

Contaminated soil

Innholdsfortegnelse

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In Norway most contaminated sites originate from earlier industrial and mining activities or from closed landfills containing hazardous waste. The problems are often a result of inadequate waste disposal from industrial operations and other activities.



STATE

About 690 heavily contaminated sites

In Norway there are numerous sites where land has become contaminated by human activities such as industry, chemical and oil spills and waste disposal. Contamination can also occur naturally as a result of the geology of an area. An example of this is alum shale and other rock types that contain sulphur which are common in the south-eastern parts of Norway. These bedrocks can react with oxygen and water, after being crushed during construction work, and produce acidic, heavy metal-containing runoff.

Locations with contaminated ground are often related to old landfills containing hazardous waste or industrial sites contaminated by hazardous chemicals. Contamination has been caused by both public enterprises and private companies. In many cases, contamination is caused by operations or waste disposal methods that are not considered acceptable today.

The map shows contaminated sites in Oslo.

The Norwegian Environment Agency has identified about 7300 sites where the ground is either known to or believed to be contaminated. More than 2600 contaminated sites have been remediated. In April 2019, about 690 sites were identified as heavily contaminated and in need of remediation (impact level 3).

The Norwegian Environment Agency has created a database that gives information about sites where there is contaminated ground or reason to suspect contamination. The database gives information on the site, type of contamination and assessments if measures have been taken on the area. There is also a possibility to report sites where one suspects that the ground is contaminated.

› Database "Grunnforurensning"

IMPACT

Hazardous chemicals released into the environment

Contamination from earlier generations can result in the dispersal of hazardous chemicals in soils, ground water and surface water. At some sites, such contamination may represent a risk to human health, cause irreversible environmental damage or make the land unsuitable for some ranges of use.

RESPONSE

Cleaning up is an important target

The Norwegian government has been working with the remediation of contaminated sites for several decades.

Initially, the effort was concentrated on 600 of the most contaminated sites known at the time. In 2006-2011, we also investigated the presence of hazardous substances in children's outdoor environment. In collaboration with the municipalities, polluted soil in day-care centers was cleaned up in ten large cities and four industrial areas.

We have identified several types of industry or activities that have a high probability of contaminating the soil. These include shipyards, petrol and filling stations, mining installations, the galvanic industry, fire-fighting training sites and large greenhouses.

In cases where the contamination of the soil might pose a risk, the land has to be restored to a state in which it is suitable for use. There are stricter requirements for soil where people are living and children playing, compared to traffic areas, industrial sites and such.

In most cases the present land usage does not represent a severe danger to human health or the environment. However, these sites still need to be followed up, because a change in land usage could lead to health risks or to the leakage of hazardous substances.