

# The licensing chain for mining in Sweden





# Main permits required for mining

 Exploration permit Permit for test mining Exploitation concession Environmental permit



## **BEOWULF MINING plc**

## Scope

### **Exploration Permit**

- Exclusive right to explore a defined area (including test mining)
- Qualifies for proirity for exploitation concession
- Issued for 3 years, maximum extension up to 15 years

### **Exploitation Concession**

• Exclusive right for 25 years to exploit a deposit. Can be extended.

#### **Environmental Permit**

 Permit to design, build, operate and decommission a deposit under defined conditions



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### The Process

#### **Exploration license**

- Issued by the Swedish Mining Inspectorate
- Work plan must be communicated to landowners/stakeholders

#### Permit for test mining

- Issued by the County Administrative Board
- Requires an EIA\*. Includes a formal stakeholder consultation process.

#### **Exploitation Concession**

- Issued by the Swedish Mining Inspectorate
- Requires an approved EIA focusing on land use. No formal consultation process including stakeholders.

#### **Environmental Permit**

- Isued by the Land- and Environmental court
- Requires an approved EIA. Includes a formal stakeholder consultation process.

<sup>\*</sup> EIA = Environmental Impact Assessment



# Additional legal frameworks

Plan and Building Act

Heritage Conservation Act

### Ordinances, e.g.

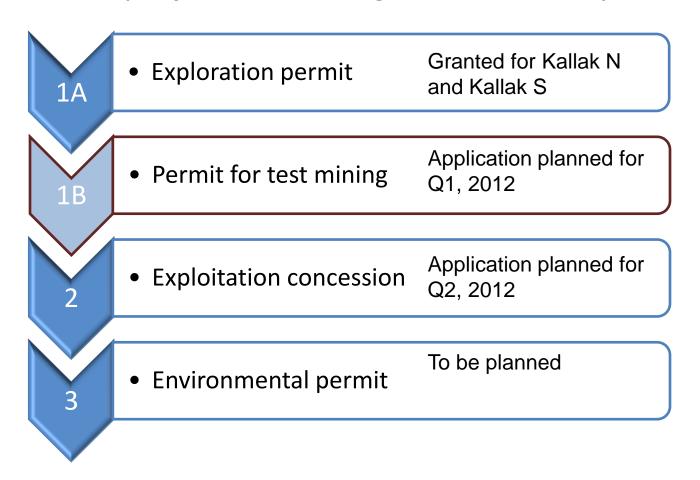
• ...on waste from recovery operations

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- ..on environmental quality standards
- ... waste
- ...on operator self monitoring



# Kallak project - licensing status January 2012



# EIA – Main content

Area description

Value inventories

Current land use

Planned operation

Potential impacts

Impact reducing measures

Remaining impacts

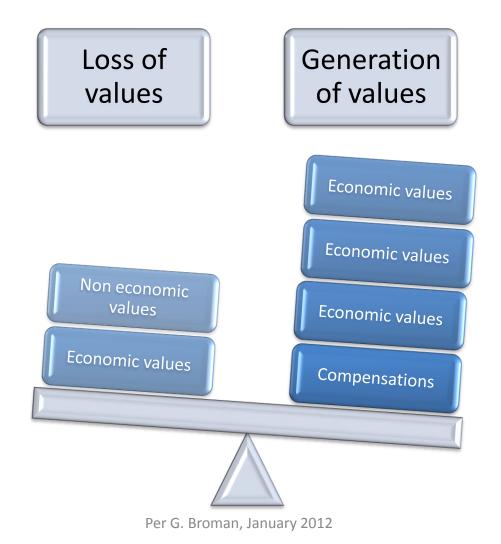
Socio economy

**Concluding assessment** 

Per G. Broman, January 2012

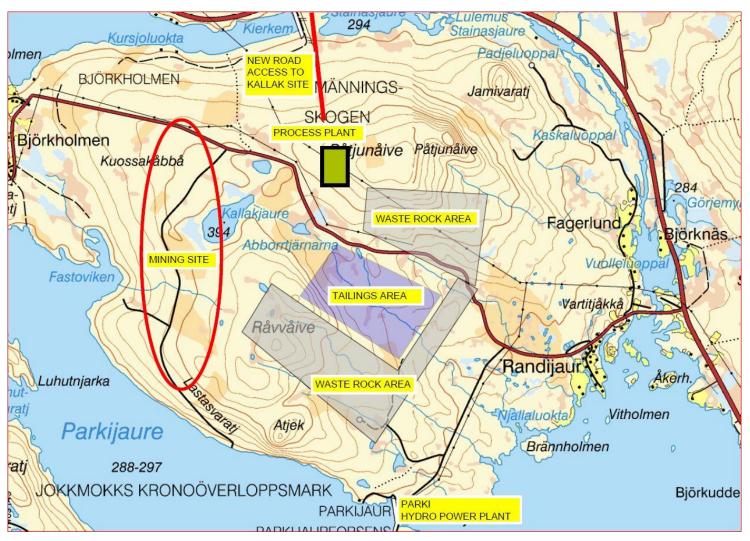


# Concluding assessment

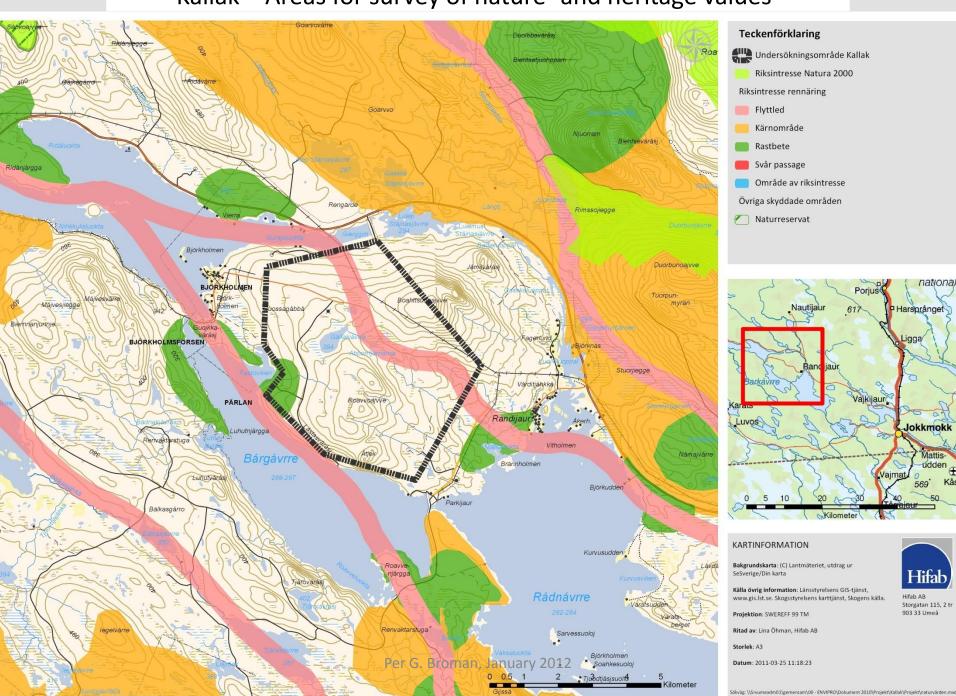




### KALLAK preliminary suggested land use



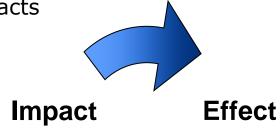
### Kallak – Areas for survey of nature- and heritage values

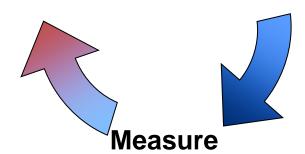




# EIA- Expected impacts and preventive measures

- Landscape
- Streaming water flows and physical impacts
- Streaming water– chemistry
- Ground water
- Air
- Noice, vibrations, etc
- Nature values
- Heritage values
- Areas of national interest
- Opposing interests
- Conservation of nature resources
- Transportation
- Waste issues
- Hazards
- Socio economy







# **BEOWULF MINING plc**

# Principal EIA aspects

- Reindeer herding
- Mineral exploitation ?

Areas of national interest



- Reindeer herding
- Logging
- Settlements
- Hydro power
- Hunting, fishing
- Recreation

Present land use



- Local business structure
- Local job market
- Job generation by project

Socio economy



- Terrestrial
- Aquatic

Nature values



- Landscape level
- Single objects

Heritage values



- Water
- Landscape
- Flora, fauna
- Climate, Air, etc

Env targets, env quality norms, etc



Per G. Broman, January 2012