



Boliden Kokkola Oy

BIODIVERSITY GRI REPORT 2019

30.4.2020

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Project number: 10553

INDEX

1	General information.....	4
2	Impacts of activities, products and services on biodiversity	5
3	Habitats protected or restored	6
4	Red list species and national conservation list species with habitats in areas affected	7
5	Summary and improvements.....	8

1 GENERAL INFORMATION

- Rummelö–Harrbådan Natura 2000 area is located beside the smelter area
- Kokkola’s archipelago is also defined as Natura 2000 area and is located 2 km from the smelter
- Total areas
 - Rummelö-Harrbådan (FI1000003) 236 hectares
 - Kokkola’s Archipelago (FI1000033) 14 699 hectares
- BKO has carried out impact assessment regarding to impacts of operation to conservation area. No significant impacts has been detected
- Some of Red list species groups have been defined but number of all species is not yet available

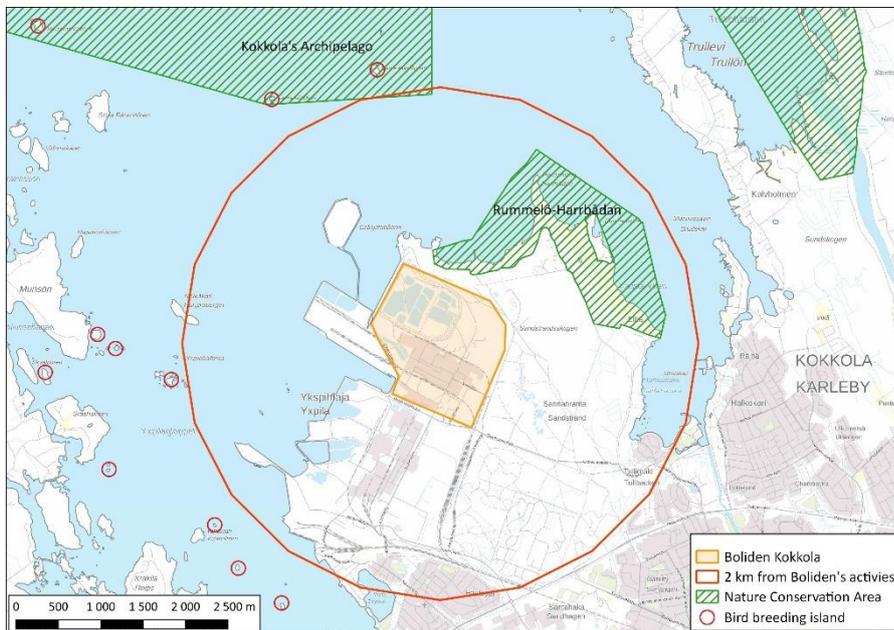


Figure 1. Location of Boliden Kokkola’s operation and yard area compared to closest nature conservation area (Natura 2000).

REQUIREMENTS

Geographic location

Subsurface and underground land that may be owned, leased, or managed by the organization

Position in relation to the protected area (in the area, adjacent to, or containing portions of the protected area) or the high biodiversity value area outside protected areas

Type of operation (office, manufacturing or production, or extractive)

Size of operational site in km2 (or another unit, if appropriate)

Biodiversity value characterized by the attribute of the protected area or area of high biodiversity value outside the protected area (terrestrial, freshwater, or maritime ecosystem)

Biodiversity value characterized by listing of protected status (such as IUCN Protected Area Management Categories, Ramsar Convention, national legislation)

Data available, no actions needed

Not related to operation / Data collection in progress

More general data needed

2 IMPACTS OF ACTIVITIES, PRODUCTS AND SERVICES ON BIODIVERSITY

- Significant direct and indirect impacts of the smelter on protected areas have been examined in several assessment reports. The latest assessment has been done in 2019 (as Natura assessment). Affected areas are limited in impact assessment reports.
- Impacts of the smelter are monitored with extensive monitorings.
 - Monitoring of ambient air quality (continuous).
 - Impacts of air pollution by bioindicator (every 5 year)
 - Monitoring of groundwater quality (3 times per year)
 - Monitoring of soil quality (every 5 year)
 - Monitoring of seawater area: water and sediment quality, zoobenthos, fish population.
- Based on the results of the monitoring, the smelter has no significant direct or indirect impact on protected areas or high biodiversity sites.
- There are several other industrial operators near Natura areas. Combined impacts from industrial area are targeted also to conservation areas.

REQUIREMENTS

Construction or use of manufacturing plants, mines, and transport infrastructure

Pollution (introduction of substances that do not naturally occur in the habitat from point and non-point sources)

Introduction of invasive species, pests, and pathogens

Reduction of species

Habitat conversion

Changes in ecological processes outside the natural range of variation (such as salinity or changes in groundwater level).

Species affected

Extent of areas impacted

Duration of impacts

Reversibility or irreversibility of the impacts.

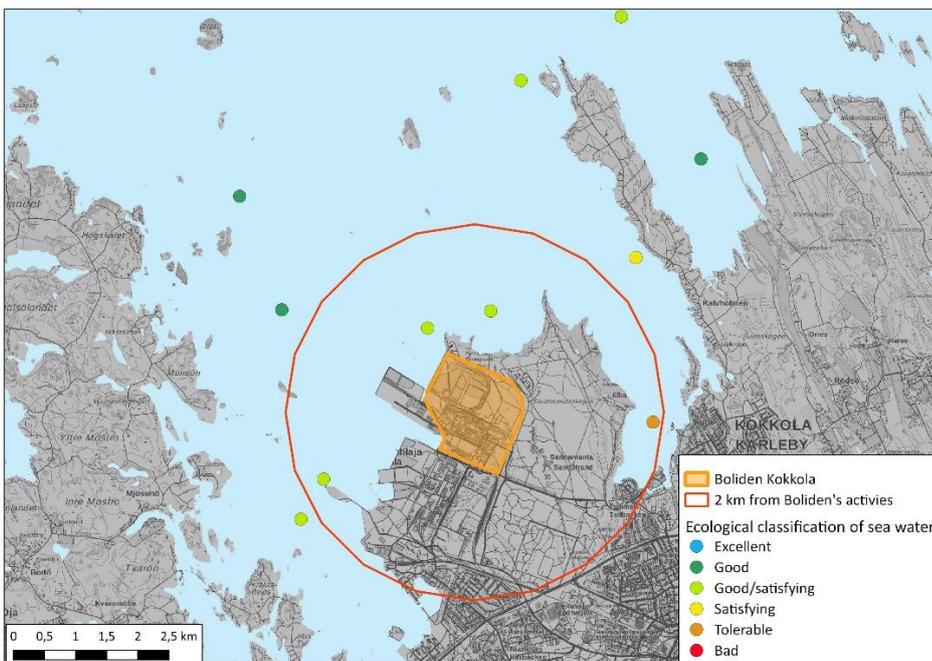


Figure 2. Ecological states of Kokkola's coastal sea water.

Impacts assessment done, no actions needed

Impacts assessment made, actions needed

Impacts not assessed, actions needed

3 HABITATS PROTECTED OR RESTORED

- Conservation area types of Rummelö-Harrbådan Natura 2000 area
 - **SAC** (Special Areas of Conservation) is defined in the European Union's Habitats Directive (92/43/EEC), also known as the Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora.
 - **SPA** (Special Protection Areas) is a designation under the European Union Directive on the Conservation of Wild Birds.
- In addition the conservation area belongs the national bird wetland protection programme.
- Affected habitats are 24,1 hectares in the conservation area. 42 % of habitats are important on a conservation basis. Detailed results have been shown Natura assessment (2019).
- The conservation area has some habitats where restorations have been done to improve biodiversity. Restorations have been completed mainly by the landowner (City of Kokkola) and NGOs.

REQUIREMENTS

Size and location of all habitat areas protected or restored, and whether the success of the restoration measure was or is approved by independent external professionals.

Whether partnerships exist with third parties to protect or restore habitat areas distinct from where the organization has overseen and implemented restoration or protection measures.

Status of each area based on its condition at the close of the reporting period.

Standards, methodologies, and assumptions used.

Data available, no actions needed

Impacts assessment made, actions needed

Impacts not assessed, actions needed



Figure 3. Rummelö-Harrbådan Natura 2000 area.

4 RED LIST SPECIES AND NATIONAL CONSERVATION LIST SPECIES WITH HABITATS IN AREAS AFFECTED

- Red list species and national conservation list species with habitats in areas affected. Detailed results have been shown Natura assessment (2019).
 - Breeding birds
 - Critically Endangered 0 species
 - Endangered 3 species
 - Vulnerable 3 species
 - Near Threatened 13 species
 - Mammals
 - Critically Endangered 0 species
 - Endangered 0 species
 - Vulnerable 1 species
 - Near Threatened 0 species

REQUIREMENTS
Critically endangered
Endangered
Vulnerable
Near threatened
Least concern

No Red list and national list species exist	Species exist, but not affected by operation	Species and risk for impact exist
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Figure 4. Rosefinch (*Carpodacus erythrinus*) is one of Near Threatened (NT) species.

5 SUMMARY AND IMPROVEMENTS

Table 1. Data summary of nature conservation areas located in the vicinity of smelter.

Nature conservation area located in the vicinity (Y/N)	Yes
Number of conservation areas and high biodiversity sites 2 km from smelter	2
Closest distance (meter)	300 m
Type of conservation area	Natura 2000 (SAC and SPA) National bird wetland protection programme
Total area of conservation area (ha)	236 ha
Affected conservation habitats (ha) and important habitats on conservation basis (%)	24,1 hectares / 42 %
Number of Threatened Species on the impacted area	21
Number of Critically Endangered and Endangered species living on the impacted area	3
Smelters impact ⁽²⁾ to conservation area is assessed (Y/N)	Yes
Impact assessment latest update	2019
Is there in the environmental permit any monitoring or other requirements considering the area (Y/N)	Yes

IMPROVEMENTS

1. Only some of the species groups of the Red list have been surveyed from the Conservation area. Surveyings can be extended to other species groups like insects, butterflies, lichens etc.
2. Developing cooperation with other local actors (industrial operators, NGOs etc.) to increase the biodiversity in the region. The development target may be habitat improvement.
3. Renewal of habitat and breeding bird surveys every four years.



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