

Indaver Ireland Limited

IE Licence Review Application

Merchant Waste Operator

Reference: LA010332

Issue | 28 February 2023

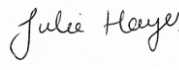

This report takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 289377-00

Ove Arup & Partners Ireland Limited
One Albert Quay
Cork
T12 X8N6
Ireland
arup.com

Document Verification

Project title IE Licence Review Application
Document title Merchant Waste Operator
Job number 289377-00
Document ref LA010332
File reference 4-04 Reports

Revision	Date	Filename	Attachment 4-3-3 Merchant Waste Operator		
Issue	February 2023	Description	Issue		
			Prepared by	Checked by	Approved by
		Name	Julie Hayes	Naoimh O' Regan	Dan Garvey
		Signature			
		Filename			
		Description			
			Prepared by	Checked by	Approved by
		Name			
		Signature			
		Filename			
		Description			
			Prepared by	Checked by	Approved by
		Name			
		Signature			

Issue Document Verification with Document



Contents

1.	Waste Merchant and Treatment	1
1.1	Merchant Facility	1
1.2	Waste Generated from On- site Activities	1

Tables

Table 1	List of wastes generated and treated on site for the existing facility and proposed development	1
---------	---	---

1. Waste Merchant and Treatment

1.1 Merchant Facility

The Indaver facility in Duleek, County Meath accepts waste on a commercial basis from waste producers and operates as a merchant waste operator. Waste producers include the following two groups:

- Waste Collectors; These are companies who collect waste from waste producers made up of customers in the household, commercial, agricultural and industrial sectors. Indaver's Municipal Solid Waste (MSW) division performs this function of sourcing the waste and securing contracts from the Collectors and has been doing so since 2011. Waste Collectors must hold a valid Waste Collection Permit (WCP), which Indaver will hold copies of in their internal system.
- Industrial Waste Producers: Suitable industrial hazardous and non-hazardous waste is sourced directly from large companies or organisations. Indaver's Industrial Waste Services (IWS) division performs this function of sourcing the waste and securing contracts from the collectors and has been doing so since 2011.

1.2 Waste Generated from On- site Activities

As part of this licence review application the total amount of waste to be accepted at site is 280,000 tpa of which 250,000tpa will be treated in the waste- to- energy plant and 30,000tpa will be treated in the ash pre-treatment facility. Waste residues arising from on-site activities include bottom ash, ferrous and non -ferrous metals, boiler ash, flue gas cleaning residues and pre-treated boiler ash and flue gas cleaning residue.

Bottom ash is produced as a residue of the combustion process in the furnace located within the waste-to-energy plant. Once extracted from the furnace the bottom ash is transported by conveyor to the bottom ash hall for metal recovery and storage. Bottom ash is currently sent to landfill outlets for recovery as daily cover or as a road construction material on the landfill itself. Ferrous and non-ferrous metals are separated from the bottom ash using a combination of over-band magnets for the ferrous metals and an eddy current separator for the non-ferrous metals. Ferrous metals and non-ferrous metals are separated annually and sent off site for recovery. Untreated boiler ash and flue gas cleaning residues are exported to suitably licensed facilities for recovery.

At the pre-treatment plant, boiler ash and flue gas cleaning residues are mixed with water and discharged into flexible intermediate bulk container (FIBC) bags and subsequently exported to suitably licensed facilities for recovery.

Waste generated from on-site activities, including quantities, are provided in Table 1 below.

Table 1 List of wastes generated and treated on site for the existing facility and proposed development

Residue/Re-agent	Existing Facility (tpa)	Proposed Development (tpa)	Total Waste Generated (tpa)
Bottom Ash	34,779	2,250	37,029
Boiler Ash	112	N/A	112
Flue Gas Cleaning Residues	5,090	N/A	5,090
Pre-treated boiler ash and FGC residues exported	10,184	916.5 ¹	11,100.5

¹ 600tpa (Boiler Ash) + 105tpa (Flue Gas Clean Residues) x 1.3 (treatment factor) = 916.5 tpa

Residue/Re-agent	Existing Facility (tpa)	Proposed Development (tpa)	Total Waste Generated (tpa)
Third party ash accepted for pre-treatment	N/A	39,000 ²	39,000
Ferrous Metals	3,314	180	3,494
Non-Ferrous Metals	662	30	692
Total	54,141	42,376.50	96,517.5

² 30,000tpa x 1.3 (treatment factor) = 39,000tpa