EPA Application Form

4. Activity and Capacity

4.3.1 - Storage of Waste and Other Materials - Attachment

Organisation Name: * Dublin Waste to Energy Limited

Application I.D.: * LA003577

* indicates required field

Amendments to this Application Form Attachment

Version No.	Date	Amendment since previous version	Reason
V.1.0	July 2017	N/A	Online application form attachment
V.1.0	March 2018	Identification of required fields	Assist correct completion of attachment

Storage of Waste and Other Materials

State the maximum amount of waste and other materials that will be stored on the site at any one time in the table below[1].

Waste/Other Material	Amount (tonnes) *
Waste accepted and in storage pending treatment:	9,500 (waste bunker)
Other materials (Non-waste) accepted, including non-waste feedstocks:	0
Capacity of treatment vessels and chambers:	DWtE consists of two identical waste to energy lines each with a capacity of approximately 41.5 tonnes per hour
Treated waste, whether classified as waste or not:	10,000 (bottom ash bunker) 200 (boiler ash hopper) 350 both APCR silos

List any other feedstocks to the treatment process not classified as waste. State 'none' if none.*

None

Waste and material outputs from waste activities (i.e., those subject to Waste licensing or class 11 of the First Schedule of the EPA Act)

Describe the waste and material outputs from the installation resulting from the treatment of waste. If no treatment is carried out on the waste, the waste outputs will be the same as the inputs.

If waste is treated, describe the nature and quantity of the treated waste and its onward fate/destination, and in particular whether it is sent for onward recovery or disposal operations.

[1] This should include waste and other materials in: (1) reception, inspection and quarantine areas; (2) storage pending treatment; (3) storage after treatment; and (4) vessels, chambers or tanks during treatment or processing.

If waste is treated and a material is produced that is no longer a waste, provide the rationale for such classification. The requirements of Article 28 of the European Communities (Waste Directive) Regulations 2011 should be addressed in any such rationale. Include the response in this attachment.

Incinerator Bottom ash (IBA), boiler ash and air pollution control residues (APCR) are generated during the waste to energy process. Details on quantities and final destinations for these waste streams are provided in Attachment 8-1.
In summary IBA constitutes the largest percentage of solid waste products resulting from the combustion process. After burnout of the refuse at the end of the grate, the combustion bottom ash falls down the bottom ash chute into the water bath of the wet ash extractor. The IBA is cooled in the water bath by evaporation. From the water bath, the ash removed by the bottom ash extractor is discharged onto a conveyor to the bottom ash bunker for temporary storage. The IBA consists of non-hazardous and inert materials from the combustion process such as glass, metal, earth and other fractions. It is stored in a separate bottom ash bunker with sealed surfaces. The bottom ash bunker is located adjacent to the boiler area on the west side of the site. The bottom ash bunker has a capacity of 10,000 tonnes. Included in the IBA bunker are grate siftings which comprise fine ash that falls through the grate bars of the furnace. These grate siftings are collected in hoppers under the grate and are transferred by conveyor belt to the IBA bunker. IBA is transported in covered trucks to Dublin Port located on the other side of Pigeon House Road for transfer to ship and subsequent delivery to a recovery facility. At present the approved recovery facility in the Netherlands recovers the metal (ferrous and non-ferrous) from the IBA. The remaining IBA material is used as aggregate in road building, embankments, road barriers and concrete pads for solar parks. It is intended to carry out this activity, through a 3rd party, in Ireland once the prerequisite licences and approvals are granted.
Air Pollution Control Residues (APCR) containing fly ash, calcium based salts, lime and activated carbon which is retained in the fabric filters in the air pollution control system is collected in hoppers located beneath the fabric filters. 90% of this material is recirculated back into the air pollution control system to maximise the reuse of the reagents and enhance the performance of the system. The remaining APCR collected in the hoppers is continuously discharged via a screw conveyor to two fully enclosed steel tanks (silos) located west of the flue gas cleaning area. The silos have sealed surfaces and a gross volume of 700m^3 each. The silos are equipped with High Efficiency Particulate Abatement (HEPA) filers. The APCR is transported off site in closed containers for recovery which currently takes place in a lime quarry in Norway and in a salt mine in Germany.

For Soil Recovery Activities (only), please complete the following table: Not applicable

All blank fields in the table are mandatory

Soil Recovery Activity Details	Input a value into ALL blank cells (where applicable)			
Volume of void to be filled and authorised by planning permission:			m^3	
Quantity of waste soil and stone that is required to fill the void:			tonnes	
Proposed annual intake of waste soil and stone:			tonnes per annum	
Proposed duration to complete the fill:			years	
Stage of fill: 'Not Commenced' OR 'Commenced':				
- If commenced: quantity of waste already deposited in the void: (Enter a value in both cells)		m^3		Tonnes
- Volume of void remaining:			m^3	
Period of previous fill: (<Year> to <Year>):				
Quantity of fill authorised by planning permission: (Enter a value in both cells)		m^3		Tonnes
Waste Licence, waste facility permit, or certificate of authorisation number: (Attach copy in this document)				