

Planning and Environment Department

Environment Division

Howard Davis Farm, La Route de la Trinite

Trinity, Jersey, JE3 5JP

Tel: +44 (0)1534 441600

Fax: +44 (0)1534 441601



**Waste Management (Jersey) Law 2005
Waste Management Licence**

Licence Number: WML019

Facility Type: The Incineration of controlled waste in an incineration plant with energy recovery and a waste transfer station

The Minister for Planning and Environment (“the Regulator”), in accordance with Article 30 of the Waste Management (Jersey) Law 2005, hereby grants a Waste Management Licence to:

Licence holder: The Minister for Transport and Technical Services

Address: PO Box 412, States Offices, South Hill, St Helier, Jersey, JE4 8UY

This Waste Management Licence authorises the keeping, treatment, disposal or recovery of controlled waste to the extent authorised by and subject to the conditions of this licence on land at:

Site Address: Energy from Waste Facility,
La Collette Phase II Reclamation Site
La Collette, St. Helier,

shown edged in red on the site plan attached to this licence, Jersey mapping grid reference 4198064230.

Duly authorised for and on behalf of the Minister for Planning and Environment:

Signed William Peggie.

William Peggie

Director for Environment / Deputy Chief Officer

Date: 15 December 2010

Notes

This licence does not exempt the holder from obtaining any consent required by or from complying with any other statutory provisions or laws.

There is a right of appeal by the applicant for this waste management licence against any term or condition imposed by the Minister for Planning and Environment in granting this licence. Appeals should be lodged with the Royal Court within 21 days of being served with the licence, although the Royal Court may allow an appeal after the 21 days have expired. For more information on appeals under the Waste Management (Jersey) Law 2005 please contact Environmental Protection at the Planning & Environment Department.

Conditions

1. Statutory Conditions

- 1.1. The activities authorised by this waste management licence may not be undertaken unless the licence holder may lawfully use the land specified by the waste management licence for the activities.
- 1.2. The licence holder, where he is the owner of the land specified by this waste management licence, may not dispose of his interest in the land without first obtaining from his successor in title a written undertaking, in a form that is legally binding upon this successor in title, allowing the holder of this licence to carry out such future works on the land as the Planning and Environment Minister may under the Waste Management (Jersey) Law 2005 require him to carry out, for the avoidance of pollution arising from the licensed activity or for the protection of the environment.
- 1.3. A written undertaking made by the owner of the land specified by this waste management licence in accordance with Article 26(3) of the Waste Management (Jersey) Law 2005 or provided in accordance with conditions 1.2 of this waste management licence must remain legally binding until this waste management licence is revoked or surrendered in accordance with the Waste Management (Jersey) Law 2005.

2. Management

2.1. General management

- 2.1.1. The licence holder 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 licence holder as a result of complaints;
 - (b) using sufficient competent persons and resources; and
 - (c) which meets or exceeds the requirements of ISO14001 or an appropriate equivalent environmental management standard.
- 2.1.2. Records demonstrating compliance with condition 2.1.1 shall be maintained.
- 2.1.3. Any person having duties that are or may be affected by the matters set out in this licence shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

2.2. Energy efficiency

- 2.2.1. The licence holder shall:
 - (a) take appropriate measures to ensure that energy is recovered and used efficiently in the activities;

- (b) review and record at least every four years whether there are suitable opportunities to improve the energy recovery and efficiency of the activities; and
- (c) take any further appropriate measures identified by a review.

2.2.2. The licence holder shall provide and maintain steam and/or hot water pass-outs such that opportunities for the further use of waste heat may be capitalised upon should they become practicable.

2.3. Efficient use of raw materials

2.3.1. The licence holder 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.

2.4. Avoidance, recovery and disposal of wastes produced by the activities

2.4.1. The licence holder shall:

- (a) take appropriate measures to ensure that waste produced by the activities is avoided or reduced, or where waste is produced it is recovered wherever practicable or otherwise disposed of in a manner which minimises its impact on the environment;
- (b) review and record at least every four years whether changes to those measures should be made; and
- (c) take any further appropriate measures identified by a review.

2.5. Site security

2.5.1. The licence holder shall

- (a) take appropriate site security measures to prevent unauthorised access to the site as far as practicable;
- (b) maintain and implement a site security plan;
- (c) review and record at least every 4 years whether changes to the plan should be made;
- (d) make any appropriate changes to the plan identified by a review.

3. Operations

3.1. Authorised Activities

3.1.1. The licence holder is only authorised to carry out the activities specified in Schedule 3, Table S 3.1 (the "activities")

3.1.2. Waste authorised by this licence in Schedule 2, Tables S2.1 and S2.2 shall be clearly distinguished from any other waste produced on the site.

3.2. The site

- 3.2.1. The activities authorised by this licence shall not extend beyond the site boundary as indicated on drawing No. 871-095 A5 (submitted with the Application) and shown in Schedule 1 to this licence; which includes the two exhaust gas emission flues in the chimney as identified in drawing No. 871-095 A5.

3.3. Operating techniques

- 3.3.1. The activities shall, subject to the conditions of this licence, be operated using the techniques and in the manner described in the documentation specified in Schedule 3, Table S 3.2, unless otherwise agreed in writing by the Regulator.
- 3.3.2. If notified by the Regulator that the activities are giving rise to pollution, the licence holder shall submit to the Regulator for approval within the period specified, a revision of any plan specified in Schedule 3, Table S3.2 or otherwise required under this licence, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Regulator.
- 3.3.3. Any raw materials or fuels listed in Schedule 3, Table S2.3 shall conform to the specifications set out in that Table.
- 3.3.4. Waste shall only be accepted if it is of a type and quantity listed in Schedule 2 Tables S2.1 and S2.2.
- 3.3.5. Waste shall only be handled or stored in designated areas of the site as listed below;
- (a) all bulking or treatment of waste shall be carried out inside a building or in a covered area;
 - (b) all storage of waste shall be in a building or within a secure container;
 - (c) all bulking, transfer, treatment and storage of waste shall be on an impermeable surface with a sealed drainage system.
- 3.3.6. Any non-permitted waste which arrives at the site and is detected during the waste reception process shall be rejected. Where these wastes cannot be removed from site immediately, they shall be stored within a designated quarantine area. Any non-permitted waste shall be removed from site within 5 working days unless otherwise agreed with the regulator.
- 3.3.7. The licence holder 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; and
 - (d) the hazard classification associated with the waste.
- 3.3.8. Waste shall not be charged, 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 4 Table S4.2 is exceeded;
- or

- (c) any continuous emission limit value in Schedule 4 Table S4.1 is exceeded, other than under WID abnormal operating conditions ; or
 - (d) monitoring results required to demonstrate compliance with any continuous emission limit value in Schedule 4 Table S4.1 are unavailable other than under WID abnormal operating conditions.
- 3.3.9. The licence holder shall have at least one auxiliary burner in each line at start up or shut down or whenever the operating temperature falls below that specified in condition 3.3.8, as long as incompletely burned waste is present in the combustion chamber. Unless the temperature specified in condition 3.3.8 is maintained in the combustion chamber, such burner(s) may 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.
- 3.3.10. The licence holder shall record the beginning and end of each period of “WID abnormal operation”.
- 3.3.11. During a period of “WID abnormal operation”, the licence holder shall restore normal operation of the failed equipment or replace the failed equipment as rapidly as possible.
- 3.3.12. Where, during “WID abnormal operation”, any of the following situations arise, the licence holder shall, as soon as is practicable, cease the burning of waste until normal operation can be restored:
- (a) continuous measurement shows that an emission exceeds any emission limit value in Schedule 4 Table S4.1 due to disturbances or failures of the abatement systems or continuous emission monitors are out of service, as the case may be, for a total of 4 hours uninterrupted duration;
 - (b) the cumulative duration of “WID abnormal operation” periods over 1 calendar year exceeds 60 hours on an incineration line;
 - (c) continuous measurement shows that an emission exceeds any emission limit value in Schedule 4 Table S4.2 due to disturbances or failures of the abatement systems;
 - (d) the alternative techniques to demonstrate compliance with the “WID abnormal operation” emission limit value(s) for particulates, TOC and / or CO in Schedule 4 Table S4.2, as agreed in writing with the Regulator, are unavailable.
- 3.3.13. The licence holder shall interpret the end of the period of “WID abnormal operation” as the earliest of the following:
- (a) when the failed equipment is repaired and brought back into normal operation;
 - (b) when the licence holder initiates a shut down of the waste combustion activity, as described in the application or as agreed in writing with the Regulator;
 - (c) when an uninterrupted period of four hours has elapsed from the start of the “WID abnormal operation”;
 - (d) when, in any calendar year, an aggregated period of 60 hours “WID abnormal operation” has been reached for a given incineration line.
- 3.3.14. Where “WID abnormal operation” occurs by reason of the failure of measurement devices; the “CEMS failure operating protocol” agreed with the Regulator shall come into operation.

- (a) Where the continuous measurement devices are switched between the incineration lines under the “CEMS failure operating protocol”; and the emissions continue to remain in compliance with the emission limit value in Schedule 4 Table S4.1; the preceding period of WID abnormal operation shall not be counted towards the cumulative total of 60 hours.
- (b) The “CEMS failure operating protocol” shall not operate for a continuous period of more than 48 hours unless otherwise agreed with the regulator.

3.3.15. Bottom ash and APC residues shall not be mixed.

3.4. Improvement conditions

- 3.4.1. The licence holder shall complete the improvements specified in Schedule 3 Table S3.3 by the date specified in that Table unless otherwise agreed in writing by the Regulator.
- 3.4.2. Except in the case of an improvement which consists only of a submission to the Regulator, the licence holder shall notify the Regulator within 14 days of completion of each improvement.

3.5. Pre-operational conditions

- 3.5.1. The activities shall not be brought into operation until the measures specified in Schedule 3 Table S3.4 have been completed.

4. Emissions and monitoring

4.1. Emissions to air

- 4.1.1. There shall be no point source emissions to air except from the sources and emission points listed in Schedule 4 Table S4.1 except in “WID abnormal operation”, when there shall be no point source emissions to air except from the sources and emission points listed in Schedule 4 Table S4.2.
- 4.1.2. The limits given in Schedule 4, Tables S4.1 and S4.2 shall not be exceeded.

4.2. Residues produced on site from licenced activities

- 4.2.1. Wastes produced at the site shall be sampled and analysed in accordance with Schedule 4 Table S 4.4. Additional samples shall be taken and tested and appropriate action taken, whenever:
 - (a) disposal or recovery facilities used for the wastes produced at the site change; or
 - (b) it is suspected that the nature or composition of the waste has changed such that the disposal or recovery facilities currently selected may no longer be appropriate.
- 4.2.2. The limits given in Schedule 4, Tables S4.4 shall not be exceeded.

4.3. Emissions of substances not controlled by emission limits

- 4.3.1. Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The licence holder 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.
- 4.3.2. The licence holder shall:
- (a) if notified by the Regulator that the activities are giving rise to pollution, submit to the Regulator for approval within the period specified, an emissions management plan;
 - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Regulator.
- 4.3.3. All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the licence holder has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

4.4. Odour

- 4.4.1. Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Regulator, unless the licence holder 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.
- 4.4.2. The licence holder shall:
- (a) if notified by the Regulator that the activities are giving rise to pollution outside the site due to odour, submit to the Regulator for approval within the period specified, an odour management plan;
 - (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Regulator.

4.5. Noise and vibration

- 4.5.1. Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Regulator, unless the licence holder 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.
- 4.5.2. The licence holder shall:
- (a) if notified by the Regulator that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Regulator for approval within the period specified, a noise and vibration management plan;
 - (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Regulator.

4.6. Monitoring

- 4.6.1. The licence holder shall, unless otherwise agreed in writing by the Regulator, undertake the monitoring specified in the following Tables in Schedule 4 to this licence:
- point source emissions specified in Tables S4.1 and S4.2;
 - process monitoring parameters in Table S4.3; and
 - residue quality in Table S4.4.
- 4.6.2. The licence holder shall maintain records of all monitoring required by this licence 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.
- 4.6.3. Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 4.6.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate) unless otherwise agreed in writing by the Regulator. 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 4 Table S4.1. 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.
- 4.6.4. Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in Schedule 4 Tables S4.1, and S4.2 unless otherwise agreed in writing by the Regulator.
- 4.6.5. Where Continuous Emission Monitors are installed to comply with the monitoring requirements in Schedule 4 Table S4.1; the Continuous Emission Monitors shall be used such that;
- the values of the 95% confidence intervals of a single measured result at the daily emission limit value shall not exceed the following percentages:

| | |
|---|-----|
| • Carbon monoxide | 10% |
| • Sulphur dioxide | 20% |
| • Oxides of nitrogen (NO & NO ₂ expressed as NO ₂) | 20% |
| • Particulate matter | 30% |
| • Total organic carbon (TOC) | 30% |
| • Hydrogen chloride | 40% |
 - 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 4.6.5;
 - 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 period. The number of half-hourly averages so validated shall not exceed 5 per day;
 - 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.

5. Information

5.1. Records

5.1.1. All records required to be made by this licence shall:

- (a) be legible;
- (b) be made as soon as reasonably practicable;
- (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
- (d) be retained, unless otherwise agreed in writing by the Regulator, until licence surrender.

5.1.2. The licence holder shall keep on site all records, plans and the management system required to be maintained by this licence, unless otherwise agreed in writing by the Regulator.

5.2. Reporting

5.2.1. The licence holder shall send all reports and notifications required by the licence to the Regulator using the contact details supplied in writing by the Regulator.

5.2.2. A report or reports on the performance of the activities over the previous calendar year shall be submitted to the Regulator by 31st January or other date agreed in writing by the Regulator 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 licence including an interpretive review of that data;
- (b) the annual production / treatment data set out in Schedule 5 Table S5.2;
- (c) the performance parameters set out in Schedule 5 Table S5.3;
- (d) other environmental data required by the Regulator for information purposes to inform environmental policy making set out in Schedule 5 Table S5.4; and
- (e) the functioning and monitoring of the incineration plant in a format agreed with the Regulator. The report shall, as a minimum requirement (as required by Article 12(2) of the Waste Incineration Directive) give an account of the running of the process and the emissions into air compared with the emission standards in the WID;
- (f) using the forms where appropriate specified in Schedule 5 Table S5.5.

5.2.3. Within 28 days of the end of the reporting period the licence holder shall, unless otherwise agreed in writing by the Regulator, submit reports of the monitoring and assessment carried out in accordance with the conditions of this licence, as follows:

- (a) in respect of the parameters and emission points specified in Schedule 5 Table S5.1;
- (b) for the reporting periods specified in Schedule 5 Table S5.1 and using the forms specified in Schedule 5 Table S5.5; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those Tables.

- 5.2.4. The licence holder shall, unless notice under this condition has been served within the preceding four years, submit to the Regulator, 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.
- 5.2.5. Within 1 month of the end of each quarter, the licence holder shall submit to the Regulator 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.

5.3. Notifications

- 5.3.1. The Regulator shall be notified without delay following the detection of:
- (a) any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution;
 - (b) the breach of a limit specified in the licence; or
 - (c) any significant adverse environmental effects.
- 5.3.2. Any information provided under condition 5.3.1 shall be confirmed by sending the information listed in Schedule 6 to this licence within the time period specified in that Schedule.
- 5.3.3. Where the Regulator has requested in writing that it shall be notified when the licence holder is to undertake monitoring and/or spot sampling, the licence holder shall inform the Regulator when the relevant monitoring and/or spot sampling is to take place. The licence holder shall provide this information to the Regulator at least 14 days before the date the monitoring is to be undertaken.
- 5.3.4. The licence holder shall inform the Regulator of any relevant changes in agreements with the Jersey Electric Company Ltd for the supply of materials and services provided which affect the activities and operating techniques authorised by this licence, at least 14 days before these changes shall come into effect.
- 5.3.5. The Regulator 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 licence holder is a registered company:
- (a) any change in the licence holder's trading name, registered name or registered office address; and
 - (b) any steps taken with a view to the licence holder going into administration, entering into a company voluntary arrangement or being wound up.
- Where the licence holder is a corporate body other than a registered company:
- (a) any change in the licence holder's name or address; and
 - (b) any steps taken with a view to the dissolution of the licence holder.
- 5.3.6. Where the licence holder proposes to make a change in the nature or functioning, or an extension of the activities, including changes to the operating techniques or changes which may have consequences for the environment and the change is

not otherwise the subject of an application for approval under the Waste Management (Jersey) Law 2005 or this licence:

- (a) the Regulator 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.

5.3.7. The Regulator shall be given at least 14 days notice before implementation of any part of the site closure plan.

5.4. Interpretation

5.4.1. In this licence the expressions listed in Schedule 7 shall have the meaning given in that Schedule.

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

Schedule 1 - Site plan



| | |
|----------------|------------|
| Scale: | 1:2000 |
| Original Size: | A3 |
| Drawn By: | JL |
| Date: | 05.03.10 |
| Checked By: | JA |
| Date: | 05.03.10 |
| CAD Ref.: | B71-095-A5 |

| Rev. | Amendment | By | CHK'd | Date |
|------|---|----|-------|----------|
| A1 | PRELIMINARY | JL | JA | 05.03.10 |
| A2 | AMENDED RED LINE BOUNDARY | JL | JA | 23.04.10 |
| A3 | AMENDED RED LINE BOUNDARY | JL | JA | 02.08.10 |
| A4 | GABION WALL ADDED, AMENDED RED LINE BOUNDARY. | JL | JA | 17.08.10 |
| A5 | OFFSITE FLUE GAS CONNECTION TO CHIMNEY ADDED. | RK | JW | 30.8.10 |

| | |
|------------------|--|
| Client: | JERSEY TSD |
| Site: | LA COLLETTE II - JERSEY |
| Project: | WASTE STRATEGY IMPLEMENTATION |
| Title: | LA COLLETTE WASTE MANAGEMENT SITE BOUNDARY |
| Office of Issue: | STOCKPORT |
| Telephone No.: | 0161-476 0032 |

| |
|---------------------------------------|
| FICHTNER |
| CONSULTING ENGINEERS LIMITED |
| Kingsgate, Wellington Road North |
| Stockport, Cheshire SK9 1LW |
| Tel: 0161-476 0032 Fax: 0161-474 0818 |
| Drawing No. B71-095 |
| Revision A5 |

Schedule 2 - Waste types, raw materials and fuels

| Table S2.1 Permitted waste types and quantities for incineration | |
|---|--|
| Maximum quantity / other limitations | Maximum design throughput of 7.5 tonnes per hour on each line. (Based on a Cv of 9.2 MJ/Kg) Combined throughput of sewage sludge and other oily sludges not to exceed 10% of throughput on each line. |
| Waste Ref. | Description |
| I1 | Mixed municipal waste , including wastes trade and commercial waste, similar in nature to mixed municipal waste |
| I2 | Combustible Construction and demolition wastes, i.e. wood, plastics, insulation materials not containing asbestos or other dangerous substances. |
| I3 | Sawdust, shavings, cuttings, wood, particle board and veneer other than those containing dangerous substances. |
| I4 | Packaging wastes, including paper, cardboard, plastics, wood, composites, textiles, |
| I5 | Combustible material from end-of-life vehicles and combustible material from Waste Electrical and Electronic Equipment, where this is not hazardous waste. |
| I6 | Bulky waste (which would be shredded on or off site prior to incineration) |
| I7 | Sewage sludge |
| I8 | Screenings, grit and grease from sewage treatment works operations |
| I9 | Absorbents, wiping cloths and protective clothing not containing asbestos or other dangerous substances. |
| I10 | Sludges, oil or oily water from oil/water separators not containing polychlorinated aromatic hydrocarbons or other dangerous substances. |

| Table S2.2 Permitted waste types and quantities for waste transfer | |
|---|---|
| Maximum quantity/ other limitations | Limits as defined within the application supporting information section 2.1.4.2 No waste received for waste transfer shall be incinerated unless it conforms to the description in Table S2.1 above. |
| Waste code | Description |
| T1 | Ferrous and non-ferrous metal |
| T2 | Paper and cardboard |
| T3 | Wood |
| T4 | Textiles |
| T5 | Plastics |
| T6 | Electrical and electronic display equipment |
| T7 | Electrical and electronic equipment with potentially hazardous properties |
| T8 | Fluorescent tubes and gas discharge lamps |
| T9 | Paints, oils, oil filters and other fluids or chemicals with potentially hazardous properties |
| T10 | Batteries |
| T11 | Gas cylinders and other pressurised containers |

| Table S2.3 Raw materials and fuels | |
|---|------------------------|
| Raw materials and fuel description | Specification |
| Gas oil | Less than 0.1% Sulphur |

Schedule 3 Operations

Authorised Activities

Table S 3.1 Activities

| Activity described in Article 23 (2) of the Waste Management (Jersey) Law 2005 | Description of specified activity | Extent of specified activity |
|---|--|--|
| Article 23 (2) (d) the disposal or recovery of controlled waste on any land, or by means of any mobile plant. | The Incineration of controlled waste in an incineration plant with energy recovery | <p>From receipt of waste to emission of exhaust gas and disposal of waste arising.</p> <p>The incineration of municipal wastes in an incineration plant with a nominal capacity of 15 tonnes per hour including the operation of</p> <ul style="list-style-type: none"> • Incineration lines, boilers and auxillary burners • Facilities for the treatment of exhaust gasses • Onsite facilities for the storage, treatment and disposal of residues, waste water and surface water • Systems for controlling and monitoring incineration • The receipt, storage, treatment and handling of wastes • The receipt, storage, treatment and handling of raw materials • The generation of electricity using a steam turbine. |
| Article 23 (2) (b) and (c) the keeping of controlled waste on any land; and the treatment of controlled waste on any land, or by means of any mobile plant. | Operation of a waste transfer station. | <ul style="list-style-type: none"> • The receipt, storage, treatment and handling of wastes in the Bulky waste facility • Receipt and storage of wastes including hazardous wastes prior to transfer off site |

Table S 3.2 Operating techniques

| Description | Parts | Date Received |
|-------------|--|---------------|
| Application | Application form dated 05/03/2010, as amended | 13/09/2010 |
| | La Collette EFW Facility Working Plan, version 1, dated 5/07/2010 | 05/07/2010 |
| | <p>La Collette EFW Plant WML Application supporting information (version 8 dated 21/08/2010)</p> <p>Incorporating amended drawings;</p> <ul style="list-style-type: none"> • Drawing No. 871-095 A5; site boundary • Drawing No. 40810202_64GO125-A ; CEMS Locations | 08/09/2010 |
| | "CEMS failure operating protocol" referred to in section 2.3.1.1 in the application supporting information | 08/09/2010 |

Table S3.3 Improvement programme requirements

| Reference | Requirement | Date |
|-----------|--|---|
| S3.3.1 | <p>Commissioning report</p> <p>The Licence holder shall submit a written report to the regulator on the commissioning of the plant. 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 licence and details of procedures developed during commissioning for achieving and demonstrating compliance with licence conditions.</p> | Report to be submitted to the regulator within 4 months from the completion of the commissioning process as defined by the commissioning plan. |
| S3.3.2 | <p>The licence holder shall prepare a written report detailing the relationship between combustion parameters (temperature, O₂ and flue gas flow rate) with CO and TOC concentrations that demonstrates how the combustion parameters can be used under abnormal operations to verify compliance with the emission limit values given in Schedule 4 Table S4.2 in the event of a failure of either measurement device. The report shall be submitted to the regulator for approval.</p> <p>The report findings shall be implemented by the licence holder from the date of approval in writing by the regulator.</p> | Report to be submitted to the Regulator within 4 months from the completion of the commissioning process, as defined by the Commissioning Plan. |
| S3.3.3 | <p>The licence holder shall prepare a written report on the "CEMS failure operating protocol" detailed in section 2.3.1.1 in the application supporting information, to demonstrate how the alternative monitoring by switching CEMS units between incineration lines can be verified over a maximum period of 48 hours to provide reliable data, carried out and recorded, and include the Standard Operating Procedure.</p> <p>The report should detail the relationship between combustion parameters (temperature, O₂ and flue gas flow rate) and the emission parameters requiring continuous measurement in Schedule 4 Table S4.1. to demonstrate that the plant is not operated above the emission limit values in Schedule 4 Table S4.1 for more than 4 hours continuously as required by Article 13(3) of WID.</p> <p>The report shall be submitted to the regulator for approval. For the avoidance of doubt, prior to the approval of the regulator, any period of CEMS failure will count towards the the cumulative total of 60 hours of WID abnormal operation.</p> | Report to be submitted to the Regulator within 4 months from the completion of the commissioning process, as defined by the Commissioning Plan. |
| S3.3.4 | <p>The Licence holder shall submit a written report to the Regulator describing the performance and optimisation of the Selective Non Catalytic Reduction (SNCR) system and combustion settings to minimise oxides of nitrogen (NO_x) emissions to within the emission limit values described in this licence. The report shall include an assessment of the level of NO_x and N₂O emissions that can be achieved under optimum operating conditions.</p> | Report to be submitted to the Regulator within 4 months from the completion of the commissioning process, as defined by the Commissioning Plan. |

| Table S3.3 Improvement programme requirements (continued) | | |
|--|--|---|
| Reference | Requirement | Date |
| S3.3.5 | The Licence holder shall submit a report on its need to burn supplementary fuel to maintain combustion temperature where sewage sludge and other sludges including oil/water mixtures are being burnt. The Licence holder shall determine the optimum level of such materials that can be burnt to minimise the need for supplementary firing. | Report to be submitted to the regulator within 12 months from the completion of the commissioning process as defined by the commissioning plan. |
| S3.3.6 | The Licence holder shall submit a report to the Regulator on the implementation of its Environmental Management System (EMS) including verification that its EMS meets the requirements of ISO 14001 or an appropriate equivalent environmental management standard. | Report to be submitted to the regulator within 12 months from the completion of the commissioning process as defined by the commissioning plan. |

| Table S3.4 Pre operational measures | |
|--|--|
| Reference | Pre-operational measures |
| S3.4.1 | Prior to the commencement of commissioning, the licence holder shall send a summary of the site Environment Management System (EMS) to the Regulator and make available for inspection all documents and procedures which form part of the EMS. |
| S3.4.2 | Commissioning Plan Prior to the commencement of commissioning; the Licence holder shall provide a written commissioning plan, including timelines for completion, for approval by the regulator. 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 the regulator in the event that actual emissions exceed expected emissions. Commissioning shall be carried out in accordance with the commissioning plan as approved. |
| S3.4.3 | The licence holder shall install a monitor that will alarm should emissions to air of particulate matter exceed 150 mg/m ³ . This monitor shall be operational at all times whenever the plant is in WID abnormal operation. |

Schedule 4 – Emissions and monitoring

Table S4.1 Point source emissions to air emission limits and monitoring requirements

| Emission point ref. & location | Parameter | Limit (including unit) | Reference period | Monitoring frequency | Monitoring standard or method |
|--------------------------------|---|------------------------|------------------|------------------------|-------------------------------|
| A1 & A2 | Oxides of nitrogen (NO and NO ₂ expressed as NO ₂) | 400 mg/m ³ | ½-hr average | Continuous measurement | BS EN 15267-3 |
| A1 & A2 | Oxides of nitrogen (NO and NO ₂ expressed as NO ₂) | 200 mg/m ³ | daily average | Continuous measurement | BS EN 15267-3 ¹ |
| A1 & A2 | Particulate matter | 30 mg/m ³ | ½-hr average | Continuous measurement | BS EN 15267-3 |
| A1 & A2 | Particulate matter | 10 mg/m ³ | daily average | Continuous measurement | BS EN 15267-3 |
| A1 & A2 | Sulphur dioxide | 200 mg/m ³ | ½-hr average | Continuous measurement | BS EN 15267-3 |
| A1 & A2 | Sulphur dioxide | 50 mg/m ³ | daily average | Continuous measurement | BS EN 15267-3 |
| A1 & A2 | Total Organic Carbon (TOC) | 20 mg/m ³ | ½-hr average | Continuous measurement | BS EN 15267-3 |
| A1 & A2 | Total Organic Carbon (TOC) | 10 mg/m ³ | daily average | Continuous measurement | BS EN 15267-3 |
| A1 & A2 | Hydrogen chloride | 60 mg/m ³ | ½-hr average | Continuous measurement | BS EN 15267-3 |
| A1 & A2 | Hydrogen chloride | 10 mg/m ³ | daily average | Continuous measurement | BS EN 15267-3 |
| A1 & A2 | Hydrogen fluoride | 4 mg/m ³ | ½-hr average | Continuous measurement | BS EN 15267-3 |
| A1 & A2 | Hydrogen fluoride | 1 mg/m ³ | daily average | Continuous measurement | BS EN 15267-3 |
| A1 & A2 | Carbon monoxide | 100 mg/m ³ | ½-hr average | Continuous measurement | BS EN 15267-3 |
| A1 & A2 | Carbon monoxide | 50 mg/m ³ | daily average | Continuous measurement | BS EN 15267-3 |

Table S4.1 Point source emissions to air emission limits and monitoring requirements (continued)

| Emission point ref. & location | Parameter | Limit (including unit) | Reference period | Monitoring frequency | Monitoring standard or method |
|---|--|-------------------------------|---|--|--------------------------------------|
| A1 & A2 | Cadmium & thallium and their compounds (total) ^[Note 1] | 0.05 mg/m ³ | Periodic over minimum 30 minute, maximum 8 hour period | Quarterly in first year. Then Bi-annual | BS EN 14385 |
| A1 & A2 | Mercury and its compounds ^[Note 1] | 0.05 mg/m ³ | Periodic over minimum 30 minute, maximum 8 hour period | Quarterly in first year. Then Bi-annual | BS EN 13211 |
| A1 & A2 | Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total) ^[Note 1] | 0.5 mg/m ³ | Periodic over minimum 30 minute, maximum 8 hour period | Quarterly in first year. Then Bi-annual | BS EN 14385 |
| A1 & A2 | Dioxins / furans (I-TEQ) | 0.1 ng/m ³ | Periodic over minimum 6 hours, maximum 8 hour period ^[Note 2] | Quarterly in first year. Then Bi-annual | BS EN 1948 Parts 1, 2 and 3 |
| A1 & A2 | Dioxin-like PCBs (WHO-TEQ Humans / Mammals) | - | Periodic measurement average value over sample period of between 6 and 8 hours. ^[Note 2] | Quarterly in the first year of operation, then bi-annual | BS EN/1948 Part 4 |
| A1 & A2 | Dioxin-like PCBs (WHO-TEQ Fish) | - | Periodic measurement average value over sample period of between 6 and 8 hours. ^[Note 2] | Quarterly in the first year of operation, then bi-annual | BS EN/1948 Part 4 |
| A1 & A2 | Dioxin-like PCBs (WHO-TEQ Birds) | - | Periodic measurement average value over sample period of between 6 and 8 hours. ^[Note 2] | Quarterly in the first year of operation, then bi-annual | BS EN/1948 Part 4 |

Table S4.1 Point source emissions to air emission limits and monitoring requirements (continued)

| Emission point ref. & location | Parameter | Limit (including unit) | Reference period | Monitoring frequency | Monitoring standard or method |
|--|--|------------------------|---|--|--|
| A1 & A2 | Specific individual polycyclic aromatic hydrocarbons (PAHs), as specified in Schedule 7. | - | Periodic measurement average value over sample period of between 6 and 8 hours. | Quarterly in the first year of operation, then bi-annual | Procedure shall use BS ISO 11338-1 and BS-ISO 11338-2. |
| A1 & A2 | Dioxins / furans (WHO-TEQ Humans / Mammals) | - | Periodic measurement average value over sample period of between 6 and 8 hours. ^[Note 2] | Quarterly in the first year of operation, then bi-annual | BS EN/1948 Part 4 |
| A1 & A2 | Dioxins / furans (WHO-TEQ Fish) | - | Periodic measurement average value over sample period of between 6 and 8 hours. ^[Note 2] | Quarterly in the first year of operation, then bi-annual | BS EN/1948 Part 4 |
| A1 & A2 | Dioxins / furans (WHO-TEQ Birds) | - | Periodic measurement average value over sample period of between 6 and 8 hours. ^[Note 2] | Quarterly in the first year of operation, then bi-annual | BS EN/1948 Part 4 |
| Points 12 and 13 as illustrated as on drawing No. 4081-20-02-AR-G-0403 in Annex 1 to the supporting information. | Air from around the sewage sludge storage tank | No limit set | - | - | - |

Note 1: Metals include gaseous, vapour and solid phases as well as their compounds (expressed as the metal or the sum of the metals as specified). Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V mean antimony, arsenic, lead, chromium, cobalt, copper, manganese, nickel and vanadium respectively.

Note 2: The I-TEQ or WHO-TEQ sum of the equivalence factors to 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.

Table S4.2 Point source emissions to air during abnormal operation of incineration plant emission limits and monitoring requirements

| Emission point ref. & location | Parameter | Limit (including unit) | Reference period | Monitoring frequency | Monitoring standard or method |
|---|----------------------------|-------------------------------|-------------------------|-----------------------------|---|
| A1 & A2 | Particulate matter | 150 mg/m ³ | ½-hr average | Continuous measurement | BS EN 15267-3 during abatement plant failure or alternative surrogate as specified in the Application during failure of the continuous emission monitor |
| A1 & A2 | Total Organic Carbon (TOC) | 20 mg/m ³ | ½-hr average | Continuous measurement | BS EN 15267-3 during abatement plant failure or alternative surrogate as specified in the Application during failure of the continuous emission monitor |
| A1 & A2 | Carbon monoxide | 100 mg/m ³ | ½-hr average | Continuous measurement | BS EN 15267-3 during abatement plant failure or alternative surrogate as specified in the Application during failure of the continuous emission monitor |

| Table S4.3 Process monitoring requirements | | | | |
|--|----------------------------------|---|--------------------------------------|---|
| Emission point reference or source or description of point of measurement | Parameter | Monitoring frequency | Monitoring standard or method | Other specifications |
| Location as agreed with the Regulator | Wind speed and direction | continuous | anemometer | As agreed in writing with the regulator |
| As described in the Application | Combustion Temperature (°C) | continuous | Traceable to applicable standards | As agreed in writing with the regulator |
| A1 & A2 | Ammonia | Continuous. Record the daily mean and the ½ hour mean | BS15267-3 | As agreed in writing with the regulator |
| A1 & A2 | Nitrous Oxide (N ₂ O) | Quarterly in first year. Then Bi-annual. Periodic over minimum 1 hour period. | VDI 2469-1 or VDI 2469-2 | As agreed in writing with the regulator |
| A1 & A2 | Exhaust gas flow rate | Continuous | BS15267-3 | |
| A1 & A2 | Exhaust gas temperature | continuous | Traceable to applicable standards | As agreed in writing with the regulator |
| A1 & A2 | Exhaust gas pressure | continuous | Traceable to applicable standards | As agreed in writing with the regulator |
| A1 & A2 | Exhaust gas water content | continuous | BS15267-3 | As agreed in writing with the regulator |
| A1 & A2 | Exhaust gas oxygen content | continuous | BS15267-3 | |

| Table S4.4 Residue quality | | | | | |
|--|--|--------------|--|--|-----------------------------|
| Emission point reference or source or description of point of measurement | Parameter | Limit | Monitoring frequency | Monitoring standard or method | Other specifications |
| Bottom Ash | Total Organic Carbon (TOC) | <3% | Monthly in the first year of operation. Then ... Quarterly | Sampling as per ash sampling protocol agreed with the Regulator | |
| Bottom Ash | Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds. | | Frequency as agreed with the regulator. | Sampling and analysis as per ash sampling protocol agreed with the Regulator | |
| | dioxins/furans | | | | |
| | dioxin-like PCBs. | | | | |
| Bottom Ash | Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions | | Before use of a new disposal or recycling route | Sampling and analysis as per ash sampling protocol agreed with the Regulator | |

| Table S4.4 Residue quality (continued) | | | | | |
|--|--|--------------|---|--|-----------------------------|
| Emission point reference or source or description of point of measurement | Parameter | Limit | Monitoring frequency | Monitoring standard or method | Other specifications |
| APC Residues | Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds. | | Frequency as agreed with the regulator. | Sampling and analysis as per ash sampling protocol agreed with the Regulator | |
| | dioxins/furans | | | | |
| | dioxin-like PCBs. | | | | |
| APC Residues | Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions | | Before use of a new disposal or recycling route | Sampling and analysis as per ash sampling protocol agreed with the Regulator | |

Schedule 5 – Reporting

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

Table S5.1 Reporting of monitoring data

| Parameter | Emission or monitoring point/reference | Reporting period | Period begins |
|--|--|---|---|
| Emissions to air Parameters requiring continuous measurement as required by condition 4.6.1 | A1 & A2 | Quarterly | 1Jan, 1 April, 1 July, 1 October |
| Emissions to air Parameters requiring periodic measurement as required by condition 4.6.1 | A1 & A2 | As per the specified monitoring frequency (quarterly or every 6 months) | 1Jan, 1 April, 1 July, 1 October |
| Process monitoring parameters as required by condition 4.6.1 | As described in Schedule 4, Table S4.3 | As requested by the Regulator. | From the first date that waste is burned in the plant |
| Residue quality parameters as required by condition 4.6.1 | Bottom Ash APC Residues | As per the specified monitoring frequency / before use of a new disposal or recycling route | From the first date that waste is burned in the plant |

Table S5.2: Annual production/treatment

| Parameter | Units |
|---|--------|
| Total mass of waste accepted for waste incineration | Tonnes |
| Total mass of waste accepted for waste transfer | Tonnes |
| Electrical energy produced | KWhrs |
| Electrical energy exported | KWhrs |

| Table S5.3 Performance parameters | | |
|--|--------------------------------|---|
| Parameter | Frequency of assessment | Units |
| WID abnormal operation | Quarterly | No of occurrences and cumulative hours per line |
| Electrical energy useage | Quarterly | KWhrs / tonne of waste incinerated |
| Fuel oil consumption | Quarterly | Kgs / tonne of waste incinerated |
| Mass of Bottom Ash produced | Quarterly | Kgs / tonne of waste incinerated |
| Mass of APC residues produced | Quarterly | Kgs / tonne of waste incinerated |
| Mass of Other solid residues produced | Quarterly | Kgs / tonne of waste incinerated |
| Urea consumption | Quarterly | Kgrs / tonne of waste incinerated |
| Activated Carbon consumption | Quarterly | Kgs / tonne of waste incinerated |
| Lime consumption | Quarterly | Kgs / tonne of waste incinerated |
| Water consumption | Quarterly | Kgs / tonne of waste incinerated |

| Table S5.4 Other Environmental Data | | |
|---|--------------------------------|--------------|
| Parameter | Frequency of assessment | Units |
| Mass emission to air of sulphur dioxide | Annual | Tonnes or Kg |
| Mass emission to air of oxides of nitrogen (NO and NO ₂ expressed as NO ₂) | Annual | Tonnes or Kg |
| Mass emission to air of Particulate Matter | Annual | Tonnes or Kg |
| Mass emission to air of Lead | Annual | Tonnes or Kg |
| Mass emission to air of Volatile Organic Cabron | Annual | Tonnes or Kg |
| Mass emission to air of Carbon Monoxide | Annual | Tonnes or Kg |

| Table S5.5 Reporting forms | |
|-----------------------------------|--|
| Media/parameter | Reporting format |
| Air | Form as agreed in writing by the Regulator |
| Water usage | Form as agreed in writing by the Regulator |
| Energy usage | Form as agreed in writing by the Regulator |
| Residue quality | Form as agreed in writing by the Regulator |
| Waste | Form as agreed in writing by the Regulator |
| Other performance indicators | Form as agreed in writing by the Regulator |

Schedule 6 - Notification

These pages outline the information that the licence holder 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 Waste Management (Jersey) Law 2005.

Part A

| | |
|--------------------------------|--|
| Licence Number | |
| Name of licence holder | |
| 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 licence holder

Schedule 7 - Interpretation

“abatement equipment” means that equipment dedicated to the removal of polluting substances from releases from the installation to air.

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

“annually” means once every year.

“APC residues” means air pollution control residues

“application” means the application for this licence, together with any additional information supplied by the licence holder as part of the application .

“authorised officer” means any person authorised by the Regulator under The States Of Jersey Law 2005, Delegation of Functions to exercise, in accordance with the terms of any such authorisation, any power specified in the Waste Management (Jersey) Law 2005.

“bottom ash” means ash falling through the grate and transported by the grate.

“CEM” Continuous emission monitor

“CEN” means Comité Européen de Normalisation

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

“dioxin and furans” means polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans.

“disposal” means any of the disposal operations listed in the Waste Management (Jersey) Law 2005

“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..

“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.

“*impermeable surface*” means a surface or pavement constructed and maintained to a standard sufficient to prevent the transmission of liquids beyond the pavement surface, and should be read in conjunction with the term “sealed drainage system” (below).

“incineration line” means all of the incineration equipment related to a common discharge to air location.

“ISO” means International Standards Organisation.

“LOI” means loss on ignition a technique used to determine the combustible material by heating the ash residue to a high temperature

“MCERTS” means the United Kingdom 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.

“pollution” “pollution” includes the introduction directly or indirectly into the environment of any substance or energy, if its introduction results or is likely to result in –

- (a) a hazard to human health or food or water supplies;
- (b) harm to any living resource or ecosystem;
- (c) damage to any amenity; or

(d) interference with any legitimate use of land, water or air, and whether or not its introduction is or would be the only contributing factor to that hazard, harm, damage or interference.

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

“quarterly” for reporting/sampling means after/during each 3 month period, January to March; April to June; July to September and October to December and, when sampling, with at least 2 months between each sampling date.

“recovery” means any of the any of the recovery operations listed in the Waste Management (Jersey) Law 2005.

“sealed drainage system” in relation to an impermeable surface, means a drainage system with impermeable components which does not leak and which will ensure that:

- (a) no liquid will run off the surface otherwise than via the system;
- (b) except where they may lawfully be discharged, all liquids entering the system are collected in a sealed sump.

“secondary containment” means a bund or any other system for preventing waste which has leaked from the primary container from escaping from the place where it is stored or treated.

Where a bund is used as secondary containment:

- (a) the bund must:
 - (i) have a capacity of not less than 110% of the original container’s storage capacity, or
 - (ii) if there is more than one container within the containment system, have a capacity of not less than 110% of the largest container’s storage capacity or 25% of their aggregate storage capacity, whichever is the greater, and
 - (iii) have an impermeable lining; and
- (b) reasonable precautions must be taken to ensure that the capacities specified in paragraph (a) are maintained at all times.

“shut down” is any period where the plant is being returned to a non-operational state and there is no waste being charged as described in the application or agreed in writing with the regulator.

“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 the regulator.

“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 Incineration Directive” and “WID” means Directive 2000/76/EC on the incineration of waste (O.J. L 332, 28.12.2000)

“WID abnormal operation” means any technically unavoidable stoppages, disturbances, or failures of the abatement plant or the measurement devices during which the concentrations in the discharges into air of the regulated substances may exceed the emission limit values in Schedule 4 Table S4.1.

“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.

Standard Reference Conditions

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

- (a) in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
- (b) in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content
- (c) In relation to gases from incineration plants other than those burning waste oil, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 11% dry,
- (d) where hazardous wastes are burned in an incineration or co-incineration plant and the emissions of pollutants are reduced by gas treatment, standardisation of the gas with respect to oxygen content shall be carried out only if the oxygen concentration measured over the same period exceeds the relevant oxygen content defined in conditions (a) – (c) above. In other cases, the measured emissions shall be standardised only for moisture, pressure and temperature.

- (e) 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.

| TEF schemes for dioxins and furans | | | | |
|---|--------------------|-------------------------|-------------|--------------|
| Congener | I-TEF(1990) | WHO-TEF (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 | 0.0001 | - | - |
| Furans | | | | |
| 2,3,7,8-TCDF | 0.1 | 0.1 | 0.05 | 1 |
| 1,2,3,7,8-PeCDF | 0.05 | 0.05 | 0.05 | 0.1 |
| 2,3,4,7,8-PeCDF | 0.5 | 0.5 | 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 |
| 1,2,3,4,7,8,9-HpCDF | 0.01 | 0.01 | 0.01 | 0.01 |
| OCDF | 0.001 | 0.0001 | 0.0001 | 0.0001 |

| TEF schemes for dioxin-like PCBs | | | |
|---|-------------------------|-------------|--------------|
| Congener | WHO-TEF (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) | 0.0001 | 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) | 0.01 | 0.00005 | 0.001 |
| Mono-ortho PCBs | | | |
| 2,3,3',4,4'-PeCB (105) | 0.0001 | <0.000005 | 0.0001 |
| 2,3,4,4',5-PeCB (114) | 0.0005 | <0.000005 | 0.0001 |
| 2,3',4,4',5-PeCB (118) | 0.0001 | <0.000005 | 0.00001 |
| 2',3,4,4',5-PeCB (123) | 0.0001 | <0.000005 | 0.00001 |
| 2,3,3',4,4',5-HxCB (156) | 0.0005 | <0.000005 | 0.0001 |
| 2,3,3',4,4',5'-HxCB (157) | 0.0005 | <0.000005 | 0.0001 |
| 2,3',4,4',5,5'-HxCB (167) | 0.00001 | <0.000005 | 0.00001 |
| 2,3,3',4,4',5,5'-HpCB (189) | 0.0001 | <0.000005 | 0.00001 |

END OF LICENCE