

## IMPACTS OF WATER CONTAMINATION BY INDUSTRIAL WASTEWATER

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### DESCRIPTION

Industrial water and contamination of water, industry may be a major cause of water pollution, but it also generates chemicals that are extremely damaging to both people and the environment. Freshwater is used by many industrial facilities to transport waste away from the facility and into rivers, lakes, and oceans. Industrial waste might be solid, semi-solid, or liquid. It might be toxic or non-hazardous trash. Industrial waste has the potential to pollute nearby soil and water bodies, as well as groundwater, lakes, streams, rivers, and coastal seas.

Sewage treatment plants can handle a limited number of industrial wastes, such as those containing traditional toxins such biochemical oxygen demand. Specialized treatment methods are required for industrial wastes containing deadly chemicals or significant quantities of other poisons. Eutrophication, or the death of existing life in water bodies, is commonly caused by wastewater carrying nutrients. Thermal pollution, which occurs when water is discharged at a high temperature after being used for cooling, can result in polluted water. Reduce species diversity and encourage the invasion of new thermophilic species.

Water contamination is one of the most serious consequences of industrial waste. Water, which comes into touch with hazardous substances, is used in a variety of industrial ways. Natural substances, metals, supplements, and radioactive material may all be present in these chemicals. It's possible that drinking water supplies and irrigation water used for farming may be harmed. Toxins have the potential to harm or ruin the environment for animals and plants. Untreated trash can infect fish and other aquatic life in coastal zones.

It can also clog the gills of fish, making it harder for them to use dissolved oxygen from the water. Many of our water sources include a significant quantity of industrial waste, which has a negative influence on our environment's health.

Water that has been contaminated is unfit for drinking, leisure, agriculture, or industry. It degrades the appearance of lakes and streams. Contaminated water is harmful to marine life and reduces its capacity to reproduce. It will inevitably pose a threat to human health.

Among the pollutants emitted by industrial sources are:

- Asbestos fibres can cause diseases including asbestosis, mesothelioma, lung cancer, intestinal cancer, and liver cancer when breathed. This contaminant is carcinogenic and poses a significant health risk.
- Lead is a metallic element that may be harmful to one's health and the environment. Because it is a non-biodegradable material, it is difficult to clean up once it has contaminated the environment. Many species, including humans, are poisoned by lead because it inhibits the function of physiological enzymes.
- Mercury is a metallic element that may be harmful to one's health and the environment. Because it is a non-biodegradable material, it is difficult to clean up once it has contaminated the environment. Mercury poisoning may cause disease in animals, and it is also hazardous to human health.
- With the growing use of fertilisers, nitrates are being washed out of the land and into rivers and lakes at an increasing pace. This can result in eutrophication, which can be highly harmful to marine ecosystems.
- With the growing usage of fertilisers, phosphates are being washed out of the soil and into rivers and lakes at an increasing rate. This can result in eutrophication, which can be highly harmful to marine ecosystems.
- Sulphur is a non-metallic compound that is toxic to marine life.
- Oil does not dissolve in water and instead forms a thick coating on top of it. This may prevent maritime plants from getting enough light to perform photosynthesis. It's also dangerous to fish and seabirds.
- Petrochemicals is a type of chemical that is made from gas or petrol and is harmful to marine life.