

Identification of hazardous activities



Identification of hazardous activities

Background

- Identification of hazardous activities is required from the Parties by Article 4 of the Convention
 - National legislation
 - EU Directive 96/82/EC

Identification of hazardous activities

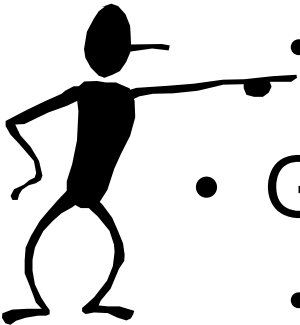
Definition

- Any activity in which one or more hazardous substances are present or may be present in quantities at or in excess of the threshold quantities listed in Annex I hereto, and which is capable of causing transboundary effects

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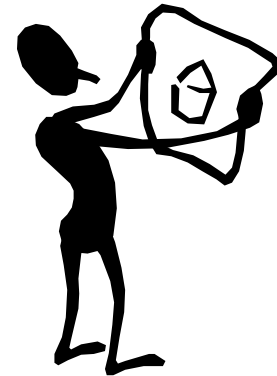
Data needed about

- Hazardous substances
 - Named in Annex I
 - Hazardous category in Annex I
- Geographic location
 - Guidelines to facilitate the identification of hazardous activities
- Accident scenarios



Identification of hazardous activities

- Data from
 - Operator /Notification/
 - Inspections on-site
 - Other sources



Identification of hazardous activities

Dangerous Substances

- Annex I of the Convention
- Two Parts
 - Part I - Named substances /e.g. Chlorine/
 - Part II - Generic categories /e.g. toxic/

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Named Dangerous Substances

- Widely used in industry, transport etc.
- Particularly hazardous due to physical, chemical, toxicological properties
- Require special storage, producing, processing conditions

Named Dangerous Substances

PART II. Named substances	
<u>Substance</u>	<u>Threshold Quantity</u> (Tonnes)
1. Ammonia	500
2 a Ammonium nitrate <u>2)</u>	2,500
2 b Ammonium nitrate in the form of fertilizers	10,000
<u>3)</u>	
3. Acrylonitrile	200
4. Chlorine	25
5. Ethylene oxide	50
6. Hydrogen cyanide	20
7. Hydrogen fluoride	50
8. Hydrogen sulphide	50
9. Sulphur dioxide	250
10. Sulphur trioxide	75
11. Lead alkyls	50
12. Phosgene	0.75
13. Methyl isocyanate	⁸0.15

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Categories Dangerous Substances

- Two main groups
 - Toxic for man and environment
 - Flammables, explosives and oxidizers
- Based on physical, chemical or toxicological properties
 - UN, EU classification
 - Indicative criteria in Annex I

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Categories Dangerous Substances

- Examples
 - Toxic and very toxic substances – methanol, carbon monoxide, methiocarb, parathion, 2,4-dinitroaniline
 - Flammable liquids – styrene, n-butanol, ethanol
 - Flammable gases – hydrogen, propane
 - Explosives – TNT, lead azide
 - Oxidizers – Potassium permanganate, Sodium nitrite

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Dangerous Substances

- Useful databases
 - EU ECB Classlab

<http://ecb.jrc.it/classification-labelling/>

- International Chemical Safety Cards

www.cdc.gov/niosh/ipcs/icstart.html

<http://www.ilo.org/public/english/protection/safework/cis/products/icsc/dtasht/index.htm>

www.europe.osha.eu.int/good_practice/risks/dangerous_substances/index.php

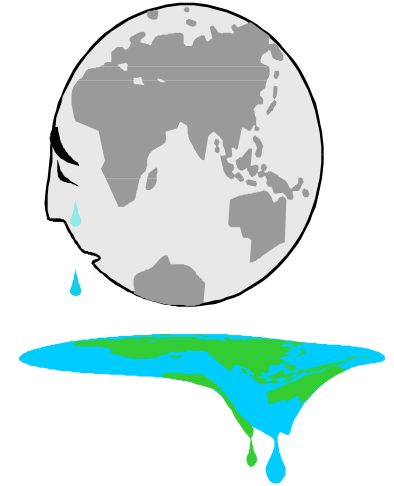
- ATSDR toxicological profiles

<http://www.atsdr.cdc.gov/toxpro2.html>

- Search engines

Chemfinder - <http://chemfinder.cambridgesoft.com/>

DSSTox – <http://www.epa.gov/nheerl/dsstox>



Identification of hazardous activities

Location criteria – Document ECE/CP.TEIA/12, Annex II: Decision 2004/2

- Hazardous activities within a 15 km distance to the border involving substances that may cause a fire or explosion or involving toxic substances that may be released into the air in the event of an accident (Air Path)

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Location criteria – Document ECE/CP.TEIA/12, Annex II: Decision 2004/2

- **Along or within catchment areas of transboundary and border rivers, transboundary or international lakes, or within the catchment areas of transboundary groundwaters, for activities involving substances that fall under category 3, 4, 5, or 8 of Part I of Annex I and that may be released into watercourses in the event of an accident (Water Path).**

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Location criteria

- **More stringent criteria for the identification of hazardous activities could be used**
 - **Article 5 of the Convention**
 - **Based on accident scenarios**
 - **Mutual agreement**
 - **Commonly accepted ToR for identification**

Identification of hazardous activities

Recommended Activities

- Identify the competent authorities on the national and regional level in your own country (e.g. for industrial installations, environmental protection, civil protection, emergencies)?
- Collect the data in your country with respect to the substance and the location criteria.
- Contact the competent authority on the national level in your neighbouring country.
- Organize a meeting with national and preferably regional level authorities to agree upon the procedures for identifying and notifying hazardous activities.
- Notify the hazardous activities to your neighbouring country.
- Transfer the results into the TEIA-Implementation Report.