

# European Experiences in LUP for Seveso Establishments

# **Examples of regulations and good practices adopted in Finland**

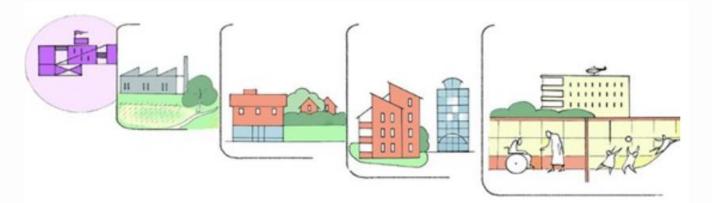
Strategies for Emergency Planning and Land Use Planning for Seveso Sites

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#### Contents of the presentation

- Tukes, Comperent Seveso Authority
- Land use regulation in Finland
- Tukes' role in LUP
- Consultation zone
- Accident scenarios and modelling
- Current challengies and development in Finland
- More info, e.g. Tukes guides





# Tukes and Seveso Surveillance in Finland

Finnish Safety and Chemicals Agency (Tukes) is the competent authority (CA)

#### tukes Industrial Process Unit

#### Our supervisory activities cover e.q.

- industrial processing and storage of hazardous chemicals, management of major accidents
  - Upper tier ~150 (Seveso)
  - Lower tier ~190 (Seveso)
  - Sub-Seveso ~390 + LPG ~270 (national legislation)

#### Our operations include e.g. the following areas

- Permits, notifications and inspections
- Development
- LUP cooperation

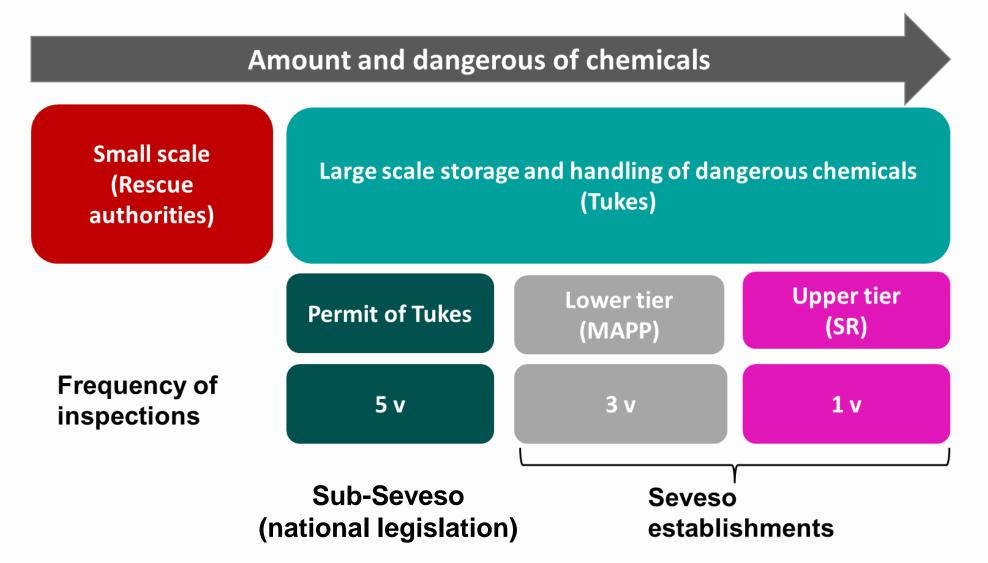
#### We are

- Competent Seveso Authority
- 15 specialists + head of unit





#### **Surveillance of Chemical Plants in Finland**



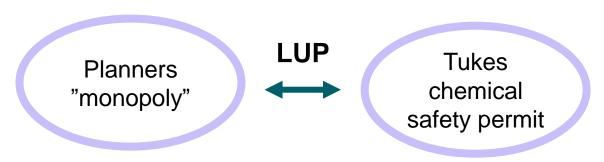
Tukes is CA for Seveso in Finland



## Regulation in Finland/ LUP

#### Seveso/ Land use planning in Finland (2012/18/EU; Article 13)

- The Seveso directive (2012/18/EU) has been implemented in Finland through several different laws and regulations.
  - LUP mainly through
    - 1. Land Use Act (132/1999)
      - the process of the updating Land Use and Building Act (132/1999) is ongoing.
    - 2. Chemical Safety Act (390/2005)



+ EIA, Environmental permit etc



## Chemical Safety Act 390/2005 (20 §): Consideration of the Local Plan

- When locating production facilities that manufacture, handle, or store hazardous chemicals or explosives,
  - the intended use indicated in the legally binding local plan under the Land Use and Building Act (132/1999),
  - as well as any applicable planning regulations for the area,
  - must be taken into account regarding the current and future land use of the site and its surroundings.



#### **Tukes' Role in LUP**

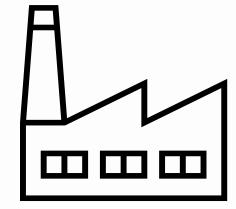
**Statements** 

**Chemical Safety Permit Process** 

### **Tukes' Role in Land Use Planning**

**Planning** 

- 1) In the chemical safety permit process, it must be assessed whether the local plan allows the proposed activity.
- Even if the LUP is approved,
   Tukes must still ensure the safety
   of the surrounding area



2) In its planning statement, Tukes provides an opinion on the effects of chemical accidents at facilities located within the consultation zone.



### Practice in Finland: Consultation Zones



#### **Consultation Zones Around Seveso Establishments**

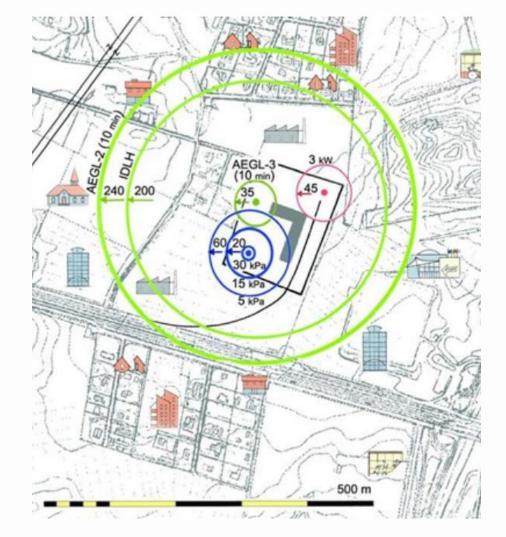
- All Seveso establishments are surrounded by a so-called consultation zone (0.2-2 km).
- Tukes determines this zone based on the accident scenarios provided by the companies during the permitting process.
- For any developments within this zone, city planners must consult both Tukes and the local emergency services regarding potential risks.
  - These written opinions are typically taken very seriously.



## Accident Scenarios and Modelling/ Tukes Chemical Safety Permit

### **Accident Scenarios and Chemical Safety Permit**

- As a general rule, all facilities requiring a chemical safety permit in Finland must conduct accident consequence analyses.
- For certain industries and smaller sites, predefined safety distances may be available in literature or legislation.
- Tukes has updated the guidance on the "Siting of the Production Plant" including the requirements for modeling the consequences of accidents in 2025.
  - Siting of production plants | Finnish Safety and Chemicals Agency (Tukes)





# **Current Challenges and Development Work in Finland**



### **Current Challenges and Developments 1/2**

- New technologies and companies' desire to place chemical plants close to residential areas and other similar locations are causing problems.
  - Regulation updates ongoing (Land Use Act and Chemical Safety Act)
  - Tukes has published guidance (in English):
    - Safety of hydrogen handling and storage, Tukes guide (in English)
    - <u>Siting of production plants | Finnish Safety and Chemicals Agency (Tukes)</u>, Tukes guide (in English)

 Challenges also arise from, for example, ammonia refrigeration plants, around which urban centers with sensitive sites such as schools, health centers, shopping malls, etc., have developed over the years.

#### **Current Challenges and Developments 2/2**

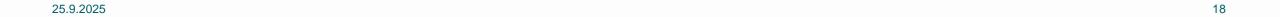
- We are currently working on enhancing our statement procedures at Tukes and strengthening cooperation with relevant authorities
  - Lack of resources (both in Tukes and municipalities)
  - A significant number of statement requests and planning-related discussions
  - Tukes' Role in the LUP Process

- · We are also developing other practices and tools related to land use at Tukes, e.g.
  - The development of our website. We have added materials, guidance, and FAQs.

Database, maps etc.



### More info



#### **More information:**

- Guide in English: <u>Siting of production plants | Finnish Safety and Chemicals Agency</u> (<u>Tukes</u>)
- Guide in English: <u>Safety of hydrogen handling and storage</u>
- Webpages in Finnish (will be translated later this year): Maankäytön suunnittelu |
   <u>Turvallisuus- ja kemikaalivirasto (Tukes)</u>