



**Env/Near Miss – HiPo UNCONTROLLED SPILL OF RESIDUE ASH**

<b>Number</b>	2021-07	<b>Date</b>	22.09.2021
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**Summary:**

Recently a Near Miss incident occurred at a UK EFW Plant. During Commissioning, the night shift encountered a minor failure on a line which caused all 6 bag filters to fill up with Residue Ash. The nightshift cleared 5 of the filter chambers but the high level alarm was showing for the last one. The issue was handed over to the dayshift and it was thought that there may be a clogged sensor in the chamber. Local isolations were put in place and an inexperienced commissioning engineer went to check the sensor. A small inspection hatch was opened and there was a solid wall of ash showing. The engineer decided that as the ash was solid that it would be OK to open the large door to the chamber. Shortly after the door was opened and the hard ash was poked, loose ash started to flow and the engineer and two others tried to shut the door. They were unsuccessful and evacuated.

**Outcomes:**

No one was injured and there was no damage to assets. Approximately 20 tons of ash spilled onto the platform and FGT concrete floor.

**Incident Classification: Level 1 Environmental and HiPo**



**Small Inspection Opening**



**Walkway Under Door**



**FGT Ground Floor Level**

**Root Causes and Contributory Factors**

- Lack of empowered and mandated leadership functions within the commissioning team Contributory factors:
- Lack of operational experience of the Commissioning Engineer who decided to open the hatch
- Lack of involvement of the Shift Team Leader in the fault finding operation
- Lack of clarity in the individual roles and responsibilities for the Commissioning Team, Commissioning, Shift Team Leaders and Plant Operators
- No Alarm to indicate the conveyor system had stopped causing the build-up of residue in the filter chamber
- Inconsistency in the operating shift routines and handover processes due to the varied previous experience of the shift teams

**Lesson Learned**

- When working on live systems only carry out the work detailed by the person in charge of approving isolations
- Ensure all Commissioning team have experienced the tasks they are asked to perform and Shift Team Leaders are involved in fault finding operations
- Documented risk assessments or operating procedures should be in place for all high risk tasks
- Produce an alarm management plan and prioritise alarms indicating failure over status alarms
- An effective Team needs a clear reporting structure and Leader
- All Team Members should be aware of their written Roles and Responsibilities



Every Lesson Learned is an opportunity to avoid recurrences.  
What have you done to avoid a similar incident on your project?

