Article 46

Control of emissions

1. Waste gases from waste incineration plants and waste co-incineration plants shall be discharged in a controlled way by means of a stack the height of which is calculated in such a way as to safeguard human health and the environment.

A detailed air quality assessment has been prepared and is submitted in Chapter 8 and Appendix 8.1 of the EIAR accompanying this IE licence application. This included a detailed baseline air quality assessment and a calculation of the stack height based on maximum emission limits permitted by part 3 of Annex VI and maximum operating conditions (110% thermal load) at the plant for 365 days per year. The calculated stack height of 70m above the ground level of the plant will ensure that human health and the environment are protected.

2.Emissions into air from waste incineration plants and waste co-incineration plants shall not exceed the emission limit values set out in parts 3 and 4 of Annex VI or determined in accordance with Part 4 of that Annex.

As outlined in the Operational Report in Attachment 4-8-1 and in Section 4.7 or Chapter 4 of the EIAR, the flue gas treatment system proposed will ensure that the emission limit values set out in part 3 of Annex VI will be met with ease. The proposed emission limit values in Attachment 7-4-1 reflect those of part 3 of Annex VI and also consider the new BAT-AEL's which will be applicable for normal operating conditions.

If in a waste co-incineration plant more than 40 % of the resulting heat release comes from hazardous waste, or the plant co-incinerates untreated mixed municipal waste, the emission limit values set out in Part 3 of Annex VI shall apply.

Not applicable in this case.

3. Discharges to the aquatic environment of waste water resulting from the cleaning of waste gases shall be limited as far as practicable and the concentrations of polluting substances shall not exceed the emission limit values set out in Part 5 of Annex VI.

There will be no process effluent discharges to the aquatic environment.

4. The emission limit values shall apply at the point where waste waters from the cleaning of waste gases are discharged from the waste incineration plant or waste co-incineration plant.

There will be no process effluent discharges to the aquatic environment.

5.Waste incineration plant sites and waste co-incineration plant sites, including associated storage areas for waste, shall be designed and operated in such a way as to prevent the unauthorised and accidental release of any polluting substances into soil, surface water and groundwater.
Storage capacity shall be provided for contaminated rainwater run-off from the waste incineration plant site or waste co-incineration plant site or for contaminated water arising from spillage or fire-fighting operations. The storage capacity shall be adequate to ensure that such waters can be tested and treated before discharge where necessary.

All wastes, raw materials and residues from the plant will be handled on hardstanding areas either indoors or in areas with controlled drainage systems.

All storm water from all of the roads and hard standings will be conveyed via a class 1 hydrocarbon interceptor to the fire water retention tank, which is indicated as tank no. 1 on the drainage drawings. The fire water retention tank will have a capacity of 1,690m^3.

Fuel oil and ammonia for use in the process will be stored in double skinned tanks with leak protection on concrete hardstanding areas. The tanker unloading area (for aqueous ammonia and fuel oil), which is located adjacent to the fuel tank, will be provided with cut off drains to collect any spillage that may occur during loading or unloading. A local holding tank with a capacity of 2m^3 will be provided where any spillage occurring during loading or unloading operation will be collected. The holding tank is drained via a forecourt interceptor to the fire water retention tank. Refer to section 4.13.3 of Chapter 4 of the EIAR.

Solid waste will be stored in the concrete waste bunker which will be designed to contain any leachate generated by the waste. Liquid wastes for treatment will be stored in a steel tank located within a bund and will be unloaded into the tank within a designated concrete contained area which is not connected to the main surface water drainage network.

Bottom ash, boiler ash and flue gas cleaning residues will be generated from the different process stages at the site. All ash is contained within the internal structure of the building and will not be discharged to the stormwater system on site.

Additional protection is provided by the following measures; manned loading and all dispensing of ash to collection trucks is undertaken in coordination with the collection truck driver. Spill containment procedures are in place in the event of an ash spill.

Boiler ash and flue gas cleaning residue transport systems and tanks are fully enclosed.

The bottom ash is quenched in a water bath upon discharge from the furnace. In the event of a release of water from the wet bath, spilled material will be contained in the area and any material reaching indoor drains will be contained in the internal drainage recovery tanks where the water can be removed for treatment or reused within the treatment process. The wet bath will be inspected and maintained as part of the site's maintenance programme.

The surface water drainage system has been designed as a minimum to comply with the Building Regulations 2010, BS EN 752-4 Drain and Sewer Systems outside Buildings. Sufficient retention capacity of 1,690 m^3 has been provided for potentially contaminated surface water in the firewater retention tank. This is based on continuous monitoring of the potentially contaminated surface water which will ensure that it is directed to the fire water retention tank in the event of a leak or spill and retained prior to either treatment on site or off-site. This system is further detailed in Chapter 4.14.3 of the EIAR accompanying this application.

6.Without prejudice to Article 50(4)(c), the waste incineration plant or waste co-incineration plant or individual furnaces being part of a waste incineration plant or waste co-incineration plant shall under no circumstances continue to incinerate waste for a period of more than 4 hours uninterrupted where emission limit values are exceeded.

The cumulative duration of operation in such conditions over 1year shall not exceed 60 hours.
The time limit set out in the second subparagraph shall apply to those furnaces which are linked to one single waste gas cleaning device.

It is standard operating procedure within Indaver to adhere strictly to this Article. It is anticipated that this will also be enforced via licence condition.

Article 47
Breakdown
In the case of a breakdown, the operator shall reduce or closedown operations as soon as practicable until normal operations can be restored.

This will be complied with in accordance with the licence conditions and for the safe operation of the plant.

Article 48
Monitoring of emissions

1. Member States shall ensure that the monitoring of emissions is carried out in accordance with Parts 6 and 7 of Annex VI.

The measurements relating to air polluting substances in Part 6 will be carried out on the parameters and with the frequency specified in Attachment 7-4-1 on the main emissions from the plant. The re-calculation for Oxygen for the concentrations of the relevant substances will be made in accordance with the formula in Part 7.

2.The installation and functioning of the automated measuring systems shall be subject to control and to annual surveillance tests as set out in point 1 of Part 6 of Annex VI.

Indaver will ensure that the measurements are carried out in accordance with the correct norms as agreed with the Agency. Indaver will carry out annual surveillance tests in accordance with the conditions of the licence.

3.The competent authority shall determine the location of the sampling or measurement points to be used for monitoring of emissions.

Indaver will liaise with the Agency on the location of the sampling and measuring point for emissions in the stack prior to commissioning of the facility.

4.All monitoring results shall be recorded, processed and presented in such a way as to enable the competent authority to verify compliance with the operating conditions and emission limit values which are included in the permit.

The reporting of emissions from our CEMS system will be automated in such a way that the results are standardised as per the conditions of the licence. This will ensure that the results are directly comparable to the emission limit values.

Article 48(5) of the IED is not applicable to the Operator.

5. As soon as appropriate measurement techniques are available within the Union, the Commission shall, by means of delegated acts in accordance with Article 76 and subject to the conditions laid down in Articles 77 and 78, set the date from which continuous measurements of emissions into the air of heavy metals and dioxins and furans are to be carried out.