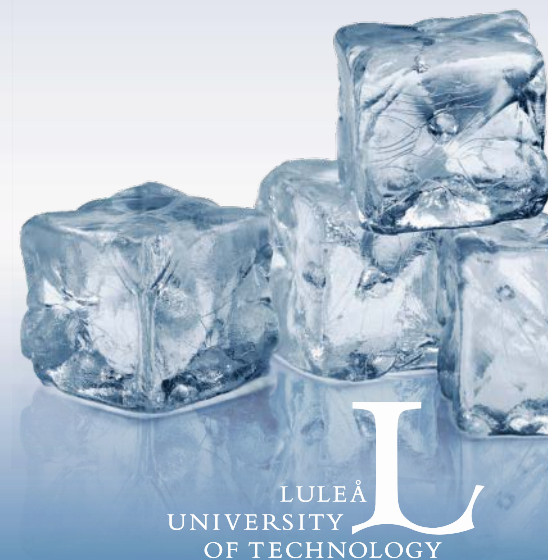


Legal preconditions for mining (II) – From consultation to final permit

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Introduction

*How do we control the
environmental impacts of these
activities?*



Environmental permitting!

Today's lecture

From consultation to final conditions

1. The Environmental Code

- Background and objectives

2. Substantive provisions

- Resource management provisions
- Basic environmental requirements

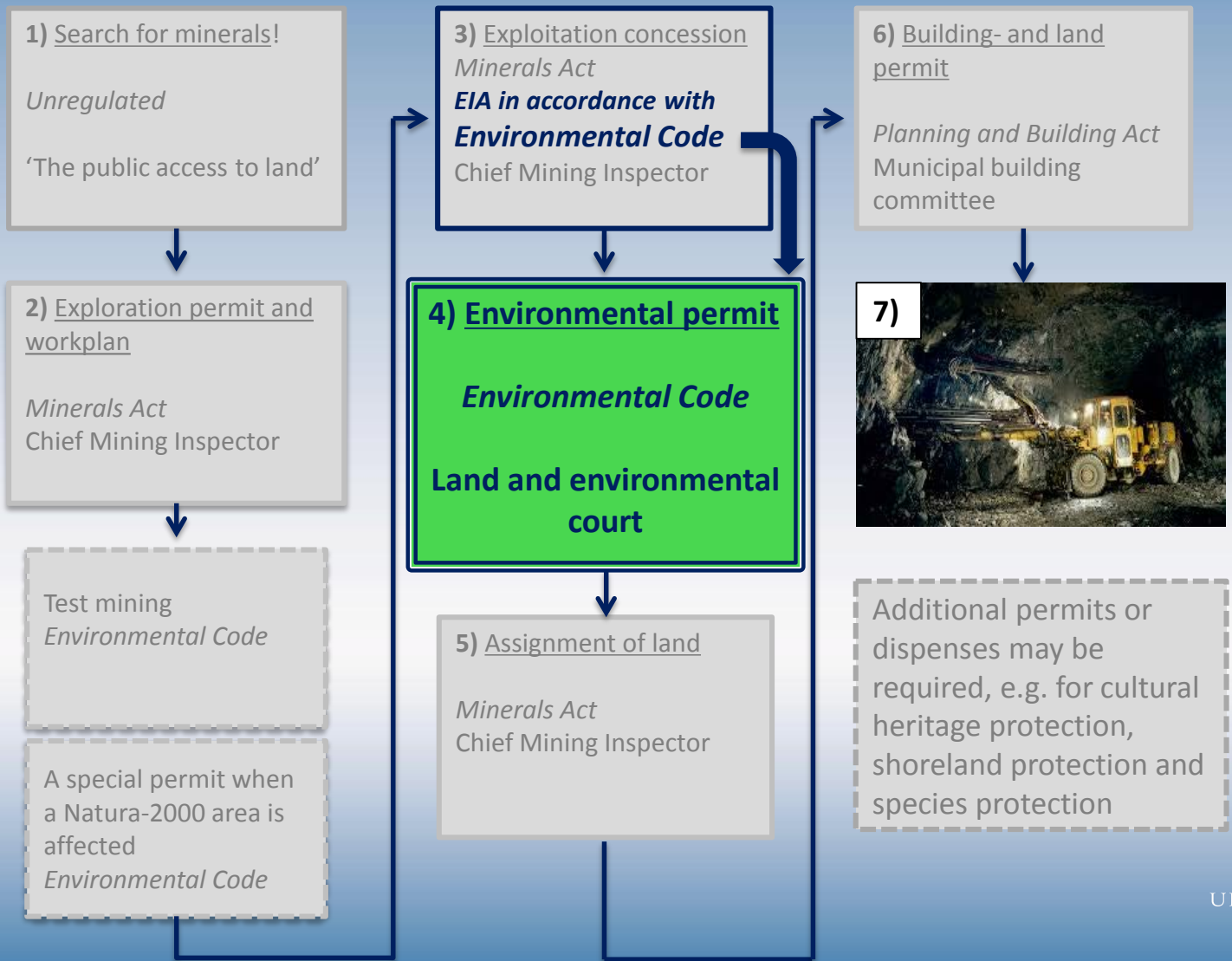
3. Environmental Impact Assessments

4. Licensing

- Environmentally hazardous activities
- Natura 2000 areas
- Conditions for permit

A special permit is required when a Natura-2000 area is affected

The licensing process





1. The Environmental Code Objectives

- Entered into force in 1999
- Modernize and reform Swedish environmental law under a sustainability umbrella
 - 16 environmental laws were included
 - The Minerals Act was left out and ‘apply in parallel’
- Enabling a **comprehensive** and **integrated** assessment of environmentally harmful activities
 - Based on principles, with a view to the overarching sustainability objective

2. Substantive provisions

The resource management provisions

- Under Swedish law, land and water areas are designated according to their suitability for different land-uses
 - *Nature protection*
 - *The extraction of minerals*
 - *Energy production*
 - *Reindeer herding*
- The designation “protects” the area from other (obstructing) activities
- In case of conflict, the area should be used for the purpose that best promotes a sustainable development

2. Substantive provisions

The basic environmental requirements

- To manage environmentally hazardous activities, **the operator** must **demonstrate compliance** with the general consideration rules (the environmental requirements):

- **KNOWLEDGE**
 - *Necessary to conduct the activity*
- **PRECAUTIONS**
 - *Best Available Technology (BAT) and the precautionary principle*
- **PRODUCT SUBSTITUTION**
 - *Of environmentally harmful products*
- **RESOURCE MANAGEMENT**
 - *Including a requirement to primarily use renewable energy*
- **LOCALIZATION**
 - *The “best” location from an environmental point of view*

3. Environmental Impact Assessment

Compliance with the requirements is demonstrated through the process of Environmental Impact Assessment



- *What type of activity is it?*
- *Where will it be located?*
- *What are the environmental impacts?*
- *What precautions will be taken to prevent damage to the environment?*

The aim of the EIA is to integrate environmental aspects into all planning and decision-making!

3. Environmental Impact Assessment

a) Scoping

- Consultation with affected municipalities, CABs and other authorities
- And other countries (in case of transboundary impacts)
- **Early in the process!**



- About location, design, environmental impacts etc.
- *Content* and *scope* of the **environmental impact statement**

3. Environmental Impact Assessment

Content requirements for the environmental impact statement

- Describing the activity (location, design, scope etc.)
- Alternative solutions (e.g. locations)
- Environmental conditions and possible development (including 0-alternative)
- Identification, description and assessment of environmental impacts of the activity, or as a result of external events
- Planned measures to prevent and counteract negative environmental impacts
- Planned measures to follow Environmental Quality Standards
- Non-technical summary
- Account of the results of the consultation

3. Environmental Impact Assessment

b) Making the environmental impact statement (examples)

Describing the activity

The deposit is located about 3.5 km northeast of X mine. The discovery extends from about 100 meters north of the E10 road to about 700 meters south-east towards the X mine. The business will consist of mining of Z and Y for eight years. The annual ore mining is planned to be 1 to 15 Mton

Preliminary design, scope etc.

As a result of the low ore value, open pit mining is the only possible mining method. In the area, an open-plan mine with a smaller industrial area adjacent to and a depot of moraine and gray rock is planned in the expanded phase

3. Environmental Impact Assessment

b) Making the environmental impact statement (examples)

Describing environmental impacts

In addition to the disappearance of habitats caused by the mine, the activity also contributes to the landscape changing through the creation of an open pit which is then filled with water to approximately the same size as nearby mountains

Measures to manage negative environmental impacts

In connection with the mining area being dewatered, a dense moraine trap will be built around the area to prevent water from flowing into the dewatered area. The measure also means that surrounding land areas will be protected from groundwater lowering

3. Environmental Impact Assessment

b) Making the environmental impact statement (examples)

Water management

Ditches will be built around the rock deposits and the industrial area to collect leachate. The ditches will lead the leachate to a collection basin. The leachate will thereafter be pumped via an existing dike to the tailings dam

Measures to prevent negative environmental impacts

The public will be kept informed about blasting and fixed times for firing will, as far as possible, be used to reduce the surprise effect

Household waste will be recycled in compost facilities in the area and other waste management will be carried out through the building of a recycling station

3. Environmental Impact Assessment

c) Submission

- The environmental impact statement is submitted to the permit authority (the Land and Environmental Court), who:
 - Makes sure that the public gets a chance to comment on the environmental impact statement (30 days)
 - Publish on the Internet
 - Announce in newspapers
 - Decides if the EIA meets the requirements of the law
 - Makes a final assessment

4. Licensing

Environmentally hazardous activities

- All land-based activities that affect the environment are considered environmentally hazardous (EHA)
 - ⇒ Permits may be required!
- **MINING** Requires a permit from the Land and Environmental Court (so called **A**-activity)
- **MINING** is also assumed to *always* have significant environmental impacts
 - ⇒ Requires a specific Environmental Impact Assessment

4. Licensing

Natura 2000 areas

Natura 2000-areas:

Network of core breeding and resting sites for rare and threatened species, and some rare natural habitat types

Based on **the EU Birds Directive** and **the EU Habitats Directive**



- **Activities that may significantly affect a Natura 2000 area require a special permit**

4. Licensing

Natura 2000 areas

- Prerequisites for a Natura 2000 permit
 - The activity must not **damage the protected habitat**
 - The activity must not **significantly disturb the species**

High demands!

4. Licensing

Natura 2000 areas

The derogation regime

In spite of the high demands, permission may still be granted, if:

1. There are no alternative solutions
2. The activity must be carried out for imperative reasons of overriding public interest
3. Compensation measures are taken

All criteria must be met for the derogation regime to apply!



4. Licensing

Permit applications

- Applications for permit must be in writing and include, e.g.
 - Blueprints and technical descriptions regarding the conditions at the location and the use of resources, materials & energy
 - Proposals for protective- and other precautionary measures and other information needed to assess if the activity complies with the basic environmental requirements
 - The environmental impact statement
- Permits *may* be granted for a limited period of time (unusual) and be combined with conditions (always)

4. Licensing

Permit conditions

- The permit implies
 - a **right** to act in accordance with the permit, and
 - an **obligation** to comply with the conditions of the permit
- Example of conditions in the permit

The company shall take measures that, as far as possible, counteract disturbing dusting. If disruptive dusting nevertheless arises, it is incumbent upon the company to report this to the county administrative board, which, in its capacity as supervisory authority, has to issue the necessary regulations to counteract such dusting.

Summary

