

Environmental Permit

**Pollution Prevention and Control Act 1999
Environmental Permitting (England and Wales) Regulations 2016**

***O-I Glass Limited
Edinburgh Way
Harlow
Essex
CM20 2UG***

**Regulated activity:
*Manufacturing container glass in a plant with a melting
capacity of more than 20 tonnes per day***

**Permit Number:
*EPR/A2/001***

Permit Issued by:

Environmental Health Services
Harlow Council
Civic Offices
The Water Gardens
Harlow
Essex
CM20 1WG

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The Address for all correspondence in relation to this Permit

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Permit Status Log

Reference	Date	Comment
EPR/A2/001	23 rd December 2019	Permit issued
EPR/A2/001	28 th February 2015	IED Permit
PPCA/A2_3.3/UG/2003	December 2012	Permit Variation – BAT update
PPCA/A2_3.3/UG/2003	April 2012	Permit Variation – post hot end coating
PPCA/A2_3.3/UG/2003	May 2009	Permit Variation – hot end coating
PPCA/A2_3.3/UG/2003	April 2007	Permit Variation – general updating
PPCA /A2_3.3/UG/2003	22 nd December 2003	United Glass Part A2 Permit
	31 st July 2003	LA-IPPC application
	10 th March 1993	First authorised

Introductory Note

These introductory notes are not Environmental Permit conditions; however they do provide useful information about the Environmental Permitting Regulations:

The following Permit is issued under Regulation 13(1) of the Environmental Permitting (England and Wales) Regulations 2016 (as amended)(S.I 2016 No.1154), (“the EPR”) to operate a scheduled installation carrying out an activity, or activities covered by the description in section 3.3 A2 of Part 2 to Schedule 1 of the EPR, to the extent authorised by the Permit.

Conditions within this Permit detail Best Available Techniques (BAT), for the management and operation of the installation, to prevent, or where that is not practicable, to reduce emissions.

In determining BAT, the Operator should pay particular attention to relevant Sector Guidance and BAT Reference notes. Techniques include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

Note that the Permit requires the submission of certain information to the Regulator, and in addition, the Regulator has the power to seek further information at any time under Regulation 60 of the EPR Regulations provided that the request is reasonable.

Public Registers

Information relating to Permits, including the application, is available on public registers in accordance with the EPR. Certain information may be withheld from the public registers where it is commercially confidential, or if it is in the interest of national security to do so.

Variations to the Permit

The Regulator may vary the Permit in the future, by serving a variation notice on the Operator. Should the Operator want any of the conditions of the Permit to be changed, a formal application must be submitted to the Regulator (the relevant forms are available from the Regulator). The Status Log includes a summary of the Permits and variations issued up to that point in time and state whether a consolidated version of the Permit has been issued.

Transfer of the Permit or part of the Permit

Before the Permit can be wholly or partially transferred to another Operator, an application to transfer the Permit has to be made jointly by the existing and proposed Operators. A transfer will not be approved if the Regulator is not satisfied that the proposed Permit holder will be the person having control over the operation of the installation, or will not comply with the conditions of the transferred Permit. In addition, if the Permit authorises the Operator to carry out a specified waste management activity, the transfer will not be approved if the Regulator does not consider the proposed Permit holder to be a ‘fit and proper person’ as required by the EPR.

Talking to us

Please quote the permit number if you contact the Regulator about this permit. To give a notification under this permit, please use the contact details on the front cover.

Description of the installation and regulated activity

This description of the installation and the regulated activity are not environmental permit conditions, however they do provide useful information about the installation and the activities undertaken. It also provides a reference point in relation to any substantial or non-substantial changes.

O-I Glass Limited manufactures container glass in an oxy-fuel furnace with a melting capacity of more than 20 tonnes per day.

Raw materials are delivered to site and stored in bulk in silos within a fully enclosed batch plant. Recycled glass cullet is stored in three sided stock bays outside the batch house. Raw materials are mixed to specification in the batch house mixer and transported to the melting furnace by covered overhead conveyor. Recycled cullet has its own dedicated feed system to the melting furnace via a cullet pre-heating system.

The natural gas fired oxy-fuel melting furnace is supported by an on-site Vacuum Swing Adsorption (VSA) oxygen production plant with associated storage, which is fully owned and operated by a third party. The operation of the VSA is not regulated by this permit. Molten glass is formed into containers in a number of forming machines. Formed containers (usually bottles) pass through hot end coating systems that apply a fine mist of a liquid treatment over the glass to improve mechanical performance. Vapours produced during hot end coating are collected and contained. Containers then pass through an annealing lehr to provide even cooling of the glass, which removes stress and provides a stronger container. Cooled containers then pass through cold end inspection systems for packing and warehousing prior to dispatch.

Waste gasses from the melting furnace and hot end coating are ducted to an electrostatic precipitator (EP) flue gas treatment system. The EP collects particulate matter from waste gasses, and is additionally equipped with a sorbent injection system to provide additional waste gas cleaning. Collected particulate matter and sorbent is collected for re-use in the batch mix, or is disposed of off-site.

Emissions to air are released via a single 75m steel chimney. Emissions to air are continuously monitoring for particulate matter, sulphur oxides and oxides of nitrogen. Spot testing of emissions is undertaken regulatory to confirm compliance with emission limits and for calibration of continuous emissions monitors (CEMs).

A summary of materials and waste storage capacities follows:

Material stored	Storage method	Capacity	Location
Gas oil	Above ground storage tank	356,000 litres	Bunded tank farm
Waste oil	Above ground storage tank	6000 litres	Bunded tank farm
Propane	Above ground storage tank	7,000 m ³	Bunded tank farm
Sprinkler system water	Above ground storage tank	500,000 Litres	Adjacent to Gatehouse
Misting system water	Above ground storage tank	3,600 Litres	5 shop plinth area
General waste	Skips	20 yard	Front car park & Batch house
Hazardous waste	Clip Top Drums	1000 Litres total	Hazardous waste storage area
Acetylene	Designated Banks	12 Banks	EP Plant area
Scrap metal	Skips	20 yard	Batch house
Packaging waste	Skips	20 yard	Batch house
Sand	Silo	950 tonnes	Batch house
Soda ash	Silo	280 tonnes	Batch house
Limestone	Silo	424 tonnes	Batch house
Nephylene syenite	Silo	98 tonnes	Batch house
Calumite	Silo	79 tonnes	Batch house
Selenium	Silo	200 kg	Batch house
Chromite	Silo	42 tonnes	Batch house
Sodium sulphate	Silo	108 tonnes	Batch house
Copper oxide	Silo	36 tonnes	Batch house
Cobalt oxide	Silo	200 kg	Batch house
Iron oxide	Silo	38 tonnes	Batch house
Carbon	Silo	37 tonnes	Batch house
EP dust	Silo	36 tonnes	Batch house
Calcium hydroxide	Silo	36 tonnes	EP

Authorisation



Permit Reference Number:
EPR/A2/001

Harlow Council ("the Regulator") in exercise of its powers under Regulation 13(1) of the Environmental Permitting (England and Wales) Regulations 2016 (as amended) (SI 2016 No 1154), hereby authorises **O-I Glass Limited** ("the Operator").

Whose registered office and installation address is:

O-I Glass Limited
Edinburgh Way
Harlow
Essex
CM20 2UG

Company registration number: **00526983**

To carry out the following Regulated Activity and its Associated Activities to the extent authorised by and subject to the conditions of this Permit:

1. Manufacturing glass where the melting capacity of the plant is more than 20 tonnes per day, Section 3.3 Part A2 'Manufacturing Glass and Glass Fibre' of the Environmental Permitting (England and Wales) Regulations 2016 (as amended) and as described, and in accordance with the conditions contained in this permit.

This Permit shall be subject to replacement, variation or amendment as may be considered appropriate by Harlow Council, at any time, according to the provisions of Regulation 20 of the EPR.

This Permit is given in relation to the requirements of the Environmental Permitting Regulations. It must not be taken to replace any responsibilities you may have under Workplace Health and Safety legislation. Nothing in this Permit grants or implies any consent under the Town and Country Planning Act.

Dated this day

23rd December 2019

Environmental Health Manager
The Authorised Officer for this purpose

Conditions

The following Environmental Permit conditions are legal requirements.

1. Installation and activities

- 1.1 The permitted installation shall not extend beyond the site as marked in red in Schedule 2 to this permit. The area edged in blue Schedule 2 to this permit does not form part of the Regulated Activity covered by this permit.
- 1.2 The Regulated Activities subject to the conditions of this permit shall be limited to the following unless approved in writing by the Regulator.

Activity listed in Schedule 1 of the EP Regulations	Activities in the Stationary Technical Unit	Limits of specified activity
Section 3.3 A2	Manufacturing glass where the melting capacity of the plant is more than 20 tonnes per day	Receipt and storage of raw materials including recycled cullet and waste returns, glass melting, product forming, hot and cold end coating, product storage, maintenance and support areas, waste storage.
Specifically excluded activities		
-	VSA	Oxygen manufacturing and storage

2. Best available techniques

- 2.1 The best available techniques shall be used to prevent, or where that is not practicable, reduce emissions from the installation in relation to any aspect of the operation of the activity which is not specifically regulated by any condition of this permit.
- 2.2 The Operator shall ensure that all appropriate preventative measures are taken against pollution and that no significant pollution is caused.

3. Emission limits

3.1 Emissions limits to air

- 3.1.1 The following emission limits provisions shall apply to emissions to air from glass melting furnaces. The emission limits shall not be exceeded:

Parameter	Emission limits (kg/tonne of melted glass)
Particulate matter (dust)	0.06
Nitrogen oxides: NO _x expressed as NO ₂ The sum of nitrogen oxide (NO) and nitrogen dioxide (NO ₂) expressed as NO ₂	0.8
Sulphur oxides: SO _x expressed as NO ₂ The sum of sulphur dioxide (SO ₂) and sulphur trioxide (SO ₃) expressed as SO ₂	0.75
Hydrogen chloride (HCl) All gaseous chlorides expressed as HCl	0.03
Hydrogen fluoride (HF) All gaseous fluorides expressed as HF	0.008
Metals: Σ (As, Co, Ni, Cd, Se, CrVI)	1.5 x 10 ⁻³
Metals: Σ (As, Co, Ni, Cd, Se, CrVI, Sb, Pb, CrIII, Cu, Mn, V, Sn)	7.5 x 10 ⁻³

- 3.1.2 Measured emissions for comparison with emission limits in condition 3.1.1 shall be calculated by conversion from concentrations to mass emission, and:
- a) For continuous measurements, a 15-minute average sampling period shall be used.
 - b) All values for concentrations in waste gases refer to standard conditions: dry gas, temperature 273.15 K, pressure 101.3 kPa.
- 3.1.3 For discontinuous measurements, the emission limits provisions of condition 3.1.1 should refer to the average value of three spot samples of at least 30 minutes each. Where a single measurement is undertaken, no result shall exceed the emission concentration limits specified.
- 3.1.4 For continuous measurements, the emission limits provisions of condition 3.1.1 shall refer to daily average values.
- 3.1.5 No visible particulate emission shall cross the site boundary.
- 3.1.6 All emissions to air from the permitted installation shall be free from offensive odour outside the site boundary as perceived by the Regulator.
- 3.1.7 If the regulated activities are identified as resulting in offensive odour, The Operator shall devise an odour control programme of improvements and maintain an odour management plan.

3.2 Emission limits to land and soil

- 3.2.1 There shall be no intentional emission of any pollutants to land from the permitted installation.
- 3.2.2 If notified by the Regulator that the regulated activities are giving rise to pollution to land, the Operator shall submit to the Regulator for approval, a plan to remedy pollution within a timeframe agreed in writing with the Regulator.

3.3 Emission limits to water

- 3.3.1 There shall be no intentional emission of any pollutants to surface water or groundwater from the permitted installation.
- 3.3.2 There shall be no intentional emission of List I and List II Substances as defined by the Water Framework Directive to groundwater from the permitted installation.
- 3.3.3 If notified by the Regulator that the regulated activities are giving rise to pollution to surface water or groundwater the Operator shall submit to the Regulator for approval, a plan to remedy pollution within a timeframe agreed in writing with the Regulator.

4. Emissions monitoring

4.1 Monitoring emissions to air

- 4.1.1 Spot samples of emissions from melting furnace shall be undertaken at least once every six months. Spot sampling exercises shall:
- a) Be undertaken in accordance with a site specific sampling protocol detailing the measurement methodology agreed with the Regulator at least 7-days prior to the commencement of the sampling, and
 - b) Be undertaken under representative operational manufacturing conditions, and

- c) Provide a comparison of results to those obtained from continuous emissions monitors during the spot sampling exercise, and
 - d) Provide a summary of results, including uncertainty, rate of flue gas treatment plant reagent injection, and any deviations from the sampling protocol agreed under 4.1.1 a) in a report to the Regulator within 8 weeks of the date of the spot sample.
- 4.1.2 Emissions of particulate matter, nitrogen oxides (as NO₂) and sulphur (as SO₂) from melting furnaces shall be continuously monitored and continuously recorded.
- 4.1.3 Where Continuous Emission Monitors are installed to comply with the monitoring requirements; the Continuous Emission Monitors shall be used such that;
- a) valid 15-minute averages shall be determined within the effective operating time (i.e excluding the start-up and shut-down or hot hold periods).
 - b) daily average values shall be determined as the average of all the 15-minute average values within a calendar day. The daily average value shall be considered valid if no more than five 15-minute average values in any day have been determined not to be valid;
 - c) no more than ten daily average values per year shall be determined not to be valid.
- 4.1.4 Exhaust gas volumetric flow rate from melting furnaces shall be continuously monitored and continuously recorded.
- 4.1.5 A summary of continuous emissions monitoring results in a format that allows direct comparison with the emission limits specified in condition 3.1.1 shall be forwarded to the Regulator at least once every three months.
- 4.1.6 Continuous emissions monitors associated with melting furnaces shall be calibrated at least once every 6 months. Calibration documentation must be made available to the Regulator on request.

4.2 Monitoring emissions to land and soil

- 4.2.1 The Operator shall undertake soil monitoring at least once every 10 years.

4.3 Monitoring emissions to water

- 4.3.1 The Operator shall undertake groundwater monitoring at least once every 5 years.

4.4 General land and water monitoring requirements

- 4.4.1 The monitoring required by conditions 4.2.1 & 4.3.1 shall be carried out in accordance with the soil and groundwater monitoring plan required by condition 4.4.2
- 4.4.2 The soil and groundwater monitoring plan for the monitoring required by conditions 4.2.1 & 4.3.1 shall be submitted to the Regulator, at least 28-days in advance of carrying out the monitoring. The monitoring plan shall include:
- a) Reference to the findings of the initial site condition report dated 21st July 2003 and any subsequent site condition reports; and,
 - b) The details of the persons or organisation undertaking the monitoring; and,
 - c) The locations at which the proposed monitoring will be carried out; and,

- d) The details of the proposed sampling methodology, including: the pollutants under investigation, how the samples will be taken, the laboratory used for sample analysis, and the limits of detection of pollutants for samples taken.
- 4.4.3 The Operator shall report the outcome of the monitoring required by conditions 4.2.1 & 4.3.1 to the Regulator within 8 weeks of the completion of the monitoring. The report shall include:
- a) Interpretation of the results with reference to previous monitoring undertaken (including the site condition and baseline reports), and the operations undertaken at the installation; and,
 - b) Details of corrective actions that are required to protect groundwater and soil and remedy any contamination that has occurred a result of permitted activities; and,
 - c) A review of the soil and groundwater monitoring plan in order to determine whether any changes to monitoring locations, frequency or parameters are required, and where changes to the soil and groundwater monitoring plan are proposed.
- 4.4.4 The Operator shall keep all soil and groundwater monitoring plans, monitoring results, and monitoring reports undertaken and produced in accordance with Conditions 4.2.1, 4.3.1, 4.4.2 & 4.4.3 until the permit is surrendered.
- 4.4.5 Any groundwater monitoring wells detailed in the plan required by Condition 4.4.2 shall be maintained in a condition fit for purpose, unless otherwise agreed in writing with the Regulator. Where a well's function is compromised it shall be repaired or replaced to allow sample collection.

5. Emissions control

5.1 Controlling emissions from glass melting furnaces

- 5.1.1 Where flue gas treatment is required in order to meet the glass melting furnace emission limits in condition 3.1.1, it shall be used.
- 5.1.2 Flue gas treatment systems for glass melting furnaces shall be operational for at least 95% of the calendar year, which includes time required for planned preventative maintenance.
- 5.1.3 Flue gas treatment by-pass shall only be used to effect maintenance or repair to the flue gas treatment systems. The Regulator shall be notified without delay of all flue gas treatment system bypass.
- 5.1.4 Where the operation of flue gas treatment systems mentioned in condition 5.1.1 do not meet the operational requirements of condition 5.1.2, the glass melting furnace shall be maintained in a 'hot hold' condition. In this condition, 'hot hold' shall mean that liquid glass is retained within the furnace and no products are formed.

5.2 Controlling emissions from downstream activities

- 5.2.1 Emissions from downstream processes (hot end coating) shall be contained and combined with the waste gas from the melting furnace before secondary flue gas treatment is applied or with the combustion air of the furnace.

5.3 Controlling emissions from raw materials and waste storage activities

- 5.3.1 All bulk powders shall be stored in silos, which shall be:
- a) Clearly labelled, and locked-off when not in use; and,
 - b) Filled by pneumatic means or other enclosed filling system; and,
 - c) Equipped with alarms and interlocks to warn of and to prevent overfilling; and
 - d) Equipped with suitable pressure relief devices; and,
 - e) Vented to suitable arrestment plant.
- 5.3.2 All bulk raw materials storage areas shall be
- a) Clearly identified; and,
 - b) Suitable for the quantity and type of material stored.
- 5.3.3 All waste storage areas shall be
- a) Clearly identified; and,
 - b) Suitable for the quantity and type of waste stored.

5.4 Controlling emissions to land and water

- 5.4.1 All containers used to store any potentially environmentally hazardous liquids shall be located in the suitable contained or bunded area. The minimum capacity of the containment area shall be either 110% of the capacity of the largest container within the bund, or 25% of the total capacity of all the containers within the bund, whichever is the greater. In the event of any containers being connected to one another, they shall be treated as one container.
- 5.4.2 The contained or bunded area referred to in condition 5.4.1 shall conform to the following standards:
- a) The walls and base of the contained or bunded area shall be impermeable and the base of the contained area shall drain to an impermeable sump; and,
 - b) When not in use all taps, valves, pipes and every part of each container shall be located within the area served by the contained area. Connection points shall be fixed and locked when not in use; and,
 - c) Vent pipes shall be directed downwards into the bund; and,
 - d) All containers with a design capacity above 1250 litres (with the exception of uncontaminated rainwater tanks) shall be fitted with a device for continuously monitoring the level of the contents.
- 5.4.3 Procedures for dealing with the discharges from bunds and the contained area shall be in place.
- 5.4.4 The Operator shall have a clear diagrammatic record of the routing of all drains, subsurface pipework, sumps and storage vessels including the type and broad location of the receiving environment. Plans shall be:
- a) Updated as often as required to reflect all changes to the items detailed above; and kept by the Operator until the permit is surrendered.
- 5.4.5 A record shall be maintained of any incident that has, or might have, impacted on the condition of any soil or groundwater under the permitted installation, either as a result of that incident or as a result of an accumulation of incidents, together with a record of any further investigation or remediation work carried out. All records made under this condition shall be kept by the Operator until the permit is surrendered.

- 5.4.6 The Operator shall undertake a systematic assessment of all measures used to prevent emissions from the permitted installation to soil and groundwater at least once every 4 years. A written report of each assessment shall:
- a) Detail of the measures in place to prevent emissions to soil and groundwater and an assessment of their state of repair and efficacy; and,
 - b) Detail all additional measures identified that are required to prevent emissions to soil and groundwater and a timetable for their implementation; and,
 - c) Be submitted to the Regulator within 8 weeks of the completion of the assessment; and,
 - d) Kept by the Operator until the permit is surrendered.

6. Management

6.1 Management

- 6.1.1 The Operator shall manage and operate the regulated activities using an effective Environmental Management System with policies and procedures for environmental compliance and improvements. Audits shall be carried out against those procedures at regular intervals.
- 6.1.2 A primary point of contact shall be appointed to liaise with the regulator and the public with regard to complaints. The Regulator should be informed of the designated individual(s) within 4 weeks of the date of issue of this permit. Any changes off the contacts shall be notified to the Regulator without delay.

6.2 Maintenance

- 6.2.1 Effective operational and maintenance systems shall be employed on all aspects of the installation whose failure could impact on the environment. Such systems shall be reviewed and updated annually.
- 6.2.2 Environmentally critical process and abatement equipment (whose failure could impact on the environment) shall be identified and listed. The Regulator shall be provided with a list of such equipment. For equipment referred to above:
- a) Alarms or other warning systems shall be provided, which indicate equipment malfunction or breakdown; and,
 - b) Such warning systems shall be maintained and checked to ensure continued correct operation, in accordance with the manufacturer's recommendations; and,
 - c) Essential spares and consumables for such equipment shall be held on site or be available at short notice from suppliers, so that plant breakdown can be rectified rapidly.
- 6.2.3 Records of breakdowns shall be kept and analysed by the operator in order to eliminate common failure modes.

6.3 Training & instruction

- 6.3.1 A formal structure shall be provided to clarify the extent of each level of employee's responsibility with regard to the control of the process and its environmental impacts. This structure shall be prominently displayed on the company within the process building at all times. Alternatively, there must be a prominent notice referring all relevant employees to where the information can be found.

- 6.3.2 Personnel at all levels shall be given training and instruction sufficient to fulfil their designated duties under the above structure. Details of such training and instruction shall be entered into an appropriate record and be made available for inspection by the Regulator.
- 6.3.3 The potential environmental risks posed by the work of contractors shall be assessed and instructions provided to contractors about protecting the environment while working on site.

7. Raw materials

- 7.1 The Operator shall provide and maintain a sulphur mass balance for the glass melting activity, which shall be forwarded to the Regulator on request. The mass balance shall:
- a) Detail all sulphur inputs in raw materials; and,
 - b) Detail all sulphur inputs in recycled materials; and,
 - c) Detail all sulphur outputs in waste products; and,
 - d) Detail all sulphur outputs in products; and,
 - e) Detail all sulphur outputs in waste gasses.
- 7.2 The rate of lime injection into the secondary abatement plant shall be recorded.
- 7.3 Collected filter dust from secondary abatement plant shall, as far as practicable, be used as a raw material in the melting furnace.
- 7.4 Collected filter dust from secondary abatement plant not used as a raw material shall be disposed of off site. Records of filter waste disposal shall be made available to the Regulator on request.

8. Waste minimisation & raw materials use efficiency (including energy & water)

- 8.1 The Operator shall:
- a) Take appropriate measures to ensure that raw materials are used efficiently; and,
 - b) Maintain records of all raw materials (including recycled materials) used; and,
 - 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 materials use; and,
 - d) Take any further appropriate measures identified by a review.
- 8.2 The Operator shall:
- a) Take appropriate measures to ensure that energy is used efficiently; and,
 - b) Maintain records of all energy used; and,
 - c) Review and record at least every four years whether there are suitable alternative measures or opportunities to improve the energy use efficiency; and,
 - d) Take any further appropriate measures identified by a review.

- 8.3 The Operator shall:
- a) Take appropriate measures to ensure that water is used efficiently in the; and,
 - b) Maintain records of all mains (Town) water used; and,
 - c) Review and record at least every four years whether there are suitable alternative materials that could reduce water use or improve water use efficiency; and,
 - d) Take any further appropriate measures identified by a review.
- 8.4 The Operator shall produce an annual report detailing the energy and raw materials used compared to finished product produced. The annual report shall:
- a) Be a full calendar year accounting period (1st January to 31st December inclusive); and,
 - b) Be submitted to the Regulator within 8 weeks of the end of the accounting period.

9. Waste

- 9.1 The Operator shall take appropriate measures to ensure that:
- a) The waste hierarchy referred to in article 4 of the Waste Framework Directive (2008/98/EC) is applied to the generation of waste by the Regulated Activities; and,
 - b) Any waste generated by the Regulated Activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and,
 - c) Where further treatment or disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.
- 9.2 All waste disposed of shall be recorded, and records of that waste disposal kept for a minimum of four years.
- 9.3 The Operator shall review and record at least every four years whether changes to those measures should be made and to take and further appropriate measures to reduce waste identified by the review.

10. Incidents, accidents and their consequences

- 10.1 There shall be written procedures for investigating incidents and near misses, including identifying suitable corrective action and following up.
- 10.2 The Operator shall maintain an accident management plan covering the matters listed above and to the satisfaction of the regulator. The plan shall be available for inspection by the Regulator.
- 10.3 Adequate provision to contain potential liquid spillage shall be provided.
- 10.4 All spillages shall be cleared as without delay.

10.5 The Operator shall:

- 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 the Regulator; and,
 - (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 or any breach of permit condition, the Operator must immediately:-
 - (i) Inform the Regulator; and,
 - (ii) Take the measures necessary to ensure that compliance is restored in the shortest possible time.
- c) In the event or any 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 operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.

10.6 The Operator shall confirm the details of the incident to the Regulator by the next working day after identification of the incident. This confirmation shall include:

- a) The time and duration of the incident; and,
- b) The receiving environmental medium or media where there has been any emission as a result of the incident; and,
- c) An initial estimate of the quantity and composition of any emission; and,
- d) The measures taken to prevent or minimise any emission or further emission; and,
- e) A preliminary assessment of the cause of the incident.

10.7 Further to any incident reported to the Regulator, the Operator shall investigate the cause of the incident, and shall provide a report detailing the findings to the Regulator. The report shall detail at a minimum:

- a) The circumstances of the incident; and,
- b) An assessment of any harm to the environment; and,
- c) The steps taken by to bring the incident to an end.

The report shall also set out proposals for remediation, where necessary, and for preventing a repetition of the incident. Unless otherwise agreed in writing the report shall be sent to the Regulator within 14 days of the date of the incident.

11. Noise & vibration

- 11.1 The operator shall identify key plant and equipment (or operations) with the potential to give rise to significant noise and take such measures as are necessary by way of mitigation and maintenance of existing plant and equipment in order to minimise noise.

12. Records

- 12.1 All systems and procedures used to demonstrate compliance with a condition of this permit shall be recorded. Records include:
- a) Hand written records; and,
 - b) Digital records (computer or other logging system).
- 12.2 All records made in compliance with this permit and the operation and maintenance of the permitted installation shall be kept in a systematic manner, and in particular:
- a) All records shall be legible, and any amendment made to any record made in compliance with a condition of this permit shall be made in such a way as to leave the original entry clear and legible. The reason for each amendment shall be explained in that record; and,
 - b) Unless otherwise stated in this permit, records made in compliance with a condition of this permit shall be preserved for not less than 5 years from the date of the record being made; and,
 - c) All records made in compliance with a condition of this permit shall be preserved on site for not less than 1 year from the date of the record being made.
- 12.3 For all records not kept on site:
- a) The Operator shall notify the Regulator of the location used for the off-site storage of records; and,
 - b) Records shall be made available to the Regulator within 7-days of the date of any request for records held off-site being made.

13. Reporting

- 13.1 All reports and notifications shall include this permit number and name of the Operator.
- 13.2 All reports, and written and or oral notifications required by this Permit shall be made or sent to the Regulator using the contact details provided by the Regulator in writing. In this condition, the term 'writing' includes email.
- 13.3 Unless specified otherwise in a condition of this permit all reporting under this permit shall be:
- a) Based on a calendar year reporting period; and,
 - b) Submitted to the regulator within 8 weeks of the end of the reporting period detailed in condition 13.3 a) above.
- 13.4 The Operator shall, unless notice under this condition has been served within the preceding four years, submit to the Regulator, within six months of a 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.

14. Notifications

- 14.1 The Operator shall give at least 20 working days prior notification of intention to transfer the permit to another Operator, using a form supplied by the Regulator for this purpose.

- 14.2 Where the Operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:
- a) The 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.
- 14.3 The Operator shall notify the Regulator within 14-days of the occurrence of the following:
- 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 by the Operator going into administration, entering into a company voluntary arrangement, being wound up or bankruptcy; and,
- 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 one or more named individuals); and,
 - 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.
- 14.4 The Operator must respond to any request for information for the purposes of complying with your obligation to report your pollutant releases and off-site waste transfers pursuant to the directly applicable EU duty in accordance with Article 5 of EC Regulation No 166/2006 concerning the establishment of a European Pollutant Release and Transfer Register. As a permit condition, any failure to respond in accordance with such annual E-PRTR Information Notice will constitute a breach of permit.
- 14.5 The Operator shall notify the Regulator at least 14-days prior to the implementation of any part of the site closure plan

15. Cessation of activities

- 15.1 The Operator shall maintain a site closure plan for the definitive cessation of the activities. The site closure plan shall include:
- a) Site details; and,
 - b) Details of the condition of the land at permit issue (initial site condition report and baseline report); and,
 - c) Details of permitted activities; and,
 - d) Outline proposals for decommissioning.

- 15.2 The baseline report shall contain the information necessary to determine the state of soil and groundwater contamination so as to make a quantified comparison with the state on definitive cessation. The baseline report shall be updated where:
- a) Changes to the activity or the installation boundary are made; and,
 - b) Measures are taken to protect land; and,
 - c) Pollution incidents may have had an impact on land, and their remediation; and,
 - d) Details of soil, gas and water quality monitoring.
- 15.3 Upon definitive cessation of the Activities, the Operator shall assess the state of soil and groundwater contamination by relevant hazardous substances used, produced or released by the installation. Where the installation has caused significant pollution of soil or groundwater by relevant hazardous substances compared to the state established in the baseline report referred to in conditions 15.1 & 15.2, the Operator shall take the necessary measures to address that pollution so as to return the site to that state as is technically feasible.
- 15.4 The Operator shall submit a site condition report detailing the assessment required by condition 15.3 with any permit surrender application. The site condition report shall include:
- a) Site details; and,
 - b) Details of the condition of the land at permit issue (initial site condition report and baseline report); and,
 - c) Details of permitted activities; and,
 - d) Changes to the activity; and,
 - e) Measures taken to protect land; and,
 - f) Pollution incidents that may have had an impact on land, and their remediation; and,
 - g) Details of soil, gas and water quality monitoring; and,
 - h) Decommissioning and removal of pollution risk; and,
 - i) Reference data and remediation; and,
 - j) Statement of site condition.

16. Interpretations and Explanatory Notes

16.1 In relation to this Permit, the following expressions shall have the following meanings:

<i>“Activity”</i>	An activity listed in Part 2 of Schedule 1 to the EP Regulations which will form part of an EP installation or be a mobile plant
<i>“Abnormal operation”</i>	Means any technically unavoidable stoppages, disturbances, or equipment failures during which releases to air, land or water might exceed emission limits.
<i>“Accident”</i>	Means an unplanned event that may result in pollution.
<i>“Authorised Officer”</i>	Means an Officer of Harlow Council who is authorised 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(1) of that Act.
<i>“Best Available Techniques (BAT)”</i>	<p>Best available techniques means the most effective and advanced stage in the development of activities and their methods of operation which indicates the practical suitability of particular techniques for providing in principle the basis for emission limit values designed to prevent, and where that is not practical, generally to reduce emissions and the impact on the environment as a whole.</p> <p>For those purposes:</p> <p>“Available techniques” means those techniques which have been developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the cost and advantages, whether or not the techniques are used or produced inside the United Kingdom, as long as they are reasonably accessible to the Operator;</p> <p>“Best” means, in relation to techniques, the most effective in achieving a high general level of protection of the environment as a whole;</p> <p>“Techniques” includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned. Schedule 2 of the Regulations shall have effect in relation to the determination of best available techniques.</p>
<i>“Change in Operation”</i>	In relation to an installation or mobile plant, a change in its nature or functioning or an extension which may have consequences for the environment.
<i>“Emissions of substances not controlled by emission limits”</i>	Means emissions of substances to air, land or water from the activities, either from specified emission points, or from other localised or diffuse sources which are not controlled by an emission limit.
<i>“Enforcement notice”</i>	A notice served by a local authority to enforce compliance with the permit conditions or require remediation of any harm following a breach of any condition.
<i>“Fugitive Emission”</i>	Means an emission to air or water (including sewer) from the Permitted installation that is not controlled by an emission limit imposed by a condition of this Permit.
<i>“Groundwater”</i>	Means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.
<i>“Hazardous property”</i>	Has the meaning given in Schedule 3 of the Hazardous Waste (England and Wales) Regulations 2005 No.894.

<i>"Incident"</i>	Means any of the following situations: <ul style="list-style-type: none"> ➤ Where an accident occurs which has caused or may have the potential to cause pollution; ➤ Where any malfunction, breakdown or failure of plant or techniques is detected which has caused or may have the potential to cause pollution; ➤ A breach of any condition of this Permit; ➤ Where any substance, vibration, heat or noise specified in any Condition of this Permit is detected in an emission from a source not authorised by a Condition of this Permit and in a quantity which may cause pollution; ➤ Where an emission of any pollutant not authorised to be released under any Condition of this Permit is detected; ➤ Where an emission of any substance, vibration, heat or noise is detected that has exceeded, or is likely to exceed, or has caused, or is likely to cause to be exceeded any limit on emissions specified in a Condition of this Permit.
<i>"Industrial Emissions Directive"</i>	Means Directive 2010/75/EU of the European Parliament and of the Council of 24 th November 2010 on industrial emissions.
<i>"Installation"</i>	A stationary technical unit where one or more activities listed in Part 2 of Schedule 1 to the EP Regulations are carried out and any other location on the same site where any other directly-associated activities are carried out. and any activities that are technically linked The terms 'regulated facility' and 'installation' are, in effect, interchangeable for A(2) and B activities.
<i>"MCERTS"</i>	Means the Environment Agency's Monitoring Certification Scheme.
<i>"Monitoring"</i>	Includes the taking and analysis of samples, instrumental measurements (periodic and continual), calibrations, examinations, tests and surveys.
<i>"Operator"</i>	The person who has control over the operation of the installation/regulated facility (EP Regulation 7).
<i>"Permit"</i>	Means Environmental permit.
<i>"Permitted activities"</i>	Means the regulated activities that may be undertaken in accordance with this permit.
<i>"Permitted Installation"</i>	Means the buildings or area within which the permitted activities can be undertaken.
<i>"Pollution"</i>	Any emission as a result of human activity which may be harmful to human health or the quality of the environment, cause offence to any human senses, result in damage to material property, or impair or interfere with amenities and other legitimate uses of the environment (EP Regulation 2(1)).
<i>"Regulator"</i>	Means Harlow Council.
<i>"Revocation notice"</i>	A notice served by the Regulator under EP regulation 22 revoking all or part of a permit.
<i>"The EPR / EP Regulations"</i>	Means the Environmental Permitting (England and Wales) Regulations 2010 S.I. 2010 No.675 (as amended) and words and expressions defined in the EPR shall have the same meanings when used in this Permit save to the extent they are explicitly defined in this Permit.
<i>"Waste Framework Directive"</i>	Means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste.

16.2 Where any condition of this Permit refers to the whole or parts of different documents, In the event of any conflict between the wording of such documents, the document with the most recent publication date shall be taken to be the most appropriate document to be used.

16.3 Any person who is aggrieved by the conditions attached to a Permit can appeal to the Secretary of State for Environment, Food & Rural Affairs. Appeals must be received by the Secretary of State no later than 6 months from the date of the decision (the date of the Permit).

Appeals relating to installations in England should be received by the Secretary of State for Environment, Food & Rural Affairs. The address is as follows;

The Planning Inspectorate
Environment Team, Major and Specialist Casework
Room 4/04 – Kite Wing
Temple Quay House
2 The Square
Temple Quay
Bristol, BS1 PN

The appeal must be in the form of a written notice or letter stating that the person wishes to appeal and listing the condition(s) which is/are being appealed against. The following five items must be included;

- (a) A statement of the ground of appeal;
- (b) A copy of any relevant application;
- (c) A copy of any relevant Permit;
- (d) A copy of any relevant correspondence between the person making the appeal (“the appellant”) and the Council;
- (e) A statement indicating whether the appellant wishes the appeal to be dealt with.
 - By a hearing attended by both parties and conducted by an inspector appointed by the Secretary of State; or
 - By both parties sending the Secretary of State written statements of their case (and having the opportunity to comment upon one another’s statements).

At the same time, the notice of appeal and documents (a) and (e) must be sent to the Council, and the person making the appeal should inform the appropriate Secretary of State that this has been done.

- An appeal will not suspend the effect of the conditions appealed against; the conditions must still be complied with.
- In determining an appeal against one or more conditions, the Act allows the Secretary of State in addition to quash any of the other conditions not subject to the appeal and to direct the local authority to either vary any of these conditions or to add new conditions.

Schedules:

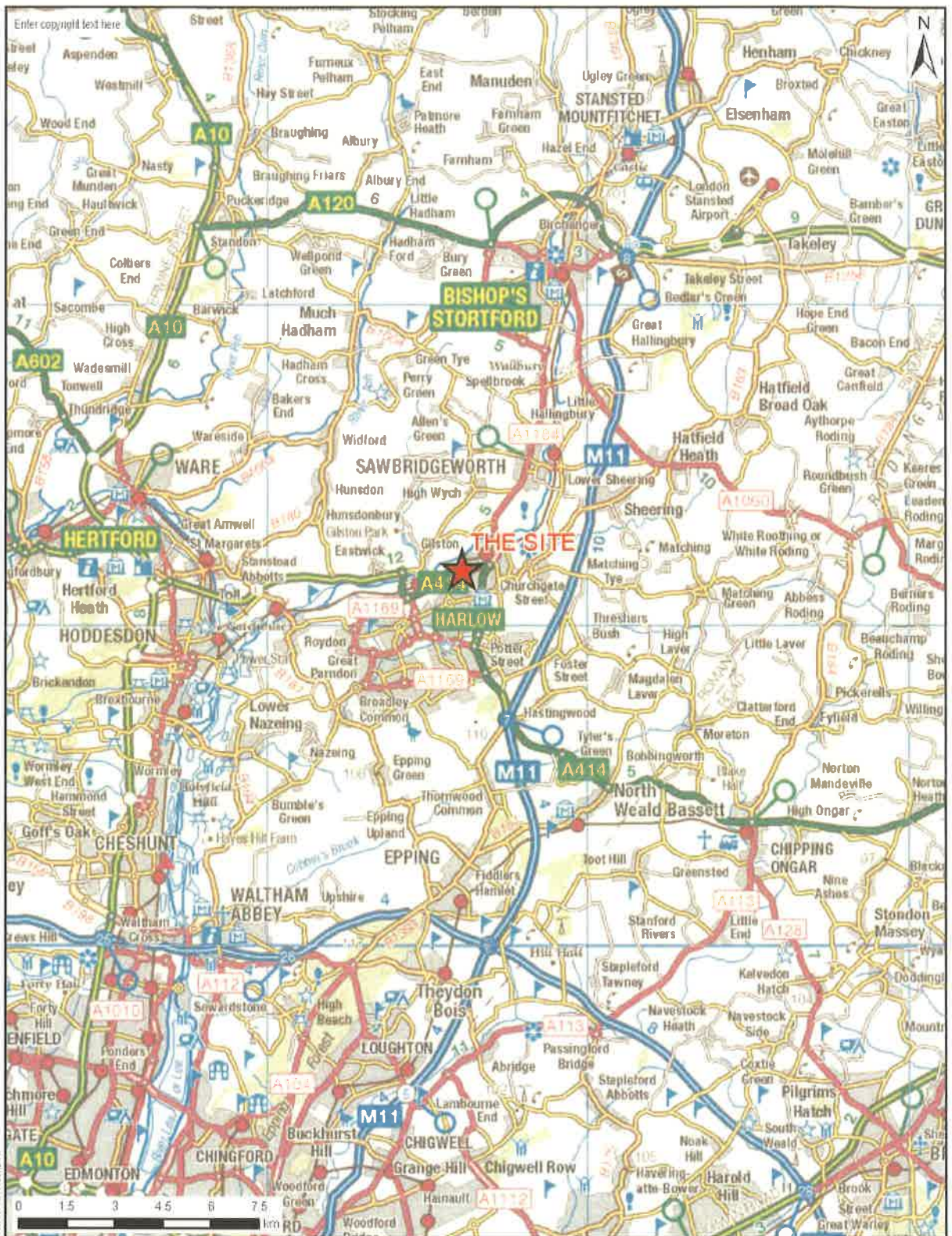
Schedule 1: Location plan

Schedule 2: Site plan


Schedule 3: Reporting summary

Schedule 4: Reporting form

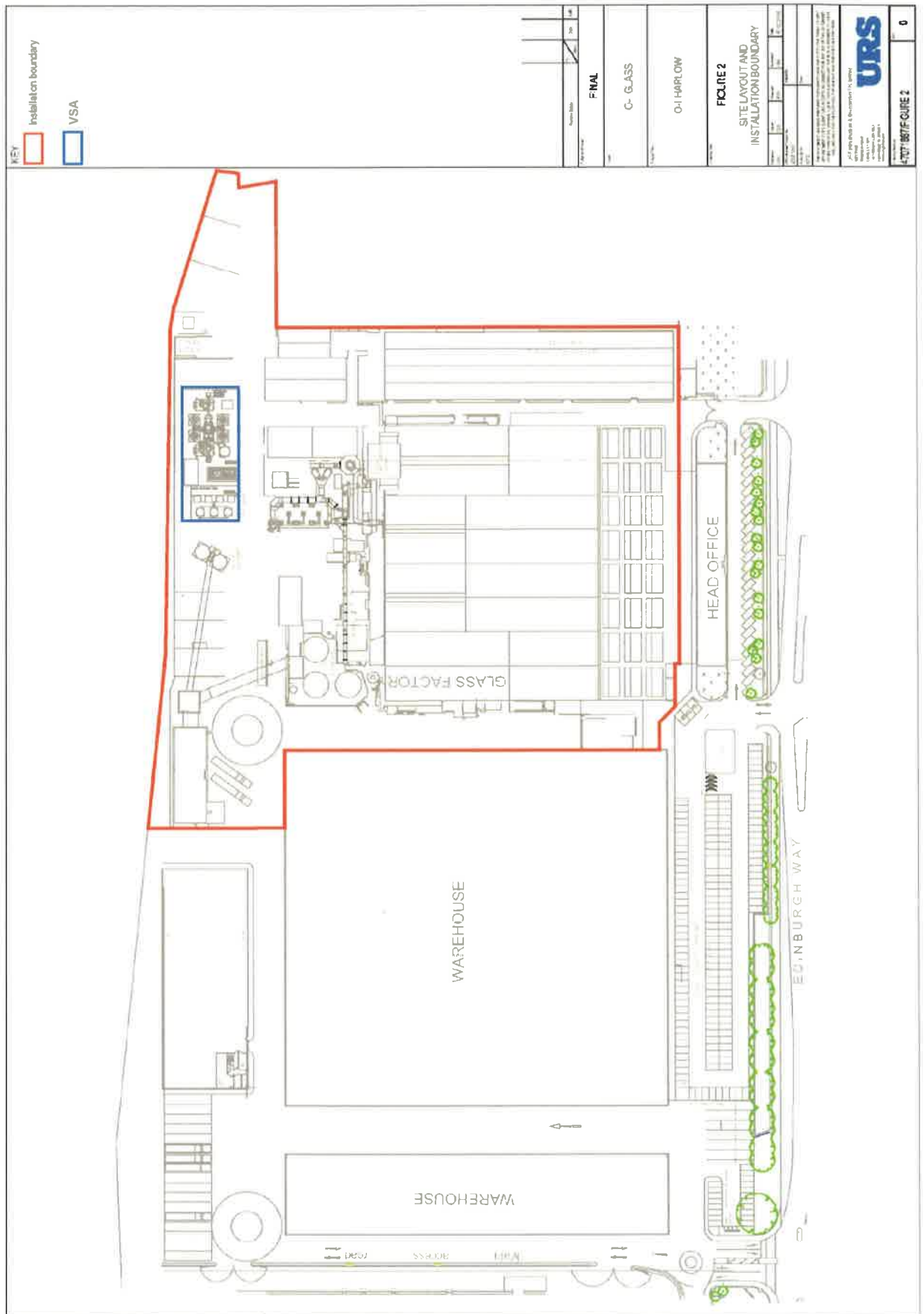
Schedule 1: Location plan



The format shown is illustrative only and does not constitute a contract.

Project Title/Drawing Title		Client		URS Infrastructure & Environment UK Limited	
O-I GLASS FIGURE 1 LOCATION PLAN		Drawn GB	Checked HW	Approved HW	 South House Mungton Park, Ennals Road Haverhill, R321 7PP Telephone: (01258) 510200 Fax: (01258) 510201 www.ursgroup.com
		Date 15/12/2014	Scale @ A4 1:150,000	Purpose of Issue DRAFT	
Drawing Number 47071887/FIGURE 1		Rev		THIS DOCUMENT HAS BEEN PREPARED EXCLUSIVELY FOR THE CLIENT AND IS NOT TO BE USED FOR ANY OTHER PURPOSES WITHOUT THE WRITTEN PERMISSION OF URS. THE CLIENT ACCEPTS LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN THAT FOR WHICH IT WAS PREPARED AND FOR WHICH IT IS NOT TO BE USED, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.	

Schedule 2: Site plan



Schedule 3: Reporting summary

The reporting requirements of this permit are summarised below:

Condition	Reporting requirement	Reporting Date
4.1.1 a)	Notification of spot sampling	At least 7 days prior to the sampling taking place
4.1.1 b)	Results of spot sampling	Within 8 weeks of the sampling taking place
4.1.4	Summary of continuous emissions monitoring results	Every 3 months
4.2.1	Groundwater monitoring	Every 5 years
4.3.1	Soil monitoring	Every 10 years
4.4.2	Soil or groundwater monitoring plan	28-days in advance of monitoring
4.4.3	Soil or groundwater monitoring results	Within 8 weeks of the monitoring taking place
5.1.3	Flue gas treatment system bypass	Without delay (immediately)
5.4.6	Systematic assessment of all measures used to prevent emissions from the permitted installation to soil and groundwater	Every 4 years, and within 8 weeks of completing the assessment
6.1.2	Notification of primary point of contact	Within 4 weeks of date of permit, and without delay on change of primary contact
8.1	Raw materials audit	Every 4 years
8.2	Energy audit	Every 4 years
8.3	Water efficiency audit	Every 4 years
8.4	Report detailing materials used compared to products produced	Annually, and within 8 weeks of the end of the accounting period
9.3	Review of waste reduction measures	Every 4 years
10.5	Incident or accident affecting the environment	Immediately
10.6	Confirmed details of an incident or accident affecting the environment	Next working day
10.7	Report on incident or accident affecting the environment	Within 14 days
12.3	Off-site storage or records	At the time of removal
14.1	Permit transfer	20 working days prior notification
14.2	Non-substantial changes to the operation of the installation	14-days prior to change
14.3	Changes to the Operators legal entity	Within 14 days of the change
15.4	PRTR return	Annually on request
14.5	Implementation of the site closure plan	14-days prior

Schedule 4: Reporting form

This schedule outlines the information that the operator must provide when making a report about an incident, accident, release or other emission.

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	EPR/A2/001
Name of Operator	O-I Manufacturing UK Limited
Location of facility	Edinburgh Way, Harlow, Essex CM20 2UG
Time and date of detection of release or emission	

(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 reported within 24 hours of detection	
Date & time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substance(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 reported within 24 hours of detection	
Emission point reference / source	
Parameter(s)	
Limit(s)	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken to stop the emission	

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

Part B

To be reported within 14 days of the incident	
Any more accurate information on the matters for notification under Part A	
Measures taken, or proposed to prevent a recurrence of the incident	
Measure taken or proposed 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 12 months.	

Name*	
Post	
Signature	
Date	

* Authorised to sign on behalf O-I Manufacturing UK Limited