# Transfrontier shipment of NORM waste

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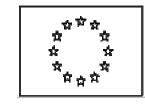
### Overview

- EC regulation of import and export of waste and radioactive waste
- Example of practice for regulation of import and export of NORM waste
  - The Netherland and Germany
- IAEA joint convention
- Norwegian regulation of import and export of NORM waste



Repository for NORM waste





# EC regulation I

- Directive 2006/117/EURATOM on the supervision and control of shipments of radioactive waste and spent fuel
- Requires prior authorisation for import or export
- Does not apply to NORM



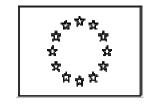
Including hazardous waste



Storing of NORM waste

 Apply to almost all waste, except radioactive waste as defined in Directive 2006/117/EURATOM





# EC regulation II

- Similar general safety requirements in the waste regulation and radioactive waste regulation.
  - Environmental sound shipment, recovery and disposal
  - Proximity-principle, priority for recovery and self-sufficiency
  - BAT
- No requirements specific to the radioactive characteristics of NORM waste.









- Germany and the Netherlands
  - no requirement for authorisation for transboundary movements of NORM
- Contract between Dutch oil and gas company NAM, German waste management company DELA gmbh and German regional authorities
  - Based on waste regulation, but with requirements regulating the radioactive characteristics
  - For instance

Activity: Disposal in:

< 0,2 Bq/g end storage in Germany

0,2 < residues to return to the Netherlands



#### **IAEA Joint Convention**



 Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive waste Management

 Requires prior authorisation from state of origin and prior notification and consent from state of destination

- Conventions preamble:
  - ...shall not apply to waste that contains only NORM and that does not originate from the nuclear fuel cycle, unless .... it is declared radioactive waste for the purpose of this Convention by the Contracting Party....



## Regulation of radioactive materials in Norway

New legislation was put into force 1st of January

2011

- Radiation protection legislation
- Radioactive waste and pollution legislation



Filters with NORM from gas extraction. Radioactive and pyrophoric material

- NORM waste
  - exemption values based on IAEA RS-G-1.7, 1Bq/g
  - From all industries



## Regulation of import of NORM waste to Norway

- Requires an authorisation from NRPA
- May be granted if:
  - Well-grounded reasons are present
  - Environmentally sound solutions exist for waste management
  - Waste management facilities are required to have the necessary authorisations and capacity
- Import of offshore installations that contain both radioactive waste and hazardous waste only require one authorisation
  - Joint authorisation from Climate and Pollution Directorate and NRPA



## Regulation of export of NORM waste from Norway

- Requires an authorisation from NRPA
- May only be granted if:
  - It is necessary to ensure environmentally sound waste management
  - Authorities in country of destination have given authorisation for import
  - It may be documented that the waste management is environmentally sound in the country of destination
  - Exporting company is fully responsible for the waste until it is accepted by the waste management facility in the country of destination
- Export of offshore installations that contain both radioactive waste and hazardous waste only require one authorisation
  - Joint authorisation from Climate and Pollution Directorate and NRPA



