

ERPAN Meeting 2013

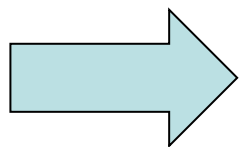
Dust, contaminated with Cs-137

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Description of the Event

- Site : Duferco Belgium S.A. metallurgist near La Louvière
- Cs-137 source (± 10 GBq) melted inadvertently into the electric furnace
 - Not detected by portal detector
 - Already on-site before installation of portal detector
- Ventilation and residue recycling equipment system had to be decontaminated



600 Ton of dust, contaminated with Cs-137

Immediate Actions

Lessons learned

- Cleaning of the installations
 - 1 month !
 - All activities interrupted during cleaning process
 - Final costs for complete cleaning unsure (waste cost were unknown)
- Additional detectors installed in grappling equipments (crane)
- Revision of procedures in case of portal/grappling detectors alarms ;
- Conditioned storage of contaminated dust in a secured place to avoid further contamination of site and surroundings ;

Cs-137 Belgian Legislation

- Class II Facility
 - Non-sealed source : > 5 MB
 - Sealed source : > 5 GBq
- Class III Facility
 - Non-sealed source : between 10 kBq and 5 MBq
 - Sealed source : between 10 kBq and 5 GBq
- Exemption Limit
 - 10 000 Bq or 10 Bq/g
- Liberation Limit
 - 1 Bq/g

Contaminated dust

1. 350 Ton contaminated > 10 Bq/g
(exemption limit)
→ Solution for treatment has to be found
2. 150 Ton contaminated between 1 and 10 Bq/g
→ Solution has been found
3. 100 Ton contaminated < 1 Bq/g
→ Not contaminated

All dust is stored in a safe way

Contaminated dust (2)

1. 350 Ton contaminated > 10 Bq/g
→ **Solution for retreatment has to be found**

Belgium don't dispose of structural solution/installation to reduce the volume of the waste !!!

→ Solutions has to be found and developed in Belgium

ERPAN's Survey Results

- 1. Contacts between ENRESA and ONDRAF (Belgian Authority for Radioactive Waste)
→ ENRESA has some experience with this kind of waste**
2. Contacts between Duferco and some companies in Germany and Luxemburg
3. Other proposals/ideas had already been explored by either FANC or DUFERCO

Questions Suggestions ???