This Report has been cleared for submission to the Board by Programme Manager, Warren Phelan

Signed: Date: 28th September 2023

OFFICE OF         ENVIRONMENTAL         SUSTAINABILITY				
то:	Directors			
FROM:	Technical Committee Environmental Licer Programme			
DATE:	28 SEPTEMBER 2023			
RE:	Objection to Proposed Determination for Dublin Waste to Energy Limited, Pigeon House Road, Poolbeg Peninsula, Dublin 4, IEL Reg: W0232-02			

Application Details	
Classes of Activity (under EPA Act 1992 as amended):	11.3 (a) Disposal or recovery of waste in waste incineration plants or in waste co-incineration plants for non-hazardous waste with a capacity exceeding 3 tonnes per hour.
	11.1 The recovery or disposal of waste in a facility, within the meaning of the Act of 1996, which facility is connected or associated with another activity specified in this Schedule in respect of which a licence or revised licence under Part IV is in force or in respect of which a licence under the said Part is or will be required.
Licence application received:	27 June 2019
PD issued:	23 March 2023
First party objection received:	1
Third Party Objection received:	0
Submissions on Objections received:	0

# Company

The licence application relates to Dublin Waste to Energy Limited (hereafter referred to as DWtE), an existing licensee, who operate a non-hazardous waste incineration plant with energy recovery at Poolbeg on the eastern side of Dublin city. In the licence application, DWtE propose to increase the permitted maximum annual waste intake from 600,000 tonnes per annum (tpa) to 690,000 tpa. The main processing operations at DWtE are waste acceptance, waste intake and storage, thermal processing, energy recovery and flue gas cleaning. The main process building has two identical waste-to-energy lines, each with separate boilers and flue gas cleaning. The two lines supply steam to one high-voltage turbine/generator that is connected to the electrical grid. In the future, some of the heat produced will be exported to the Dublin District Heating Scheme, when the external infrastructure is completed.

There was one submission received in relation to the application and this was considered by the Board at PD stage.

# **Consideration of the Objection**

The Technical Committee (TC), comprising of Niamh Connolly (Chair), John Cassels and Anne Lucey of OES, has considered all of the issues raised in the objection and this report details the Committee's comments and recommendations following the examination of the objections and the documents associated with the industrial emissions licence application.

This report considers the first party objection received.

The objections raised are summarised below. However, the original objection should be referred to for greater detail and further expansion of particular points.

# **First Party Objection**

The licensee has made 17 main points of objection relating to the glossary and specific Conditions/Schedules of the Proposed Determination. The points of objection are dealt with in the order below. Some points of objection have been addressed under one heading, where it is considered appropriate to do so.

# A.1 Condition No. 1.11.2 Scope - hours of operation

The licensee objects to the time restriction placed on the dispatch of waste from the installation, which will impact the removal of Air Pollution Control Residues to Belview Port, Co Kilkenny. The Licensee asserts that the current condition is not workable and is not congruous with the site being licenced to operate 24 hours a day, seven days a week. The licensee requests that the condition is "amended to facilitate the removal of all residues off-site at anytime, as already accepted by the Agency" under a previous licensee submission in 2021 (Ref. LR060066).

# Technical Committee's Evaluation:

In relation to licensee return LR060066, the TC notes that the Agency only approved for flue gas treatment residue/air pollution control residue destined for Belview Port to be

removed at any time and not the removal of all wastes or residues. Residues are defined in the glossary of the proposed determination as "*Any liquid or solid waste which is generated by an incineration plant or by a bottom ash treatment plant*".

The TC further notes that Condition 12 of the parent planning permission granted by An Bord Pleanála (Reference PL29S.EF2022) states that "*Flue gas residues shall not be stored at any location outside the boundaries of the site of the proposed development in such quantities as to result in the storage area becoming an Establishment for the purposes of the European Union Major Accidents Directive"* and that this condition was satisfied in the approval of licensee submission LR060066.

The TC therefore considers it appropriate that only the specific aspects and destination of this previous approval are restored.

The TC recommends that Condition 1.11.2 be amended.

Reason for Decision:

The TC has reached its conclusion on the basis of the following consideration:

• In the interest of appropriate management of waste generated at the installation.

#### Recommendation:

Amend Condition No. 1.11.2 to read as follows:

Incinerator residues destined for ships within the Dublin Port Area, and Flue Gas Treatment Residue/Air Pollution Control Residue destined for Belview Port, Co. Kilkenny, may be dispatched from the installation at any time. Otherwise, waste shall be dispatched from the installation only between the hours of 0800 hrs to 1830 hrs Monday to Friday inclusive and 0800 hrs to 1400 hrs on Saturdays.

# A.2 Condition No. 3.21.2 Infrastructure and Operation (CCTV)

The licensee requests that a "*30 day retention timeline for the storage of CCTV footage"* is included in Condition 3.21.2, as this was already approved by the Agency under a previous licensee submission (Ref. LR027220).

# Technical Committee's Evaluation:

The TC notes that Condition 3.4.2 of licence W0232-01 required the licensee to maintain a copy of CCTV recordings on site for a period of time to be agreed by the Agency. Under licensee submission LR027220, dated 07 March 2017, the Agency approved a retention period of 30 days. The TC considers that this is still an adequate timeframe in which

incidents may be investigated and is not in conflict with guidance<sup>1</sup> on retention periods for CCTV footage.

The TC recommends that Condition 3.21.2 be amended.

#### Reason for Decision:

The TC has reached its conclusion on the basis of the following consideration:

• To ensure the licence appropriately reflects operations at the site while ensuring the protection of the environment and human health.

Recommendation:

Amend Condition No. 3.21.2 to read as follows:

The licensee shall maintain a CCTV monitoring system which records all waste vehicle movements into and out of the installation as well as operations in the waste reception hall bunker and ash storage areas. The CCTV system shall be operated at all times with digital date stamping. Copies of recordings shall be kept on site **for a minimum of 30 days** and made available to the Agency on request.

# A.3 Condition No. 3.23.2 Installation Roads and Site Surfaces

The licensee is objecting to condition 3.23.2 to "*provide and maintain an impermeable concrete surface in all areas of the installation used for the movement, holding, storage or processing of waste.*" The licensee notes that much of the existing hardstanding on the site is of tarmacadam construction and requests that the standard for tarmacadam be inserted into this condition.

The licensee also requests that the timeline for repairs be amended from "within five working days" to "as soon as is practicable" with the reason stated that the facility operates 24 hours per day, 7 days a week and that repairs can only be scheduled during planned maintenance events.

#### Technical Committee's Evaluation:

The TC considers that an impermeable surface is applicable for movement of vehicles and waste on a licenced waste site of this nature as spills of oil, waste or fuel pose a risk to the water environment and human health. The TC considers that the most important aspect of this condition is that the surface over which vehicle and waste movements take place is impermeable to liquid wastes and is maintained as such. This is also required by BAT 12, Technique (a); 'Impermeable surfaces with an adequate drainage infrastructure'

<sup>&</sup>lt;sup>1</sup> Guidance for Data Controllers by the Data Protection Commission available at: <u>CCTV Guidance Data</u> <u>Controllers October19 For Publication 0.pdf (dataprotection.ie)</u>

of Commission Implementing Decision  $2019/2010^2$  for waste incineration (CID 2019/2010).

Concrete and tarmacadam have different properties. Concrete is a more expensive construction material but when laid correctly, is stronger, lasts longer and requires less regular maintenance than tarmacadam – provided any cracks in concrete are repaired quickly. Tarmacadam is likely to require a greater level of maintenance and need to be replaced sooner. However, the TC considers that tarmacadam is suitable for the activity at this site as an impermeable surface provided it is constructed and maintained sufficiently. There is also a benefit in keeping this condition open to the licensee to use innovative materials in future and not limiting the material use to one or two materials.

The TC notes that the licensee has not provided an equivalent standard for tarmacadam but considers that the condition already achieves this by allowing "...an alternative as approved by the agency".

The TC does not consider it an appropriately high level of environmental protection to defer repairs until planned shutdowns and recommends maintaining the requirement to repair defects within five days.

The TC recommends that Condition 3.23.2 be amended.

#### Reason for Decision:

The TC has reached its conclusion on the basis of the following consideration:

• In the interest of protecting the receiving environment in the event of an incident on-site.

#### Recommendation:

Amend Condition No. 3.23.2 as follows:

"The licensee shall provide and maintain an impermeable <del>concrete</del> surface in all areas of the installation used for the movement, holding, storage or processing of waste. The **impermeable** <del>concrete</del> surface shall be constructed to <del>Standard BS EN 1992-1-1:2004+A1:2044</del> **the appropriate European or National Standard,** as amended or an alternative as approved by the Agency. The licensee shall remedy any defect in <del>concrete</del> **impermeable** surfaces within five working days."

<sup>&</sup>lt;sup>2</sup> Commission Implementing Decision (EU) 2019/2010 of 12 November 2019 establishing the best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for waste incineration. Available at: <u>eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019D2010</u>

# A.4 and A.14 Condition No. 3.26.2 Waste Treatment Infrastructure and Glossary – definition of Incident

The licensee is objecting to Condition 3.26.2 which states that the quantity of waste to be accepted on a daily basis shall not exceed the duty capacity of the equipment and that any exceedance shall be treated as an incident. If the site complies with the duty capacity referenced in condition 3.26.2 then this would not allow them to accept the proposed licenced annual waste quantity of 690,000 tonnes per annum or to operate the facility on a 24-hour, seven days a week. This objection is based on the assertion that the duty capacity is "*a nominal capacity and not the operational capacity of the facility*". The licensee calculates that complying to the duty capacity of the equipment would total approximately 560,000 tonnes of waste acceptance per annum and this would undermine the intention of the Proposed Determination, necessitate shutting down the plant regularly and potentially impacting Irelands national waste capacity. The licensee further asserts that this condition would seem appropriate for a landfill, not a waste to energy (WtE) facility and requests removal of this condition.

Additionally, the licensee requests the removal of part (iv) of the definition of an incident within the glossary: '*Any exceedance of the daily duty capacity of the waste handling equipment;*' as this will limit the operational capacity of the facility as set out in relation to the licensee's objection to Condition 3.26.2 outlined above.

#### Technical Committee's Evaluation:

The TC notes the following in relation to this objection:

- The application for the licence requested an increase in annual capacity from 600,000 to 690,000 tonnes per annum. The EIAR submitted as part of the application states that "the proposed tonnage increase will not require physical changes to the facility and its associated infrastructure". The EIAR further states that "as a result of variations in the annual average calorific value of the waste, the increase in nominal annual throughput can be achieved without the addition or modification of any Waste to Energy plant".
- Article 45, 1(b), of Industrial Emissions Directive<sup>3</sup> (IED) states that the permit shall include the total waste incinerating or co-incinerating capacity of the plant. Article 3 of the IED states that 'nominal capacity' means the sum of the incineration capacities of the furnaces of which a waste incineration plant or a waste co-incineration plant is composed, as specified by the constructor and confirmed by the operator, with due account being taken of the calorific value of the waste, expressed as the quantity of waste incinerated per hour.
- Nominal Capacity is defined in the glossary of the proposed determination "As defined in EU Directive 2010/75/EU on industrial emissions."

<sup>&</sup>lt;sup>3</sup>. Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (Recast). Available at: <u>https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02010L0075-20110106</u>

- Condition 3.32.2 of the proposed determination states "The nominal capacity of the plant shall be 70 tonnes per hour (35t per line).
- Condition 3.26.2 is a standard template condition the EPA utilises for IE Waste Licensing, as is the associated part (iv) of the definition of an Incident within the glossary.
- The EIAR (Vol. 2) and attachment 4.3.4 of the application provides the following details in relation to capacity calculations:
  - The key system in determining the throughput capacity at the installation is the boiler train, consisting of stoker, boiler and air pollution control (APC) equipment. The boiler train is designed to allow a certain range of waste throughput processing and heat release capabilities. The stoker is designed to combust the quantities of waste within certain waste quantity and heat release ranges. The boiler is designed to absorb the heat and create steam for heating or electricity generation purposes. The APC equipment is designed to remove pollutants from the volume of combustion gases produced in the boiler/stoker in order to meet the emissions limits required by the IE Licence.
  - The original design heat release rate for each of the plant lines was 102.5 thermal megawatts (MWth) (Eslam Engineering, 2006). However, the as-built design basis as reported by technology provider (Hitachi Zosen) is up to 10% greater than the original design basis. This is not unusual as waste to energy plants are typically constructed with significant margin, in part due to the variability and onerous nature of the fuel. All the key equipment is sized to handle the higher heat release rate including the stoker, boiler, APC system, pumps and fans. In addition, the capacity of the turbine generator is sized such that it can fully accept the additional steam and produce the commensurate additional electrical energy from it.
  - The original design basis of the stoker allowed a range of heating value of 7,000 kJ/kg to 15,000 kJ/kg. The throughput range was 20.5 to 41.0 tonnes per hour. However, as the as-built WtE plant is up to 10% oversized compared to the original design basis, up to 44 tph can be accommodated at the lower end of the calorific value range.
  - The original design basis was a capacity of 35 tonnes per hour (tph) per line at an average waste calorific value of 10,540 kJ/Kg. Over the course of approximately one year of operations, the licensee observed that the average heating value of the waste is approximately 9,600 KJ/Kg. At this heat release value, capacity can be extended to a waste throughput in the plant of approximately 41.0 tph, which will facilitate the maximum annual throughput of 690,000 tonnes of waste.
  - Taking account of the points noted above, the TC considers that nominal capacity and duty capacity are the same in the context of the incinerator furnaces i.e., that the duty capacity of the stoker (combustion device) is the same as the nominal capacity of the furnaces as defined by Article 3 of the IED. The TC also considers that the capacity of the incinerator furnace is the 'design' capacity rate and not the 'as built' capacity rate which will vary up to

10% as noted by the licensee. However, the TC regards that the nominal capacity specified by the constructor should be the maximum design capacity rate of 41 tonnes per hour and not the average design capacity rate of 35 tonnes per hour per line as specified currently in Condition 3.32.2.

Accordingly, the TC recommends that Condition 3.32.2 is amended to reflect the maximum design capacity rate of 41 tonnes per hour. The TC further recommends that Condition 3.26.2 is retained along with the current definition of an incident within the glossary.

#### Reason for Decision:

The TC has reached its conclusion on the basis of the following consideration:

- To ensure the licence appropriately reflects the equipment and operations at the site.
- In the interest of protection of the environment and human health.

Recommendation:

Amend Condition No. 3.32.2 to read as follows:

The nominal capacity of the plant shall be **82** tonnes per hour (**41**t per line).

# A.5 and A.6 Condition No. 3.27 Weighbridge and Wheel Cleaning

The licensee objects to condition 3.27 referring to Wheel Cleaning. The licensee objects that all surface areas of the facility are hardstanding with no vehicle movements taking place on soil or stone and that vehicles will not drive over waste. The licensee requests that the requirement for wheel cleaning be removed.

# Technical Committee's Evaluation:

The TC notes that the current licence does not require wheel cleaning and agrees that given the nature of site infrastructure and operations, it is not necessary to now require the licensee to maintain wheel cleaning equipment. The TC also notes that Condition 5.5 of the proposed determination requires the licensee to ensure that mud, dust and litter "associated with the activity do not result in an impairment of, or an interference with, amenities or the environment at the installation or beyond the installation boundary. Any method used by the licensee to control or prevent any such impairment/interference shall not cause environmental pollution."

The TC recommends Condition No. 3.27.1 be amended, Condition 3.27.3 and 3.27.4 be removed.

# Reason for Decision:

The TC has reached its conclusion on the basis of the following consideration:

• To ensure the licence appropriately reflects operations at the site while ensuring the protection of the environment.

Recommendation:
Amend Condition No. 3.27 to read as follows:

3.27 Weighbridge and Wheel Cleaning

Amend Condition No. 3.27.1 to read as follows:

3.27.1 The licensee shall maintain a weighbridge and wheel cleaner at the installation.

Remove Condition No. 3.27.3 and 3.27.4 as follows:

3.27.3 The wheel cleaner shall be used by all vehicles leaving the installation, as required, to ensure that no waste water, waste or storm water is carried off site. All water from the wheel cleaning area shall be collected for appropriate treatment, reuse or disposal.
3.27.4 The wheel wash shall be inspected on a daily basis and drained as required. Silt, stones and other accumulated material shall be removed as required from the wheel wash and disposed of appropriately.

# A.7 Condition 3.28.2 Incinerator residues - enclosed conveyor system.

The licensee objects to the condition 3.28.2 "*The licensee shall maintain an enclosed conveyor system for the transfer of bottom ash to trucks/containers.*"

The licensee objects that there is no such conveyor system on site and it would not be feasible to install one. The licensee sets out that bottom ash is transferred via conveyor from the bottom ash discharger to the bottom ash storage bunker. The transfer from the bunker to the trucks is done in an enclosed building under negative pressure which prevents dust leaving the building.

# Technical Committee's Evaluation:

The TC acknowledges that the transfer of bottom ash to trucks/containers is carried out within an enclosed building under negative pressure which will limit the generation of diffuse dust emissions. Enclosure within a building is a recognised technique for preventing dust emissions in accordance with BAT 24 of CID 2019/2010 for the treatment of slags and bottom ashes, and although BAT 24 is not applicable to the installation, the TC considers the technique to be an appropriate reference for Condition 3.28.2.

The TC recommends Condition 3.28.2 be amended.

### Reason for Decision:

The TC has reached its conclusion on the basis of the following consideration:

• To ensure the licence appropriately reflects operations at the site while ensuring the protection of the environment and human health.

#### Recommendation:

Amend Condition No. 3.28.2 to read as follows:

The licensee shall transfer bottom ash to trucks/containers within an enclosed building under negative pressure.

# A.8 Condition 6.2.1 Incineration – test programme

The licensee objects that the three month timeline for prior submission of the test programme for additional wastes in this condition would not be commercially feasible to meet. The licensee requests that this timeline be reduced to one month.

#### Technical Committee's Evaluation:

The TC considers that one month is an adequate timeline to assess the test programme for approval and therefore agrees that the three month timeline in this condition can be amended.

The TC recommends that Condition No.6.2.1 be amended.

#### Reason for Decision:

The TC has reached its conclusion on the basis of the following consideration:

- In the interest that the licence appropriately reflects operations at the site,
- In the interest of the protection of the environment.

#### Recommendation:

Amend Condition No. 6.2.1 to read as follows:

The licensee shall prepare a test programme for the incineration of each individual or combination of additional wastes proposed for introduction to the incinerator. This

programme shall be submitted to the Agency at least **one month** prior to implementation.

# A.9 and A.17 Condition 6.26.2 Soil Monitoring and Schedule C.7.3. Soil Monitoring

The licensee is objecting to Condition 6.26.2 which requires soil monitoring at the site every 10 years in accordance with Schedule C.7.3. The licensee states that the site is made-up of reclaimed land and soil monitoring on made-up ground would serve no purpose. All operations are on hard standing areas and no discharges are emitted to ground.

#### Technical Committee's Evaluation:

The TC notes that in accordance with Article 22 paragraph 4 of the IED, where a baseline report is not required, the operator upon cessation of activities is required to take "actions aimed at the removal, control, containment or reduction of relevant hazardous substances, so that the site, taking into account its current or approved future use, ceases to pose any significant risk to human health or the environment due to the contamination of soil and groundwater as a result of the permitted activities and taking into account the conditions of the site of the installation established in accordance with Article 12(1)(d)". Article 12 lists a number of items which must be included in the permit application including 12(1)(d) a description of "the conditions of the site of the installation of soils from these substances was identified as low and a full baseline report was not required, the TC considers that soil monitoring every 10 years is not onerous and is prudent to carry it out when taking account of Article 22 of the IED.

Accordingly, the TC recommends that the licensee is required to complete soil sampling in accordance with Condition 6.26.2 Groundwater & Soil Monitoring and Schedule C.7.3 of the IE licence.

#### Reason for Decision:

The TC has reached its conclusion on the basis of the following consideration:

- In the interest of compliance with Industrial Emissions Directive.
- In the interest of the protection of the environment and human health.

Recommendation:

No change

# A.10 Condition 7.4 Resource Use – reduction in water used on site.

The licensee is objecting to Condition 7.4 and Condition 7.10 on the grounds that the conditions are duplicates. The licensee as a result requests the deletion of Condition 7.4.

#### Technical Committee's Evaluation:

The TC acknowledges that Condition 7.10 is a duplicate of Condition 7.4 in relation to the requirement of the licensee to identify opportunities for the reduction of water used on site. The TC recommends that Condition 7.10 is deleted rather than Condition 7.4 which contains additional requirements related to the recovery/recycling of residues and optimisation of fuel and raw materials.

The TC recommends that Condition 7.10 be removed.

#### Reason for Decision:

The TC has reached its conclusion on the basis of the following consideration:

• To ensure clarity in the licence.

Recommendation:

Remove Condition 7.10 and renumber Condition 7.11 to 7.10.

# A.11 Condition No. 8.6 Materials Handling – incinerator residues.

The licensee wants a clarification on whether the incinerator residues referred to are bottom ash.

#### Technical Committee's Evaluation:

The TC notes that "Residues" is defined in CID 2019/2010 and subsequently the licence glossary as "Any liquid or solid waste which is generated by an incineration plant or by a bottom ash treatment plant". The TC would therefore like to clarify that the incinerator residues in condition 8.6 includes bottom ash derived from the incineration process.

The TC recommends that Condition 8.6 be amended.

#### Reason for Decision:

The TC has reached its conclusion on the basis of the following consideration:

• To ensure clarity in the licence.

Recommendation:

Amend Condition No. 8.6 to read as follows:

All incinerator residues (ashes including bottom ash, fly ash and abatement system derived material) shall be stored within the installation building pending off-site disposal or recovery.

# A.12. Condition 8.7 Materials Handling – storage of residues in bins on concrete hardstanding.

The licensee is objecting to condition 8.7, the licensee is requesting to replace the word 'bins' with 'containers' and the removal of the word 'concrete' from the condition.

#### Technical Committee's Evaluation:

The TC notes that the word 'container' is regularly used within conditions of the licence. The word 'container' is used in the following conditions: 3.28, 3.9., 6.10, and 8.12 which refers specifically to 'container' as a means of storage for each waste type. The word bin is not included in these conditions or elsewhere in the licence. The TC considers that replacing the word 'bin" with the word 'container' would provide for consistency of wording within the licence. The TC agrees to remove the word concrete in condition 8.7 which aligns with the agreed change to condition 3.23.2 above (Objection A.3).

The TC recommends that Condition 8.7 be amended.

#### Reason for Decision:

The TC has reached its conclusion on the basis of the following consideration:

• To provide for consistency of wording within the licence.

Recommendation:

Amend Condition No. 8.7 to read as follows:

Hazardous boiler ash and flue gas cleaning residues shall be stored at dedicated areas within enclosed structures (incorporating dust curtains or equivalent approved and vented through self-cleaning filters), or sealed bins **containers** on **concrete** hard standing with contained drainage.

# A.13. Condition 8.11.5 Waste Arriving at The Installation Shall be Inspected.

The licensee is objecting to Condition 8.11.5 '*Each load of waste arriving at the installation shall be inspected prior to and during unloading only after such inspections shall the waste* 

*be processed for disposal or recovery'*. The licensee states it is not operationally feasible to inspect every load arriving at the facility and that previous approval was granted by the Agency for current inspection rates (Ref. LR060066).

#### Technical Committee's Evaluation:

The TC considers that it is not necessary to inspect every load arriving at the facility given that the existing waste streams permitted to be accepted are established streams at the facility and that the additional five new wastes to be accepted fall within the definition of municipal waste and are similar to the existing permitted LoW codes. Additionally, only residual waste shall be incinerated at the installation and residual waste must be subject to pre-treatment prior to acceptance at the installation. The TC also notes that Condition 8.11.3 requires that waste shall only be accepted from known or new waste producers subject to initial waste profiling and basic characterisation off site.

Regarding Agency approval (Ref. LR060066) for current inspection rates of "at least one inspection per operator per day when feasible and safe to do so", the TC considers that the inspection frequency is agreeable but that 'when feasible and safe to do so' is within the licensee's control and should not be a limiting factor given the nature of the inspection. The TC proposes to amend the condition so that the frequency granted by approval LR055547 is provided for in the licence.

The TC recommends that Condition 8.11.5 be amended.

#### Reason for Decision:

The TC has reached its conclusion on the basis of the following consideration:

• In the interest of the protection of the environment and human health.

#### Recommendation:

Amend Condition No. 8.11.5 to read as follows:

Waste arriving at the installation shall be inspected and have its documentation checked at the point of entry to the installation and subject to this verification, weighed, documented and directed to an appropriate area within the installation. **Unless otherwise required by the Agency, at a minimum one load of waste per day received from each waste producer shall be inspected prior to incineration. Each load of waste arriving at the installation shall be inspected prior to and during unloading only after such inspections shall the waste be processed for disposal or recovery.** 

### A.15. Schedule A.2 Waste Acceptance

The licensee is requesting to reinstate previously proposed waste codes in this review IE License application (W0232-02) and two waste codes (07 02 12 and 07 05 12) which were previously approved by the Agency under Technical Amendment C to licence W0232-01. The licensee states that the two waste codes approved under Technical Amendment C are critical to the pharmaceutical sector due to the lack of suitable outlets for the pharmaceutical sludges in Ireland. The licensee noted that the only other waste to energy plant operating in Ireland has over 200 list of waste codes approved. The licensee provided a list of all waste codes proposed in the licence in Appendix 4 of the objections, which totals 74 waste codes. Those 24 waste codes currently not included in the proposed licence, and requested to be included by the licensee are listed in Table 1 and Table 2 of the Technical Committee's evaluation of this objection below.

#### Technical Committee's Evaluation:

An Bord Pleanála (ABP) in its grant of planning permission (PL29S.EF2022) (parent planning permission), granted in November 2007, included the following condition in relation to the waste, which can be accepted at the installation:

Condition 1: "The waste thermally treated at the facility shall be in the form of municipal non-hazardous residual waste generated primarily in the Dublin Waste Management Region as proposed in the application.

ABP in its grant of planning permission (ABP-309812-21), granted on 17 December 2021, included the following condition in relation to the waste which can be accepted at the installation:

Condition 4: "For the avoidance of doubt, the waste thermally treated at the facility shall be in the form of municipal non-hazardous residual waste generated primarily in the Dublin Waste Management Region as proposed in the application and permitted under the parent permission for the facility that was granted approval by An Bord Pleanála under reference number PL29S.EF2022."

#### **Definition of municipal waste**

The scope of 'municipal waste' is defined in the Waste Management Act 1996 as amended:

"municipal waste' means: (a) mixed waste and separately collected waste from households, including paper and cardboard, glass, metals, plastics, bio-waste, wood, textiles, packaging, waste electrical and electronic equipment, waste batteries and accumulators, and bulky waste, including mattresses and furniture; (b) mixed waste and separately collected waste from other sources, where such waste is similar in nature and composition to waste from households; **Municipal waste does not include waste** from production, agriculture, forestry, fishing, septic tanks and sewage network and treatment, including sewage sludge, end-of-life vehicles or construction and demolition waste. This definition is without prejudice to the allocation of responsibilities for waste management between public and private actors.

#### **Definition of Residual Waste**

"In the context of intake to an incinerator/WtE plant, is waste that has been subjected to pre-treatment (including, inter alia, pre-segregation, sorting, mechanical-biological treatment) to extract, to the maximum practical and available extent having regard to BAT, the recyclable/reusable components."

In relation to the list of waste codes proposed for inclusion to the licence by the licensee in Table 1 below, no details were provided in the application documentation or in the objection received in relation to the handling, pre-treatment or storage of these waste streams. Furthermore, in relation to waste codes 18 01 04 and 18 01 09, which were previously approved under Technical Amendment D of licence W0232-01, the TC notes that the acceptance of these wastes was expected to originate from sources such as hospitals, healthcare facilities and COVID-19 testing facilities on a temporary basis and was limited to the timeframe set out in the COVID-19 Regulations (S.I. No. 121 of 2020) which are now revoked.

List of Waste Codes	Description		
02 wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food			
preparation and processing			
02 01 wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing			
02 01 02	animal-tissue waste		
02 01 06	animal faeces, urine and manure (including spoiled straw), effluent,		
	collected separately and treated off-site		
02 03 wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco			
	ssing; conserve production; yeast and yeast extract production, molasses		
preparation and fermer			
02 03 04	materials unsuitable for consumption or processing		
17	construction and demolition wastes (including excavated soil from contaminated sites)		
17 06	insulation materials and asbestos-containing construction materials		
17 06 04	insulation materials other than those mentioned in 17 06 01 and 17 06 03		
18	wastes from human or animal health care and/or related research (except kitchen and restaurant wastes not arising from immediate health care)		
18 01	wastes from natal care, diagnosis, treatment or prevention of disease in humans		
18 01 04	wastes whose collection and disposal is not subject to special requirements in order to prevent infection (for example dressings, plaster casts, linen, disposable clothing, diapers)		
18 01 09	medicines other than those mentioned in 18 01 08		
18 02	wastes from research, diagnosis, treatment or prevention of disease involving animals		
18 02 08	medicines other than those mentioned in 18 02 07		
19	wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use		
19 06	wastes from anaerobic treatment of waste		
19 06 04	digestate from anaerobic treatment of municipal waste		

List of Waste Codes	Description
19 06 06	digestate from anaerobic treatment of animal and vegetable waste
20	municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 01	separately collected fractions (except 15 01)
20 01 32	medicines other than those mentioned in 20 01 31

In relation to the list of waste codes proposed for inclusion to the licence by the licensee in Table 2 below, the TC notes that CID 2019/2010 defines 'sewage sludge' as residual sludge from the storage, handling and treatment of domestic, urban or industrial waste water. The CID also provides for BAT-associated boiler efficiency for the incineration of sewage sludge, and this was not addressed or provided for by the licensee in the application form or the objections. Additionally, no details were provided on the characteristics of the sludge (dry/wet), the means by which the sludge will be stored, handled and introduced to the furnace or an impact assessment in relation to emissions and odour. The TC also considers that these codes do not meet the definition of municipal waste and notes that the EPA oral hearing report associated with W0232-01 states "There does not appear to have been any assessment of the input of sewage sludge and ABP did not give planning permission for this aspect of the project".

List of Waste Codes	Description			
02 wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food				
preparation and processing				
02 02 wastes from the preparation and processing of meat, fish and other foods of animal origin				
02 02 04	sludges from on-site effluent treatment			
02 03 wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco				
preparation and processing; conserve production; yeast and yeast extract production, molasses				
preparation and fermentation				
02 03 05	sludges from on-site effluent treatment			
02 05	wastes from the dairy products industry			
02 05 02	sludges from on-site effluent treatment			
02 06	wastes from the baking and confectionery industry			
02 06 03	sludges from on-site effluent treatment			
02 07	wastes from the production of alcoholic and non-alcoholic beverages			
	(except coffee, tea and cocoa)			
02 07 05	sludges from on-site effluent treatment			
06	wastes from inorganic chemical processes			
06 05	sludges from on-site effluent treatment			
06 05 03	sludges from on-site effluent treatment other than those mentioned in 06 05 02			
07	wastes from organic chemical processes			
07 01	wastes from the manufacture, formulation, supply and use (MFSU) of			
	basic organic chemicals			
07 01 12	sludges from on-site effluent treatment other than those mentioned in			
	07 01 11			
07 02	wastes from the MFSU of plastics, synthetic rubber and man-made fibres			
07 02 12	sludges from on-site effluent treatment other than those mentioned in			
	07 02 11			

Table 2: List of Waste Codes Proposed by the Licensee to be Included	Table 2: List of Waste Co	odes Proposed by the	e Licensee to be Included.
--	---------------------------	----------------------	----------------------------

List of Waste Codes	Description
07 04	wastes from the MFSU of organic plant protection products (except 02 01 08 and 02 01 09), wood preserving agents (except 03 02) and other biocides
07 04 12	sludges from on-site effluent treatment other than those mentioned in 07 04 11
07 05	wastes from the MFSU of pharmaceuticals
07 05 12	sludges from on-site effluent treatment other than those mentioned in 07 05 11
07 07	wastes from the MFSU of fine chemicals and chemical products not otherwise specified
07 07 12	sludges from on-site effluent treatment other than those mentioned in 07 07 11
19	wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use
19 06	wastes from anaerobic treatment of waste
19 06 04	digestate from anaerobic treatment of municipal waste
19 06 06	digestate from anaerobic treatment of animal and vegetable waste
19 08	wastes from waste water treatment plants not otherwise specified
19 08 05	sludges from treatment of urban waste water
19 08 12	sludges from biological treatment of industrial waste water other than those mentioned in 19 08 11
19 08 14	sludges from other treatment of industrial waste water other than those mentioned in 19 08 13

Taking account of the above, the TC recommends no change.

Reason for Decision:

The TC has reached its conclusion on the basis of the following consideration:

• To provide for protection of the environment and human health.

Recommendation:		
No change.		

# A.16. Schedule C.4 Monitoring of Incinerator Residues

The licensee is objecting to the monthly frequency of monitoring fly ash, boiler ash and flue gas treatment residues. The licensee agrees with the monthly frequency of monitoring of bottom ash. The licensee states that the Agency previously agreed that fly ash and boiler ash be sampled on a quarterly basis. This was previously agreed under licensee return LR043423. They also object to Total Organic Carbon (TOC)/Loss of Ignition (LOI) monthly monitoring requirement for bottom ash. The licensee requests that the monthly monitoring be reduced to quarterly in accordance with BAT 7 of the CID, this refers to a minimum sampling frequency of 3 months for TOC and LOI.

### Technical Committee's Evaluation:

The TC notes that the Agency did previously agree to quarterly monitoring for Fly Ash and boiler Ash under LR043423. The TC notes that the TOC/LOI monitoring in accordance with BAT 7 of the CID is quarterly but the Agency is permitted to be more stringent. Following consultation with OEE during the application stage, the RD specifies monthly monitoring of bottom ash, fly ash, boiler ash and flue gas treatment residues. The frequency, methods and scope of monitoring, sampling and analyses can be amended as required or approved by the Agency following evaluation of test results in accordance with Condition 6.8.

The TC recommends no change.

#### Reason for Decision:

The TC has reached its conclusion on the basis of the following consideration:

• To provide for protection of the environment and human health.

#### Recommendation:

No Change.

#### **Environmental Impact Assessment Directive – Reasoned Conclusion Update**

The TC has reviewed the assessment in the Inspector's Report and, taking into account all objections received, and the contents of this TC report, the TC considers that the potential significant direct and indirect effects of the activity have been identified, described and assessed in an appropriate manner as respects the matters that come within the functions of the Agency, and as required by Section 83(2A) of the Environmental Protection Agency Act 1992, as amended (hereafter referred to as the EPA Act).

It is considered that the monitoring, mitigation and preventative measures proposed in the Inspector's Report, and as detailed in this TC report, will enable the activity to operate without causing environmental pollution, subject to compliance with the licence conditions included in the PD, with the inclusion of the amendments proposed in this report.

#### Appropriate Assessment – Technical Committee Review

The TC has reviewed the Inspector's Appropriate Assessment in the Inspector's Report and, taking into account all objections received, and the content of this TC report, the TC is satisfied that the Inspector's Report provides an adequate examination and evaluation of the effects of the activity on the following European Sites concerned, in light of their conservation objectives:

South Dublin Bay 000210)	SAC (Site	Code	Dalkey Islands SPA (Site Code 004172)
South Dublin Bay Estuary SPA (Site Co		Tolka	Ireland's Eye SAC (Site Code 002193)

North Dublin Bay SAC (Site Code 000206)	Ireland's Eye SPA (Site Code 004117)
North Bull Island SPA (Site Code 004006),	Malahide Estuary SAC (Site Code 000205)
Rockabill to Dalkey Island SAC (Site Code 003000)	Malahide Estuary SPA (Site Code 004025)
Howth Head SAC (Site Code 000202)	Wicklow Mountains SAC (Site Code 002122)
Howth Head Coast SPA (Site Code 004113)	Wicklow Mountains SPA (Site Code 004040)
Baldoyle Bay SAC (Site Code 000199)	Knocksink Wood SAC (Site Code 00725)
Baldoyle Bay SPA (Site Code 004016)	Glenasmole Valley SAC (Site Code 001209
Ballyman Glen SAC (Site Code 000713)	-

# **Overall Recommendation**

It is recommended that the Board of the Agency grant a licence to the Licensee:

- (i) for the reasons outlined in the proposed determination and
- (ii) subject to the conditions and reasons for same in the Proposed Determination, and
- (iii) subject to the amendments proposed and the reasons set out in this report.

Signed

one Contal

Anne Lucey

Niamh Connolly

John Cassels

Anne Lucey

Technical Committee