

Acute plastic pollution: causes, problems and solutions

Acute plastic pollution, particularly from the loss of plastic pellets, poses a significant threat to marine ecosystems. Immediate action to protect the environment and public health is necessary.

This report explores the scope of the acute plastic pollution problem, existing regulations, and proposes recommendations for more effectively addressing acute plastic pollution at the international, regional and national levels.

"The Nordic countries should be in the frontline to spread best practice globally, and when possible, introduce stricter regulations before international rules are in place."

Norwegian and Swedish coastline polluted by plastic

In 2020, the Motor Vessel Trans Carrier, a cargo ship, lost 13.2 tons of plastic pellets at sea, polluting the coastlines of Norway and Sweden. As a result, part of the coastlines of both Norway and Sweden were polluted by plastic pellets. The incident exposed the challenges of addressing acute plastic pollution (APP) and prompted a study under the Nordic Council of Ministers. The study considered questions, such as:

- Should plastic pellets be considered acute plastic pollution?
- How should we deal with this form of plastic pollution in an effective way?
- Can this be prevented?

Methodology

In order to determine an effective approach, interviews were held with representatives of the regional agreements and relevant national agencies. A literature review was also performed to evaluate relevant laws, policies. Four maritime incidents where pellets were lost was examined.

Conclusion

Addressing acute plastic pollution requires a combination of improved regulations and enhanced international cooperation. Measures must include a combination of preventive measures such as preparedness plans and improved cleanup technologies.

Derived from the conclusions, the following recommendations are proposed:

International level

1. Establish a standardized global definition of acute plastic pollution (APP).
2. Classify plastic pellets as hazardous materials to enforce stricter transport regulations.
3. Improve reporting systems for plastic spills to enable rapid response.
4. Incorporate APP into international agreements, such as the Global Plastics Treaty.
5. Develop advanced cleanup technologies for plastic pellets in marine environments.

National level

1. Develop national contingency plans for APP response.
2. Implement rapid response and cleanup strategies to prevent pellet dispersion.
3. Improve tracking and analysis of spilled plastics to identify sources.
4. Strengthen legislation to prevent pellet loss during transport and production.

Regional level

1. Conduct research to map the magnitude and sources of APP.
2. Establish standardized response protocols for plastic spills under agreements like the Bonn and Copenhagen Agreements.

Read the full report on Acute plastic pollution [here](#).

