

## Introduction

The objective of this plan is to detail how fugitive emissions will be prevented and controlled during the bagging operations and the response actions that will be taken to address minor release and a major incident.

### *Plant Layout*

All unloading, bagging and storage of the APCR will be carried out inside the Main Warehouse. A duty and stand-by bagging unit will be installed. The plant and equipment will include:

- 3 No. Storage Silos, each with a storage capacity of 175m<sup>3</sup>.
- 2 No Air Compressor
- 3 No. Screw Conveyors
- 1 No. Stacker Truck
- Pallet Racking
- 1 No. Rapid Closing Door
- 1 No Vacuum Collection Unit

### *Proposed Waste Acceptance Procedures*

The APCR will be loaded into the transport vehicles (powder trucks) at the Dublin Waste To Energy Ltd facility at Poolbeg. The haulier will have a current Waste Collection Permit and the authorised wastes will include LoW 19 01 07\*, 19 01 13\* and 19 01 15.

On arrival at the Rilta installation the vehicle will be weighed on the weighbridge, the relevant information recorded, following which the driver will be directed to the Main Warehouse. The vehicle will drive to the building, the rapid acting door will be opened to allow the vehicle to enter, immediately following which the door will be closed.

The APCR will be transferred to the silos using compressed air. Each silo will be fitted with two high level alarms to prevent overfilling and a pressure relief vent that will contain a reverse jet dust filter. Once the APCR has been transferred, the building door will be opened to allow the empty truck to exit.

## *Bagging Plant*

The unit will comprise a steel frame, a loading cell and a stainless steel fill head. The APCR will be fed from the silo to the bagging unit using a screw conveyor. The empty Flexible Intermediate Bulk Container (FIBC) will be attached to the fill head and inflated using a bellows supplied by a compressor. The bellows serves two functions, the first is to allow a visual assessment of the inflated bag to confirm it is not damaged, and the second is to provide an air tight seal between the filling head and the bag.

The filling head will have two dust vents that will connect to a reverse jet dust filter located beside the bagging unit. The filter will be connected to an FIBC and the dust collected in the filter will be blown into the bag using the air jets.

The filling rate will be controlled by a load cell. After the bag has been filled it will be tied and then moved to the pallet racks using the stacker loader. The bags will be stored on the racks inside until there is enough for a ship's load (ca 2,500 tonnes).

Once the transport ship has berthed, the transport vehicle will drive into the building and the door will be closed. The bags will be moved from the racks and placed on the trailers using the stacker truck. When the load is secure, the door will be opened to allow the vehicle to exit.

## *Emission Controls*

Each silo will be fitted with two high level alarms to prevent overfilling and a pressure relief vent that will contain a reverse jet dust filter. The top air vent jet filter, pressure sensor and level sensors and valves on the silo will be monitored and controlled by a Silo Control System (SCS).

A 'pinch' valve on the powder truck transfer pipeline controls the flow of material from the vehicle to the silo. The pipeline is double lined, with a pressure sensor on the outside line to detect leaks from the inner delivery line. If these occur the leakages are contained within the outer line.

Before the start of the material transfer from the truck to the silo the SCS checks the solid level in the silo. If the silo is full, the power to the compressor is cut off and the truck cannot be unloaded. If the silo level is low the silo vent jet filter is switched on, the pinch valve on the-fill pipe is opened and the transfer begins. The silo jet filter continues to operate for a short period after all of the materials have been transferred from the truck to the silo.

The solid level in the silo, the transfer line pressure and the pressure in the silo are continuously monitored. If the pressure inside either the silo or the pipeline increases above the normal operational range, the air feed to the truck is stopped, the silo pressure relief valve is opened and an alarm is sounded.

## *Storage*

The bag will be removed the bagging unit and placed on a pallet and then moved to the pallet racks using a stacker truck.

## *Emergencies-APCR Release*

In the unlikely event of an accidental release of the APCR during the transfer to and from the silo and when moving the bags, the material will fall on the floor. Trained staff wearing the appropriate PPE (e.g. full face mask, overalls and gloves) will respond to the incident.

The spillage will be collected using an industrial vacuum cleaning unit containing an integral hopper and chute that connects to an FIBC. The unit is readily manoeuvrable using a standard forklift.

More details are provided in the Emergency Response Procedure (ERP) and the 'Flue Gas Residue Dust Emission Prevention and Mitigation Procedure.

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