

OSHE Policies and Procedures Manual

Revised By: Sean Lawlor

Approved By: Colm Hussey

Procedure Title: **Flue Gas Residue Dust Emission Prevention and Mitigation**

Ref: OSHE-P-075

1. GENERAL

1.1 The bagging and storage of flue gas residue ash has the potential to create fugitive dust emissions. While the bagging plant is designed to prevent any dust emissions, it's potential must be comprehensively considered.

2. PURPOSE

2.1 The purpose of this document is to ensure that flue gas residues are accepted onto the site, processed and stored in a suitable manner, to enable it to be safely transported and disposed of at authorised facilities.

2.2 It also provides for the emergency procedures which are to be activated where there is a release of significant levels of residue dust.

3. RESPONSIBILITY

3.1 It is the responsibility of the Site Manager to ensure that this procedure is implemented in a safe manner.

3.2 Relevant staff must follow the requirements of this procedure.

4. ATTACHMENTS

4.1. Attachment No.01 – Dust Emission Prevention Equipment

4.2. Attachment No.02 – Dust Emission Mitigation Equipment

4.3. Attachment No.03 – Emergency Response Plan (ERP)

5. PROCEDURE

5.1. All efforts must be made to minimise the possible release of fugitive dust. Where it is identified, decontamination processes (i.e. wet wiping) must be employed to ensure that it is removed from all surfaces.

5.2. DELIVERY OF WASTE

5.2.1. All waste loads must be pre-booked.

5.2.2. All deliveries of air pollution control residue (APCR) waste will be by approved enclosed bulk vehicles.

5.2.3. Bulk vehicles which have dust residues on the exterior of the tanker may be rejected

5.2.4. Small amounts of fugitive dust must be wiped down with damp cloths or a spray mist before and after unloading.

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5.3. UNLOADING OF WASTE

5.3.1. Only Rilta staff shall commence the unloading process. Drivers should not have any requirement to leave their vehicle.

5.3.2. 2-step high level alarms will be fitted to all silos

5.3.3. The silo fill line will be a double skinned hose pipe

5.3.4. All silos will be fitted dust collectors (which are serviced at regular intervals or as needed).

5.3.5. The compressor will be fitted with an automatic shut off mechanism to mitigate hose failure.

5.3.6. Unloading must cease in the event of significant dust being released. The emergency response procedures (ERP) will be applied in this case.

5.3.7. Small amounts of fugitive dust, where identified, can be wiped down with damp cloths or a spray mist.

5.4. FILLING FIBCS

5.4.1. The bagging platform shall be inspected prior to the filling of each bag. Small amounts of fugitive dust must be wiped up with a damp cloth.

5.4.2. The bellows fill head system shall have an associated dust extraction filter.

5.4.3. The automated filling process shall be visually inspected to pinpoint any anomalous behaviour.

5.4.4. When the FIBC has been adequately filled (no greater than 95% full), it must be carefully inspected as the bag won't be tied easily if there is dust residue at the neck. Any residual dust can be wiped down with a damp cloth.



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5.4.5. The sealed filled bag must be inspected, and any residual dust wiped down with a damp cloth.

5.5. STORAGE OF FILLED FIBCs OF APCR

5.5.1. Only clean dust free bags should be stored on site.

5.5.2. Each pallet space should be clean and dust free prior to the placing of an FIBC. Any residual dust must be dampened down and removed.

5.5.3. Exposed parts of the floor must be cleaned on a regular basis. Water spray misters should be employed as required.

5.6. REMOVING FIBCs FROM WAREHOUSE

5.6.1. A street sweep will be employed for the day while trucks are being loaded with FIBCs of APCR.

5.6.2. If, in the unlikely event that a leaking bag is identified during the process it shall either be fixed before loading or not loaded at all. If the damage/leak is significant, the site ERP shall be employed and followed.

5.6.3. When the truck is full, the bags must be carefully braced by the driver. A fine spray mist must be employed if any fugitive dust is released during the bracing process.

5.7. APCR WASTE SPILLAGE/CLEAN UP

5.7.1. It is foreseeable that small amounts of APCR dust waste may be released and these will be 'cleaned as you go' by on site operatives.

5.7.2. All waste residue and associated rags that are used in the cleaning up process shall be drummed and sent for recovery/disposal off site.

5.7.3. For any larger spillages or where a blow-out has occurred the site ERP must be employed.



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5.8. PERSONAL DECONTAMINATION

5.8.1. High levels of personal hygiene must be practised at all times.

5.8.2. Where significant personal contamination occurs, use must be made of the localised emergency shower or other available shower facilities as required.

5.8.3. All waste that is generated as a result of this clean-up process must be contained and appropriately disposed of.

6. POLICY REVISION

6.1. This procedure will be revised from time to time to take account of in-company and legislative changing circumstances.

7. REFERENCES

7.1. Waste License W0185-01 and W0192-03.

7.2. Internal company procedure OSHE-P-004 - Waste Acceptance, Inspection and Rejection – Overview Procedure.

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Attachment No.01 – Dust Emission Prevention Equipment

- Sealed Delivery Tankers
- Double Skinned Silo Deliver Line Hosing
- 2-step Silo High Level Alarm
- Silo Pressure Sensor
- Silo Dust Collector
- Bellows Fill Head Dust Filter
- Fast Closing Shutter Door At Warehouse Entrance
- Loading Bay Seals
- Dust Curtains Where Required

Attachment No. 02 – Fugitive Dust Mitigation Equipment

- Water Spray Misters
- Damp Cloths
- Street Sweepers
- Emergency Response Plan