



The licensing chain for mining in Sweden





Main permits required for mining

- Exploration permit
 - Permit for test mining
 - Exploitation concession
 - Environmental permit
-
- The diagram consists of four blue chevron-shaped callouts stacked vertically, each containing a bullet point followed by a permit type. The callouts are numbered 1A, 1B, 2, and 3 from top to bottom. The background behind the callouts is white.
- 1A • Exploration permit
 - 1B • Permit for test mining
 - 2 • Exploitation concession
 - 3 • Environmental permit



Scope

Exploration Permit

- Exclusive right to explore a defined area (including test mining)
- Qualifies for priority 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 build, operate and decommission a deposit under defined conditions



The Process

Exploration license

- Issued by the Swedish Mining Inspectorate
- Workplan 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

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

* EIA = Environmental Impact Assessment



Additional legal frameworks

Plan and Building Act

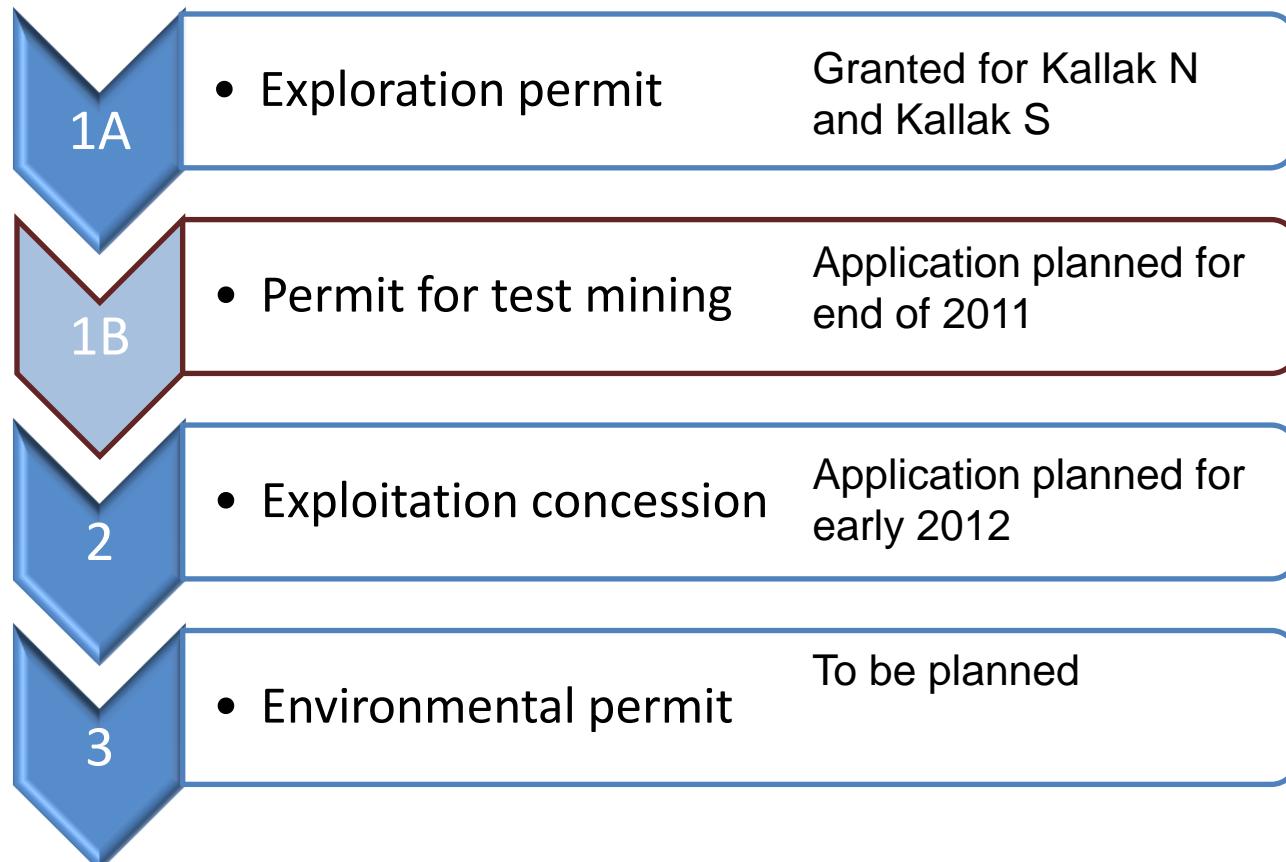
Heritage Conservation Act

Ordinances, e.g.

- ...on waste from recovery operations
- ..on environmental quality standards
- ... waste
- ...on operator self monitoring



Kallak project - licensing status September 2011





EIA – Main content

Area description

Value inventories

Current land use

Planned operation

Potential impacts

Impact reducing measures

Remaining impacts

Socio economy

Concluding assessment



Concluding assessment

Loss of
values

Generation
of values

Economic values

Economic values

Economic values

Compensations

Non economic
values

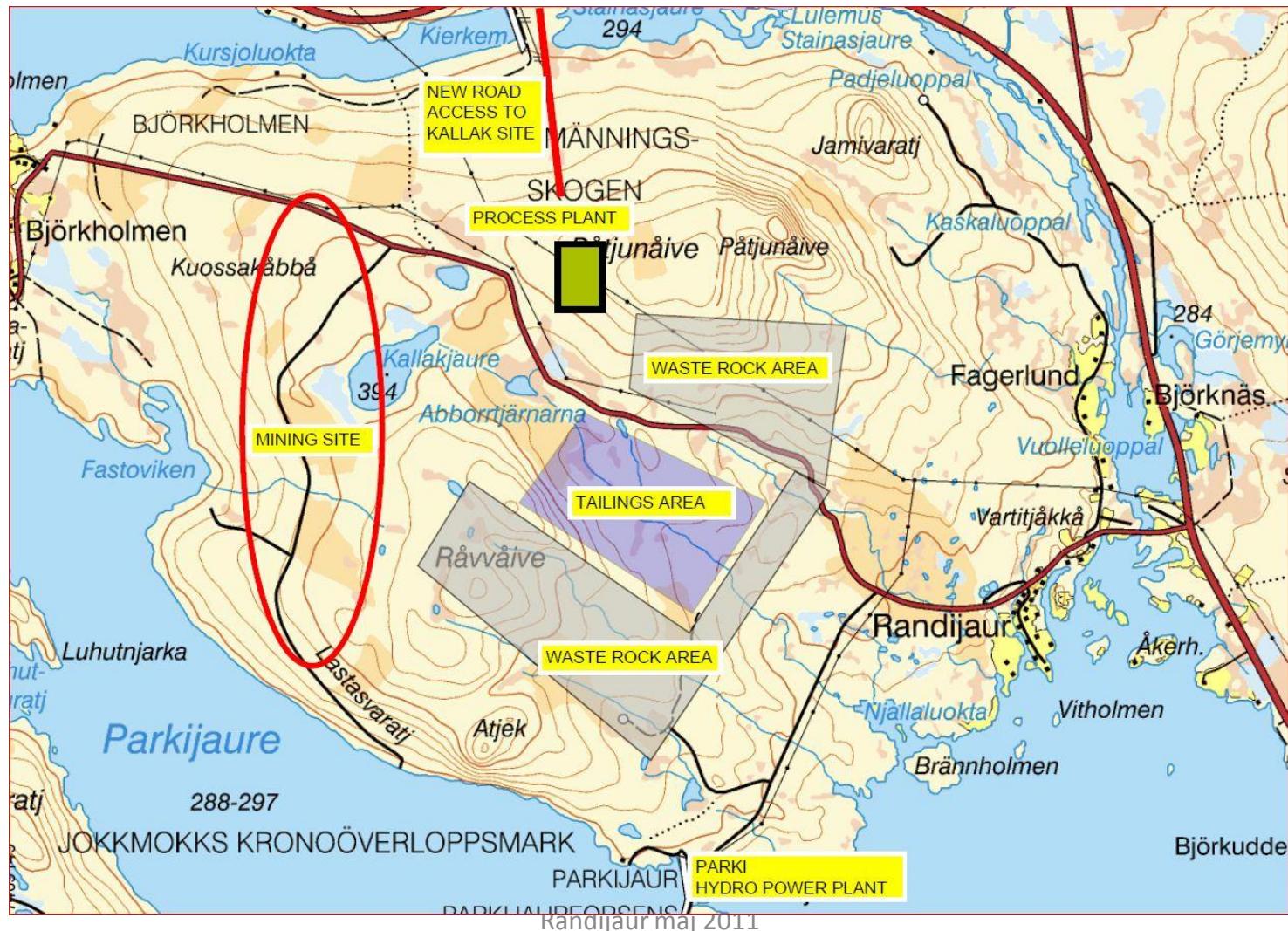
Economic values



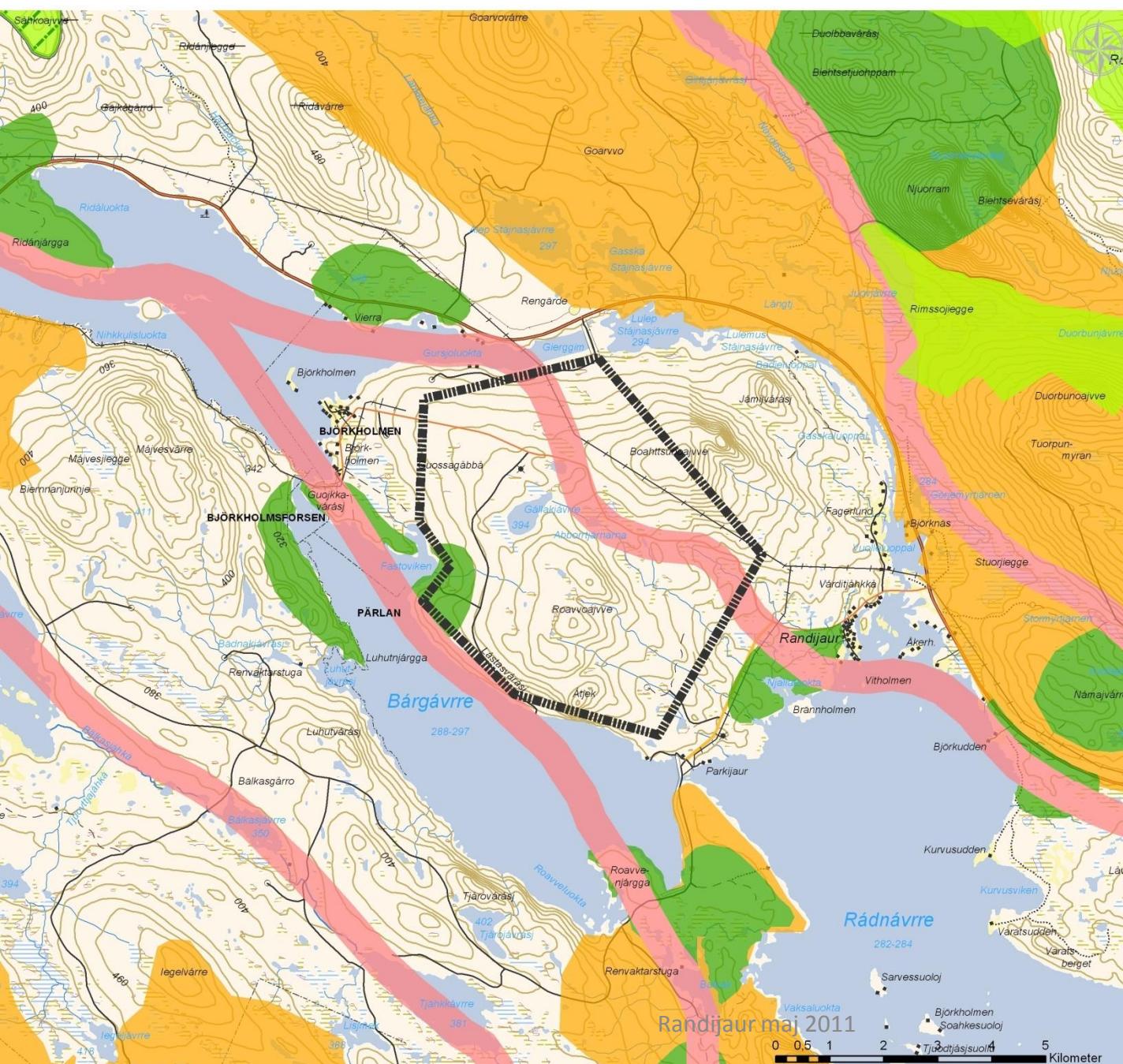


BEOWULF MINING plc

KALLAK preliminary suggested land use

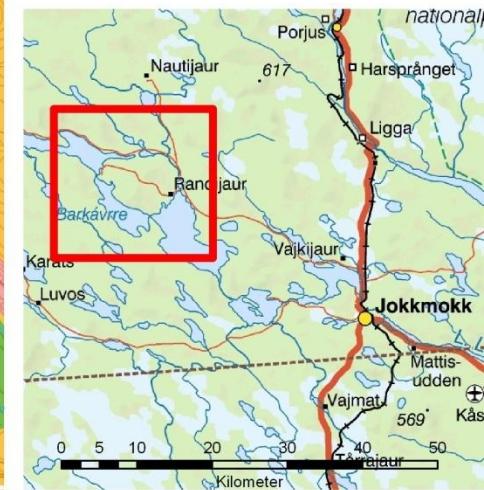


Kallak – Areas for survey of nature- and heritage values



Teckenförklaring

-  Undersökningsområde Kallak
 -  Riksintresse Natura 2000
 - Riksintresse rennäring
 -  Flyttled
 -  Kärnområde
 -  Rastbete
 -  Svår passage
 -  Område av riksintresse
 - Övriga skyddade områden
 -  Naturreservat



KARTINFORMATION

Bakgrundskarta: (C) Lantmäteriet, utdrag ur
SeSverige/Din karta

Källa övrig information: Länsstyrelsens GIS-tjänst,
www.gis.lst.se. Skogsstyrelsens karttjänst, Skogens källa.

Projektion: SWEREF 99 TM

Ritad av: Lina Öhman, Hifab AB

Storlek: A3

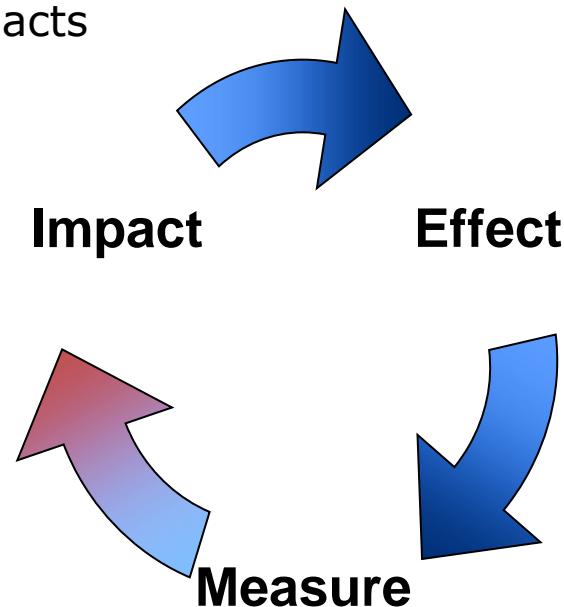
Datum: 2011-03-25 11:18:23





EIA- Expected impacts and preventive measures

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





Principal EIA aspects

- Reindeer herding
- Mineral exploitation ?

Areas of national interest



- Reindeer herding
- 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





Suggested environmental profile (preliminary)

Not critical

Areas of national interest



Decisive

Present land use



Supportive

Socio economy



Not critical

Nature values



Not critical

Heritage values



Not critical

Env targets , env quality norms, etc

