

Environmental Risks

► The management of environmental risks is part of a company's daily life. Identifying environmental hazards and controlling associated risks is important, not only to protect the environment, but also to prevent your company from incurring large fines, remediation costs, loss of reputation, etc.

What are environmental risks?

Environmental risks refer to risks that can affect the health and viability of living things and the condition of the physical environment.

Environmental risks can be caused by the release of pollutants to air, land or water. Environmental damage can also be caused by irresponsible use of energy and natural resources. Pollutants can include:

- Waste (controlled waste, special waste)
- Emissions to air e.g. smoke, fumes, dusts, gases, etc.
- Releases to the ground and water systems e.g. effluent, chemicals, oil/fuel discharges, etc.
- Products can cause environmental damage when used e.g. aerosols
- Noise, vibration, light, etc. if causing a nuisance
- Radiation

Environmental risks can be hidden and cause damage over a long period of time. A disused refuse dump can contaminate the ground around it. An environmental risk can also emerge suddenly e.g. due to an accident. A chemical container that breaks during transport can result in the leakage of harmful substances into the ground, a water system, the air or a surface water drain.

Severity of an environmental risk

In addition to the type of business, the location of a company's operations has a significant effect on the severity of an environmental risk. The surrounding land and the proximity of water systems; recreational areas; protected areas/habitats; schools; hospitals; etc., set special demands on a company's activities.

A chemical-related accident that takes place in a groundwater area, releasing harmful chemicals into the ground and groundwater, can have really serious consequences. In the worst case, the source of drinking water for a community can be contaminated and interrupted. Apart from environmental damage, an accident can result in fines, remediation costs, loss of reputation, etc.

Management of environmental risks

There can be environmental risks at all stages of a company's activities e.g:

- Procurement and storage of raw materials, admixtures and chemicals
- Production and maintenance
- Transportation
- Product development
- Installation and commissioning of products
- Repairing and servicing of products
- Management of waste
- Use of energy and natural resources
- Premise structures

What you can do

It is important to assess the environmental impact of your activities or plans, and to implement control measures to minimise the risk of harm from them. You need to plan what should be done in the event of accidents to mitigate potential damage and train your employees accordingly. As well as good environmental practice, it also makes good business sense to use energy and natural resources responsibly and to recycle, recover or reuse materials wherever reasonably practicable. Companies must take action to prevent pollution. You should keep records of any contamination to your land and if purchasing land, should enquire as to its history regarding potential contamination.

As with other risks, managing environmental risks starts with hazard identification. The **risk chart** on the back of this card can be used as an identification aid. The aim of environmental risk management is to secure continued production in a way that keeps the environment safe and healthy.

Further information can be obtained from the following government websites:

www.netregs.environment-agency.gov.uk/ (England & Wales)

www.sepa.org.uk/ (Scotland)

www.ehsni.gov.uk (Northern Ireland)



Environmental Risk Chart

Company:	Group/Assessor:
Object of assessment:	Date:

Chemicals and waste

- Chemicals and knowledge of chemicals
- Storage and handling of chemicals
- Transportation of chemicals
- Fuels and oil products
- Handling of waste
- Other

Releases and malfunctions

- Air pollution
- Noise, vibration, light
- Radiation
- Releases into water systems and the ground
- Other

Other risk causing factors

- Activities of contractors and subcontractors
- Risk related to history of land/property
- Other

Environmental Risks

Pollution prevention and emergency plans

- Environmental legislation compliance
- Maintenance of plant and equipment
- Maintenance activities
- Employees' environmental expertise
- Action and communication in accident situations
- Other

Responsible use of resources

- Use of energy e.g. gas, electricity, fuel, etc.
- Use of water
- Recycle, reuse or recover materials
- Energy conservation e.g. insulation
- Waste minimisation
- Other

Vulnerability of the surroundings

- Local community and neighbours
- Local habitats and other sensitive areas
- Other

Example of use

Air pollution – a significant risk **OK** Maintenance activities – issue in order ~~Noise~~ – does not concern us

Chemicals and waste. There are always hazards associated with the use, storage, transportation and disposal of chemicals. The severity of risk depends on properties, quantities, strengths and locations of the chemicals. When risks related to chemicals and waste are assessed, include substances used by contractors on your premises and their waste.

Pollution prevention and emergency plans. Environmental law requires prevention or control of pollution. This will mean that plant and equipment is adequately and safely maintained and employees are trained to deal with accident situations.

Releases and malfunctions. During normal operations, releases/emissions must be within permitted limits. Releases that occur during malfunctions/accident situations can have harmful effects on large areas, depending on the type and seriousness of the release. Noise, vibration and light that create nuisance are considered to be 'pollutants'.

Responsible use of resources. In addition to protecting the environment, responsible use and conservation of energy, water and natural resources can be very cost-effective. Minimisation of waste and reuse, recycling and recovery of materials can also provide the same dual benefits.

Other risk causing factors. Contractors and subcontractors operating on your premises can create environmental risks. You need to ensure that their methods of working and emergency procedures are adequate to prevent environmental damage. Hazards related to the history of the land/premises should also be identified - surprises can be unpleasant and costly.

Vulnerability of the surroundings. Special care in managing environmental risks is required where the local community or ecosystem (plants, wildlife, etc.) are particularly vulnerable or sensitive. There may be special limits or conditions set by the local authority.