

EU Regulation of Wastes

Inception Workshop

Mercury Storage and Disposal Project in the Caribbean

Port of Spain

12-13 August 2015

General EU Rules for Waste Storage (1)

Council Directive 1999/31/EC of 26 April 1999 on the landfill^{*)} of waste

- Key piece of EU legislation in the field of waste disposal
- Stringent operational and technical requirements to prevent possible negative effects on the environment
- Not to be operated without appropriate permit by competent authority

^{*)} notion „landfill“ = very broad, covers sites for waste disposal onto or into land



General EU Rules for Waste Storage (2)

Council Directive 1999/31/EC on the landfill of waste (cont.)

- Application for permit must contain all relevant information
 - type and quantity of waste
 - capacity of the site
 - geological and hydrogeological characteristics
 - proposed measures for pollution control
 - monitoring and control plan
 - plan for closure and after-care of the site
 - financial security provided by applicant
 - environmental impact assessment (acc. to local conditions)
- Permit only to be granted if authority is satisfied with all elements
- Liquid waste not to be accepted in a landfill, but now derogation for metallic mercury



General EU Rules for Waste Storage (3)

2003/33/EC: Council Decision of 19 December 2002 establishing criteria and procedures for the acceptance of waste at landfills

- Complement and particularizing of the landfill directive by detailed technical requirements
- Criteria for waste acceptable at landfills dedicated to hazardous waste^{*)}
- Criteria for underground storage, including specific considerations for salt mines
- Long-term safety assessment required for underground storage
- All provisions of landfill directive as well as of criteria and procedures apply to a storage facility of metallic mercury

^{*)} Metallic mercury as well as waste containing mercury is classified as hazardous waste under EU legislation



EU Criteria for Underground Disposal (1)

Council Decision 2003/33/EC establishing criteria and procedures for the acceptance of waste at landfills

- **Criteria for underground storage**
 - A site-specific safety assessment as defined in **Annex A**
- **Importance of geological barrier**
 - Ultimate objective of **underground storage** = Isolation of wastes from the biosphere
 - Wastes + geological barrier + cavities + engineered structures + technical aspects must fulfill the corresponding requirements



EU Criteria for Underground Disposal (2)

Council Decision 2003/33/EC establishing criteria and procedures for the acceptance of waste at landfills

- **The site-specific assessment of risk requires the identification of:**
 - The hazard (deposited wastes)
 - The receptors (biosphere and possibly groundwater)
 - The pathways by which substances from the wastes may reach the biosphere
 - The assessment of impact of substances that may reach the biosphere



EU Criteria for Underground Disposal (3)

Council Decision 2003/33/EC establishing criteria and procedures for the acceptance of waste at landfills

- **An integrated performance assessment analysis, including:**
 - Geological assessment
 - Geomechanical assessment
 - Hydrogeological assessment
 - Geochemical assessment
 - Biosphere impact assessment
 - Assessment of the operational phase
 - Long-term assessment
 - Assessment of the impact of all the surface facilities at the site



EU Legislation on Mercury Storage

