

PABLO

# WATER POLLUTION

◦ DEFINITION ◦ CAUSES ◦ EFFECT AND IMPACT ◦ PREVENTION AND CONTROL

# WATER POLLUTION

- ▶ Water pollution refers to contamination of water bodies, such as lakes, rivers, oceans and ground water by human activities or natural processes.
- ▶ Water pollution can have harmful effects on aquatic ecosystems, human health and the economy.

## Causes of water pollution

- ✚ Industrial activities; Industries discharge large amount of pollutants into water bodies such as heavy metals, chemicals, and organic compounds.

- ✦ Agricultural Activities; agricultural activities such as the use of pesticide and fertilizers, can lead to contamination of water bodies.
- ✦ Domestic sewage contains high levels of organic matter and nutrients, which can cause eutrophication and harm aquatic life.
- ✦ Oil Spills; oil spills from ships or oil rigs can cause severe pollution of water bodies leading to the death of marine life and ecosystem destruction.
- ✦ Mining activities; mining activities such as the extraction of minerals leads to the discharge of heavy metals and other contaminants such as acids into the water bodies.

# Oils spillage from ships



Industrial activities which releases chemicals into the water bodies.



# Effects of water pollution

- ▶ Now, let's talk about the effects of polluting the water bodies;
- i. Harm to aquatic life; water pollution can cause harm to fish, birds and other aquatic life, leading to population declines and even extinction of certain species.
- ii. Harm to human health; contaminated water can cause a range of health problems such as gastrointestinal illness, skin irritation and neurological disorders.
- iii. Economic impact; water pollution can have a significant economic impact, as it can harm industries such as fishing and tourism.
- iv. Global warming; water pollution can also contribute to global warming as it can release greenhouse gases such as methane and carbon dioxide.

# Some effects of water pollution

## Effects of water pollution





# Death of aquatic or marine life





# An example of eutrophication



# Prevention and control

- Reduction of industrial pollution: industries can reduce water pollution by implementing clean production practices and using water treatment technologies to remove contaminants.
- Regulation of agricultural activities: regulations can be put in place to limit the use of pesticides and fertilizers and promote sustainable agricultural practices.
- Treatment of domestic sewage: Domestic sewage can be treated before discharge to remove organic matter and nutrients.
- Proper disposal of hazardous waste, hazardous waste should be properly disposed off to prevent contamination of water bodies.
- Adoption of sustainable practices: individuals can adopt sustainable practices, such as reducing plastic use, conserving water, and using environmentally-friendly products.
- Educating the people: lastly, a very heavy impact could be made by starting from the people. Most people do not know how harmful it is polluting the water bodies, so therefore alerting the people could greatly affect our way of thinking thereby saving our water bodies.