10 10 13
10 10 16	waste crack-indicating agent other than those mentioned in 10 10 15

Table S2.5 Waste types and quantities for waste transfer station – storage only	
Maximum Quantities The total quantity of waste accepted shall be less than 18,000 tonnes a year.	
Waste Code	**Description**
10 11	**wastes from manufacture of glass and glass products**
10 11 03	waste glass-based fibrous materials
10 11 05	particulates and dust
10 11 10	waste preparation mixture before thermal processing, other than those mentioned in 10 11 09
10 11 12	waste glass other than those mentioned in 10 11 11
10 11 16	solid wastes from flue-gas treatment other than those mentioned in 10 11 15
10 11 18	sludges and filter cakes from flue-gas treatment other than those mentioned in 10 11 17
10 12	**wastes from manufacture of ceramic goods, bricks, tiles and construction products**
10 12 01	waste preparation mixture before thermal processing
10 12 03	particulates and dust
10 12 05	sludges and filter cakes from gas treatment
10 12 06	discarded moulds
10 12 08	waste ceramics, bricks, tiles and construction products (after thermal processing)
10 12 10	solid wastes from gas treatment other than those mentioned in 10 12 09
10 12 12	wastes from glazing other than those mentioned in 10 12 11
10 12 13	sludge from on-site effluent treatment
10 13	**wastes from manufacture of cement, lime and plaster and articles and products made from them**
10 13 01	waste preparation mixture before thermal processing
10 13 04	wastes from calcination and hydration of lime
10 13 06	particulates and dust (except 10 13 12 and 10 13 13)
10 13 07	sludges and filter cakes from gas treatment
10 13 10	wastes from asbestos-cement manufacture other than those mentioned in 10 13 09
10 13 13	solid wastes from gas treatment other than those mentioned in 10 13 12
11	**WASTES FROM CHEMICAL SURFACE TREATMENT AND COATING OF METALS AND OTHER MATERIALS; NON-FERROUS HYDRO-METALLURGY**
11 01	**wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphatising, alkaline degreasing, anodising)**
11 01 10	sludges and filter cakes other than those mentioned in 11 01 09
11 01 14	degreasing wastes other than those mentioned in 11 01 13
11 02	wastes from non-ferrous hydrometallurgical processes
11 02 03	wastes from the production of anodes for aqueous electrolytical processes
11 02 06	wastes from copper hydrometallurgical processes other than those mentioned in 11 02 05
11 05	**wastes from hot galvanising processes**
11 05 02	zinc ash

Table S2.5 Waste types and quantities for waste transfer station – storage only	
Maximum Quantities The total quantity of waste accepted shall be less than 18,000 tonnes a year.	
Waste Code	**Description**
12	**WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS**
12 01	**wastes from shaping and physical and mechanical surface treatment of metals and plastics**
12 01 01	ferrous metal filings and turnings
12 01 03	non-ferrous metal filings and turnings
12 01 04	non-ferrous metal dust and particles
12 01 05	plastics shavings and turnings
12 01 13	welding wastes
12 01 15	machining sludges other than those mentioned in 12 01 14
12 01 17	waste blasting material other than those mentioned in 12 01 16
12 01 21	spent grinding bodies and grinding materials other than those mentioned in 12 01 20
15	**WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED**
15 02	**absorbents, filter materials, wiping cloths and protective clothing**
15 02 03	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02
16	**WASTES NOT OTHERWISE SPECIFIED IN THE LIST**
16 11	**waste linings and refractories**
16 11 02	carbon-based linings and refractories from metallurgical processes others than those mentioned in 16 11 01
16 11 04	other linings and refractories from metallurgical processes other than those mentioned in 16 11 03
16 11 06	linings and refractories from non-metallurgical processes others than those mentioned in 16 11 05
17	**CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)**
17 05	**soil (including excavated soil from contaminated sites), stones and dredging spoil**
17 05 06	dredging spoil other than those mentioned in 17 05 05
17 05 08	track ballast other than those mentioned in 17 05 07
17 06	**insulation materials and asbestos-containing construction materials**
17 06 01*	insulation materials containing asbestos
17 06 05*	construction materials containing asbestos[1]
17 08	**gypsum-based construction material**
17 08 02	gypsum-based construction materials other than those mentioned in 17 08 01

Table S2.5 Waste types and quantities for waste transfer station – storage only	
Maximum Quantities The total quantity of waste accepted shall be less than 18,000 tonnes a year.	
Waste Code	**Description**
19	**WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE**
19 01	**wastes from incineration or pyrolysis of waste**
19 01 02	ferrous materials removed from bottom ash
19 01 12	bottom ash and slag other than those mentioned in 19 01 11
19 01 14	fly ash other than those mentioned in 19 01 13
19 01 16	boiler dust other than those mentioned in 19 01 15
19 01 18	pyrolysis wastes other than those mentioned in 19 01 17
19 01 19	sands from fluidised beds
19 08	**wastes from waste water treatment plants not otherwise specified**
19 08 01	screenings
19 08 02	waste from desanding
19 08 05	sludges from treatment of urban waste water
19 08 12	sludges from biological treatment of industrial waste water other than those mentioned in 19 08 11
19 08 14	sludges from other treatment of industrial waste water other than those mentioned in 19 08 13
19 09	**wastes from the preparation of water intended for human consumption or water for industrial use**
19 09 01	solid waste from primary filtration and screenings
19 13	**wastes from soil and groundwater remediation**
19 13 02	solid wastes from soil remediation other than those mentioned in 19 13 01
19 13 04	sludges from soil remediation other than those mentioned in 19 13 03
19 13 06	sludges from groundwater remediation other than those mentioned in 19 13 05
20	**MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS**
20 01	**wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing**
20 01 23*	discarded equipment containing chlorofluorocarbons
20 01 99	other fractions not otherwise specified
20 03	**other municipal wastes**
20 03 03	street-cleaning residues

Table S2.6 Waste types and quantities for soil processing	
Maximum Quantities The total quantity of waste accepted shall be less than 30,000 tonnes a year.	
Waste Code	**Description**
01	**WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS**
01 04	**wastes from physical and chemical processing of non-metalliferous minerals**
01 04 09	waste sand and clays
02	**WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING**
02 01	**wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing**
02 01 07	wastes from forestry
02 04	**wastes from sugar processing**
02 04 01	soil from cleaning and washing beet
02 04 02	off-specification calcium carbonate
17	**CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)**
17 05	**soil (including excavated soil from contaminated sites), stones and dredging spoil**
17 05 04	soil and stones other than those mentioned in 17 05 03
19	**WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE**
19 12	**wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified**
19 12 09	minerals (for example sand, stones)
19 13	**wastes from soil and groundwater remediation**
19 13 02	solid wastes from soil remediation other than those mentioned in 19 13 01
20	**MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS**
20 02	**garden and park wastes (including cemetery waste)**
20 02 02	soil and stones

Table S2.7 Waste types and quantities for wood processing	
Maximum Quantities The total quantity of waste accepted shall be less than 75,000 tonnes a year.	
Waste Code	**Description**
02	**WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING**
02 01	**wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing**
02 01 07	wastes from forestry
03	**WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD**
03 01	**wastes from wood processing and the production of panels and furniture**
03 01 01	waste bark and cork
03 01 05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04
03 03	**wastes from pulp, paper and cardboard production and processing**
03 03 01	waste bark and wood
15	**WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED**
15 01	**packaging (including separately collected municipal packaging waste)**
15 01 03	wooden packaging
17	**CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)**
17 02	**wood, glass and plastic**
17 02 01	wood
19	**WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE**
19 12	**wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified**
19 12 07	wood other than that mentioned in 19 12 06
20	**MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS**
20 01	**separately collected fractions (except 15 01)**
20 01 38	wood other than that mentioned in 20 01 37
20 02	**garden and park wastes (including cemetery waste)**
20 02 01	biodegradable waste

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements

Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 as shown on plan referenced JCD0170-PER-002	Small waste wood co-incinerator	Particulate matter	15 mg/m^3	Daily average	Continuous	BS EN 14181
		Particulate matter	45 mg/m^3	½ hour average	Continuous	BS EN 14181
		Total Organic Carbon	15 mg/m^3	Daily average	Continuous	BS EN 14181
		Total Organic Carbon	30 mg/m^3	½ hour average	Continuous	BS EN 14181
		Hydrogen chloride	15 mg/m^3	Daily average	Continuous	BS EN 14181
		Hydrogen chloride	90 mg/m^3	½ hour average	Continuous	BS EN 14181
		Hydrogen fluoride	3 mg/m^3	Periodic over minimum 1-hour period	Quarterly in first year, then twice per year	BS ISO 15713
		Carbon monoxide	75 mg/m^3	Daily average	Continuous	BS EN 14181
		Carbon monoxide	150 mg/m^3	½ hour average	Continuous	BS EN 14181
		Sulphur dioxide	75 mg/m^3	Daily average	Continuous	BS EN 14181
		Sulphur dioxide	300 mg/m^3	½ hour average	Continuous	BS EN 14181
		Oxides of Nitrogen (NO and NO_2, expressed as NO_2)	300 mg/m^3	Daily average	Continuous	BS EN 14181
		Oxides of Nitrogen (NO and NO_2, expressed as NO_2)	600 mg/m^3	½ hour average	Continuous	BS EN 14181
A1 as shown on plan referenced JCD0170-PER-002	Small waste wood co-incinerator	Cadmium & thallium and their compounds (total)	0.05 mg/m^3	Periodic over minimum 30 minute, maximum 8 hour period	Quarterly in first year, then twice per year	BS EN 14385

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
		Mercury and its compounds expressed as mercury (Hg)	0.05 mg/m^3	Periodic over minimum 30 minute maximum 8 hour period	Quarterly in first year, then twice per year	BS EN 13211
		Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total)	0.5 mg/m^3	Periodic over minimum 30 minute, maximum 8 hour period	Quarterly in first year, then twice per year	BS EN 14385
		Ammonia (NH_3)	No limit set	periodic over minimum 1-hour period	Quarterly in first year, then twice per year	Procedural requirements of BS EN 14791
		Nitrous oxide (N_2O)	No limit set	periodic over minimum 1-hour period	Quarterly in first year, then twice per year	BS EN ISO 21258
		Dioxins / Furans (I-TEQ)	0.1 ng/m^3	Periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year, then twice per year	BS EN 1948 Parts 1, 2, and 3
		Dioxins / furans (WHO-TEQ Humans / Mammals)	No limit set	Periodic over mimimum 6 hours, maximum 8 hour period	Quarterly in first year, then twice per year	BS EN 1948 Parts 1, 2, and 3
		Dioxins / furans (WHO-TEQ Fish)				
		Dioxins / furans (WHO-TEQ Birds)				
		Dioxin-like PCBs (WHO-TEQ Humans / Mammals)	No limit set	Periodic over mimimum 6 hours, maximum 8 hour period	Quarterly in first year, then twice per year	BS EN 1948-4
		Dioxin-like PCBs (WHO-TEQ Fish)				
		Dioxin-like PCBs (WHO-TEQ Birds)				

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A1 as shown on plan referenced JCD0170-PER-002	Small waste wood co-incinerator	Specific individual poly-cyclic aromatic hydrocarbons (PAHs), as specified in Schedule 6	No limit set	Periodic over mimimum 6 hours, maximum 8 hour period	Quarterly in first year, then twice per year	Procedure shall use BS ISO 11338-1 and BS-ISO 11338-2

Table S3.1(a) Point source emissions to air during abnormal operation of co-incineration plant – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A1 as shown on plan referenced JCD0170-PER-002	Particulate matter	Small waste wood co-incinerator	225 mg/m^3	½-hr average	Continuous measurement	BS EN 14181 during abatement plant failure
	Total Organic Carbon (TOC)		30 mg/m^3	½-hr average	Continuous measurement	BS EN 14181 during abatement plant failure
	Carbon monoxide		150 mg/m^3	½-hr average	Continuous measurement	BS EN 14181 during abatement plant failure

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
D2 as shown on the Drawing at schedule 7 of this permit	Temperature	Surface water drainage	To be within 2 degrees of the temperature at monitoring point SW09 at the time of discharge. Note, point SW09 is defined on plan referenced JCD0170-PER-002	Spot sample	Prior to each discharge	To be agreed in writing with Natural Resources Wales
	pH		6.8 – 8.5	Continuous	Monthly	In line with monitoring plan as agreed by Natural Resources Wales.
	Total oxidised Nitrogen		2 mg/l			
	Nitrite		1 mg/l			
	Nitrate		1 mg/l			
	Ammonicial Nitrogen		1 mg/l on one occasion 0.5 mg/l on four consecutive occasions			
	Chloride		300mg/l			
	Electrical conductivity		2000 microS/cm			
	BOD (biological Oxygen demand)		18 mg/l on one occasion 10+ mg/l on three consecutive samples			

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
	Dissolved Oxygen levels		2 mg/l on one occasion Less than 5 mg/l in 3 consecutive samples			
	Total suspended solids		250 mg/l on one occasion 100 mg/l in 3 consecutive samples 60 mg/l in 4 consecutive samples			
	Total Petroleum Hydrocarbons C6-C40 Fully speciated total Petroleum Hydrocarbons		2 mg/l			
	Orthophosphate		1mg/1			
	Total Sulphate		300 mg/l			
	Total Cadmium		0.005 mg/l			
	Total Calcium		300 mg/l			
	Dissolved Nickel		0.1 mg/l			

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
	Dissolved Lead		0.25 mg/l			
	Total Zinc		1 mg/l			

Table S3.3 Process monitoring requirements				
Emission point reference or source or description of point of measurement	**Parameter**	**Monitoring frequency**	**Monitoring standard or method**	**Other specifications**
Location close to the Combustion Chamber inner wall or as identified and justified in Application.	Temperature (° C)	Continuous	Traceable to national standards	As agreed in writing with Natural Resources Wales.
A1	Exhaust gas temperature	Continuous	Traceable to national standards	As agreed in writing with Natural Resources Wales.
A1	Exhaust gas pressure	Continuous	Traceable to national standards	As agreed in writing with Natural Resources Wales.
A1	Exhaust gas oxygen content	Continuous	BS14181	-
A1	Exhaust gas water vapour content	Continuous	BS EN 14181	Unless gas is dried before analysis of emissions

Table S3.4 SWCP Residue Quality

Emission point reference or source or description of point of measurement	Parameter	Limit	Monitoring frequency	Monitoring standard or method *	Other specification
Bottom Ash	Total Organic Carbon (TOC)	<3%	Monthly in the first year of operation. Then Quarterly	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	None
Bottom Ash	Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs	No Limit Set	Monthly in the first year of operation. Then Quarterly	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	None
Bottom Ash	Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions	No Limit Set	Before use of a new disposal or recycling route	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	None
APC Residues	Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs	No Limit Set	Monthly in the first year of operation. Then Quarterly	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	None
APC Residues	Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions	No Limit Set	Before use of a new disposal or recycling route	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	None
* Or other equivalent standard as agreed in writing with Natural Resources Wales					

Schedule 4 - Reporting

Table S4.1 Reporting of monitoring data			
Parameter	**Emission or monitoring point/reference**	**Reporting period**	**Period begins**
Emissions to air Parameters as required by condition 3.6.1	A1	Quarterly	1 Jan, 1 Apr, 1 Jul and 1 Oct
Emissions to water Parameters as required by condition 3.6.1	D2 as per table S3.2	Monthly	01/03/12
Total Organic Carbon Parameters as required by condition 3.6.1	Bottom Ash (including boiler ash)	Quarterly (but monthly for the first year of operation)	1 Jan, 1 Apr, 1 Jul, and 1 Oct
Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs Parameters as required by condition 3.6.1	Bottom Ash (including boiler ash)	Quarterly (but monthly for the first year of operation)	1 Jan, 1 Apr, 1 Jul, and 1 Oct
Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions Parameters as required by condition 3.6.1	Bottom Ash (including boiler ash)	Before use of a new disposal or recycling route	-
Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs Parameters as required by condition 3.6.1	APC Residues	Quarterly (but monthly for the first year of operation)	1 Jan, 1 Apr, 1 Jul, and 1 Oct
Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions Parameters as required by condition 3.6.1	APC Residues	Before use of a new disposal or recycling route	-
Functioning and monitoring of the SWCP as required by condition 4.2.2	-	Annually	1 Jan

Table S4.2 Annual Production/Treatment	
Parameter	**Units**
Total production of RDF	tonnes
Total production of SRF	tonnes
Total waste wood co-incinerated in the SWCP	tonnes
Thermal energy produced by the SWCP	KWh
Thermal energy from the SWCP utilised by the installation	KWh

Table S4.3 SWCP Performance Parameters		
Parameter	**Frequency of Assessment**	**Units**
Diesel consumption	Annually	Kg/tonne
Waste wood	Annually	Kg/tonne of waste co-incinerated
Bottom Ash Residue	Annually	Route, tonnes and tonnes / tonne of waste incinerated
APC residue	Annually	Route, tonnes and tonnes / tonne of waste co-incinerated
Boiler Ash	Annually	Route, tonnes and tonnes / tonne of waste co-incinerated
Urea consumption	Annually	Kg / tonne of waste co-incinerated
Activated carbon consumption	Annually	Kg/ tonne of waste co-incinerated
Sodium Bicarbonate consumption	Annually	Kg/tonne of waste co-incinerated
Water consumption	Annually	Litres / tonne of wate co-incinerated
Periods of abnormal operation	Annually	No of occasions and cumulative hours for current calendar year for each time

Table S4.4 Reporting forms		
Media/parameter	**Reporting format**	**Date of form**
Air	Form Air 1 or other form as agreed in writing by Natural Resources Wales	XX/XX/20
Water	Form Water 1 or other form as agreed in writing by Natural Resources Wales	01/03/12
Residue quality	Form Residue 1 or other form as agreed in writing by Natural Resources Wales	Xx/xx/20
Other performance indicators	Form Performance 1 or other form as agreed in writing by Natural Resources Wales	XX/XX/20
Annual production and treatment	Form Performance 1 or other form as agreed in writing by Natural Resources Wales	XX/XX/20
Waste subject to condition 4.2.5	Waste tonnage return form from the Natural Resources Wales website or other form as agreed in writing by Natural Resources Wales	n/a

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

"abnormal operation" means any technically unavoidable stoppages, disturbances, or failures of the abatement plant or the measurement devices, during which the emissions into the air and the discharges of waste water may exceed the prescribed emission limit values.

"accident" means an accident that may result in pollution.

"Annex I" means Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

"Annex II" means Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

"APC residues" means air pollution control residues

"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 Natural Resources Wales 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 (BATRRT) and Treatment of Waste Electrical and Electronic Equipment (WEEE).

"bottom ash" means ash transported by the grate

"CEM" means continuous emission monitor

"CEN" means Commité Européen de Normalisation

"Co-incineration line" means all of the incineration equipment related to a common discharge to air location.

"Commissioning" means testing of the new co-incineration plant that involves any operation of the furnace

"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.

"daily average" for releases of substances to air means the average of valid half-hourly averages over a calendar day during normal operation

"*dioxins and furans"* means polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans.

"Disposal" means any of the operations 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.

"groundwater" means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

"hazardous property" has the meaning in Annex III of the Waste Framework Directive

"hazardous waste" has the meaning given in the Hazardous Waste (Wales) Regulations 2005 (as amended).

"impermeable surface" means a surface or pavement constructed and maintained to a standard sufficient to prevent the transmission of liquids beyond the surface.

"Industrial Emissions Directive" means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions.

"ISO" means International Standards Organisation.

"MCERTS" means the Environment Agency's Monitoring Certification Scheme.

"PAH" means Poly-cyclic aromatic hydrocarbon, and comprises Anthanthrene, Benzo[a]anthracene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Benzo[b]naph(2,1-d)thiophene, Benzo[c]phenanthrene, Benzo[ghi]perylene, Benzo[a]pyrene, Cholanthrene, Chrysene, Cyclopenta[c,d]pyrene, Dibenzo[ah]anthracene, Dibenzo[a,i]pyrene Fluoranthene, Indo[1,2,3-cd]pyrene, Naphthalene

"PCB" means Polychlorinated Biphenyl. Dioxin-like PCBs are the non-ortho and mono-ortho PCBs listed in the table below.

"Pests" means Birds, Vermin and Insects.

"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.

"recovery" means an of the operations provided for in Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

"shut down" is any period where a plant is being returned to a non-operational state and there is no waste being burned as agreed in writing with Natural Resources Wales.

"start up" is any period, where the plant has been non-operational, after igniting the auxiliary burner until waste has been fed to the plant in sufficient quantity to cover the grate and to initiate steady state conditions as described in the application or agreed in writing with Natural Resources Wales.

"TOC" means Total Organic Carbon. In respect of releases to air, this means the gaseous and vaporous organic substances, expressed as TOC. In respect of Bottom Ash, this means the total carbon content of all organic species present in the ash (excluding carbon in elemental form).

"Waste code" means the six digit code referable to a type of waste in accordance with the list of wastes established by Commission Decision 2000/532/EC as amended from time to time (the 'List of Wastes Decision') 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 2012/19/EU of the European Parliament and of the Council of 4th July 2012 on waste electrical and electronic equipment (WEEE).

"year" means calendar year ending 31 December.

Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

in relation to gases from co-incineration plants the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 6% dry

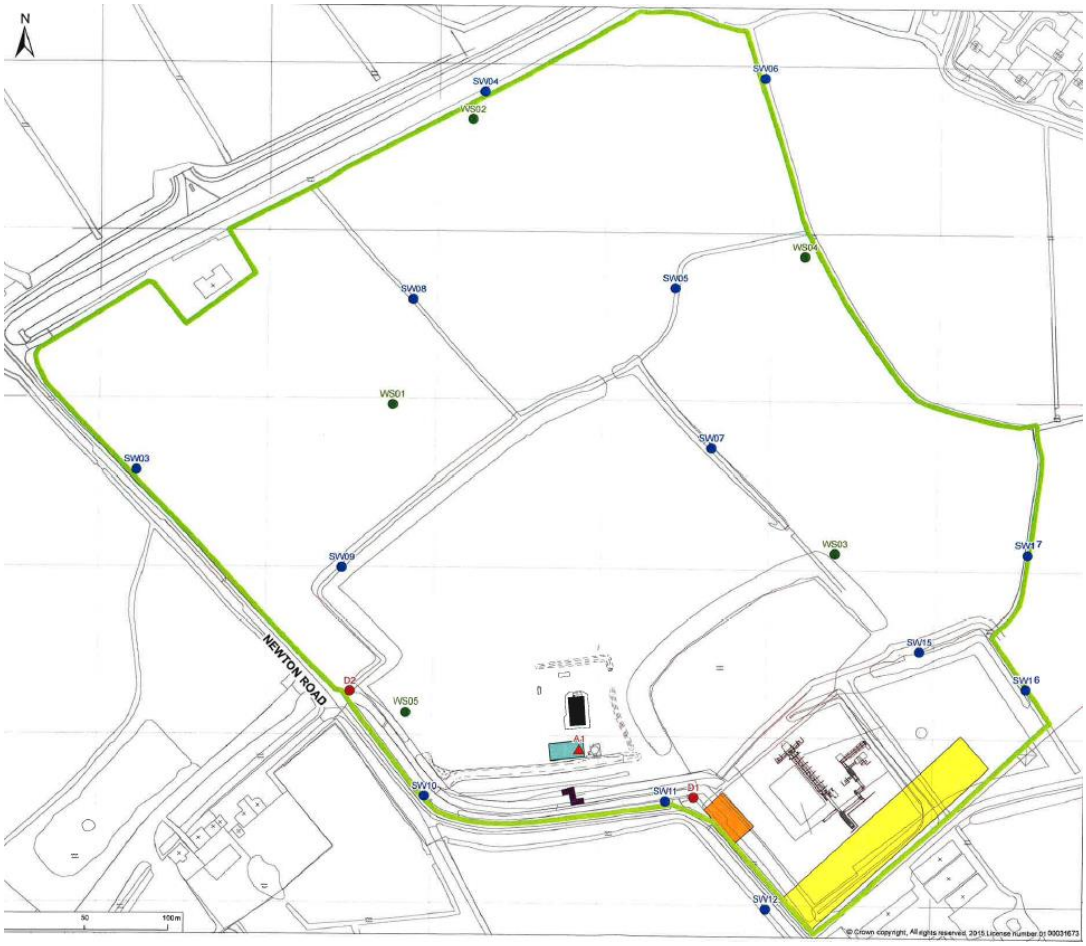
For dioxins/furans and dioxin-like PCBs the determination of the toxic equivalence concentration (I-TEQ, & WHO-TEQ for dioxins/furans, WHO-TEQ for dioxin-like PCBs) stated as a release limit and/ or reporting requirement, the mass concentrations of the following congeners have to be multiplied with their respective toxic equivalence factors before summing. When reporting on measurements of dioxins/furans and dioxin-like PCBs, the toxic equivalence concentrations should be reported as a range based on: all congeners less than the detection limit assumed to be zero as a minimum, and all congeners less than the detection limit assumed to be at the detection limit as a maximum. However the minimum value should be used when assessing compliance with the emission limit value in table S3.1.

TEF schemes for dioxins and furans				
Congener	**I-TEF**	**WHO-TEF**		
	1990	**2005**	**1997/8**	
		Humans / Mammals	**Fish**	**Birds**
Dioxins				
2,3,7,8-TCDD	1	1	1	1
1,2,3,7,8-PeCDD	0.5	1	1	1
1,2,3,4,7,8-HxCDD	0.1	0.1	0.5	0.05
1,2,3,6,7,8-HxCDD	0.1	0.1	0.01	0.01
1,2,3,7,8,9-HxCDD	0.1	0.1	0.01	0.1
1,2,3,4,6,7,8-HpCDD	0.01	0.01	0.001	<0.001
OCDD	0.001	0.0003	-	-
Furans				
2,3,7,8-TCDF	0.1	0.1	0.05	1
1,2,3,7,8-PeCDF	0.05	0.03	0.05	0.1
2,3,4,7,8-PeCDF	0.5	0.3	0.5	1
1,2,3,4,7,8-HxCDF	0.1	0.1	0.1	0.1
1,2,3,7,8,9-HxCDF	0.1	0.1	0.1	0.1
1,2,3,6,7,8-HxCDF	0.1	0.1	0.1	0.1
2,3,4,6,7,8-HxCDF	0.1	0.1	0.1	0.1
1,2,3,4,6,7,8_HpCDF	0.01	0.01	0.01	0.01

TEF schemes for dioxins and furans				
Congener	**I-TEF**	**WHO-TEF**		
	1990	**2005**	**1997/8**	
1,2,3,4,7,8,9-HpCDF	0.01	0.01	0.01	0.01
OCDF	0.001	0.0003	0.0001	0.0001

TEF schemes for dioxin-like PCBs			
Congener	**WHO-TEF**		
	2005	**1997/8**	
	Humans / mammals	**Fish**	**Birds**
Non-ortho PCBs			
3,4,4',5-TCB (81)	0.0001	0.0005	0.1
3,3',4,4'-TCB (77)	0.0003	0.0001	0.05
3,3',4,4',5 - PeCB (126)	0.1	0.005	0.1
3,3',4,4',5,5'-HxCB(169)	0.03	0.00005	0.001
Mono-ortho PCBs			
2,3,3',4,4'-PeCB (105)	0.00003	<0.000005	0.0001
2,3,4,4',5-PeCB (114)	0.00003	<0.000005	0.0001
2,3',4,4',5-PeCB (118)	0.00003	<0.000005	0.00001
2',3,4,4',5-PeCB (123)	0.00003	<0.000005	0.00001
2,3,3',4,4',5-HxCB (156)	0.00003	<0.000005	0.0001
2,3,3',4,4',5'-HxCB (157)	0.00003	<0.000005	0.0001
2,3',4,4',5,5'-HxCB (167)	0.00003	<0.000005	0.00001
2,3,3',4,4',5,5'-HpCB (189)	0.00003	<0.000005	0.00001

Schedule 7 - Site plan



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