

# ENVIRONMENTAL POLLUTION





# Types of pollution

An aerial photograph of a river or stream. The water is dark and murky, with a thick layer of brown sediment or silt visible in the center. The banks are composed of reddish-brown soil and some sparse green vegetation. The overall scene depicts significant water pollution.

- Air Pollution
- Water Pollution
- Thermal Pollution
- Soil Pollution
- Radioactive Pollution

# Air pollution

The background of the slide is a photograph of an industrial facility. Two prominent, tall, dark smokestacks are the central focus, each emitting a thick, billowing plume of white smoke that rises into the sky. The sky is a clear, bright blue. In the lower portion of the image, the dark silhouettes of various industrial buildings and structures are visible, including a tall lattice tower on the right side. The overall scene depicts a source of air pollution.

Imbalance in the quality of air so as to cause adverse affects on the living organisms existing on earth.



# Causes of air pollution

The background of the slide is a photograph of an industrial facility. Several tall, dark smokestacks are visible, with thick white plumes of smoke rising from them into a sky filled with large, white, fluffy clouds. The overall scene is somewhat hazy, suggesting air pollution. The text is overlaid on the left side of the image.

## 1. Natural sources

- Volcanic eruptions
- Forest fires
- Pollen grains of flowers

## 2. Man-made sources

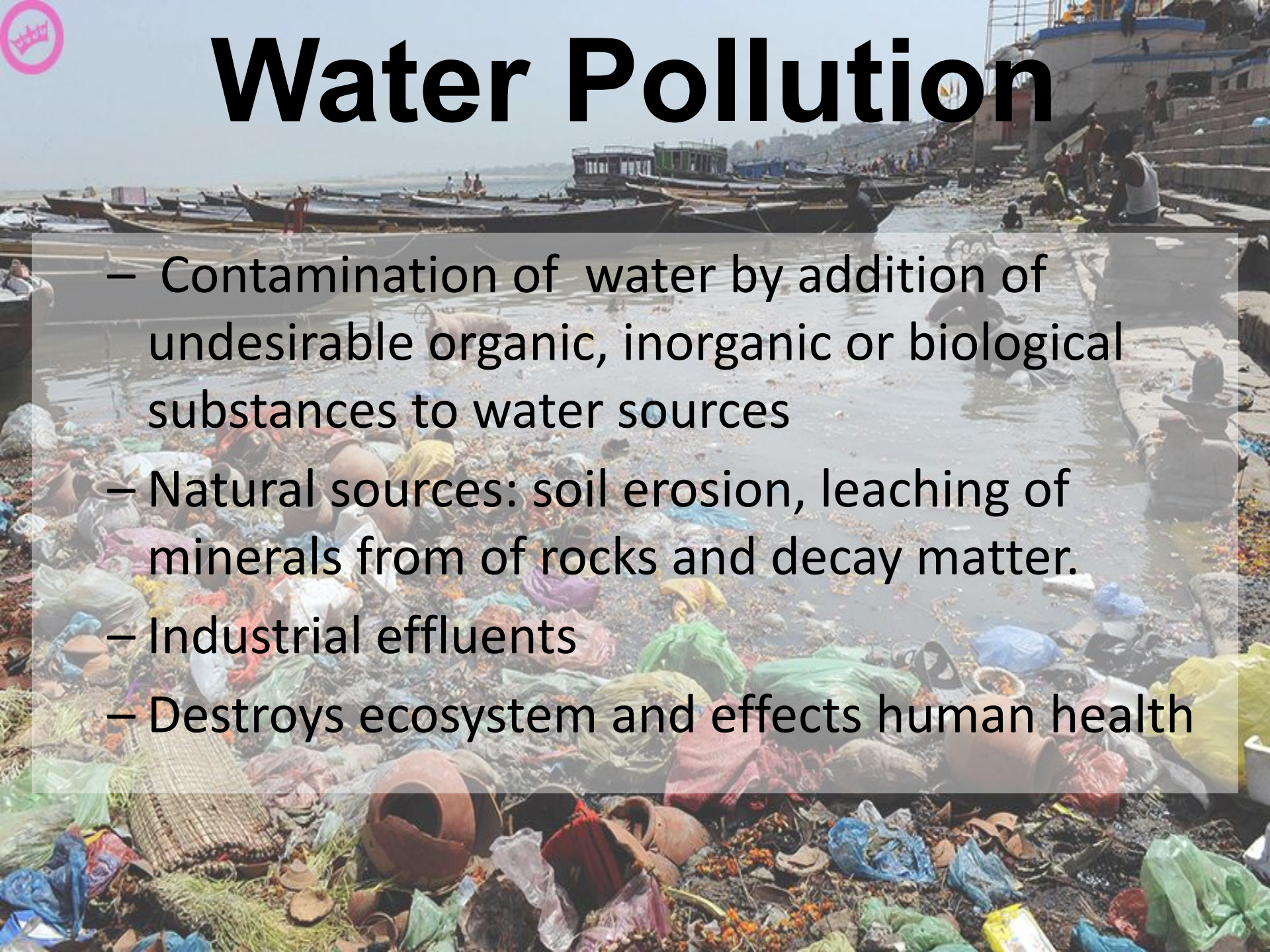
- Deforestation
- Emission from vehicles
- Rapid industrialization
- Wars





# Water Pollution

- Contamination of water by addition of undesirable organic, inorganic or biological substances to water sources
- Natural sources: soil erosion, leaching of minerals from of rocks and decay matter.
- Industrial effluents
- Destroys ecosystem and effects human health







# Sources of water pollution

- Community waste waters
- Industrial wastes
- Agricultural sources
- Under ground water pollution
- Marine pollution
- Thermal pollution





# Soil pollution

- Undesirable change in the physical, chemical or biological property which adversely affects its productivity
- Caused by dumping of wastes, agrochemicals and as indirect result of air pollution

# Sources of Soil Pollution

- Domestic wastes
- Agricultural wastes
- Industrial wastes
- Excretory products
- Salination





# Radioactive pollution

The background of the slide is a photograph of a nuclear power plant. Several large, white, conical cooling towers are visible, each emitting a thick plume of white steam that rises into the air. The scene is set against a clear, bright sky, and the overall lighting is bright, suggesting a sunny day. The towers are arranged in a row, and the steam creates a sense of activity and industrial scale.

- Physical pollution that affects air, water and soil. Caused by ionizing radiations of harmful nature emitted from disintegrating atomic nuclei.
- The natural sources include cosmic rays that reaches the earth surface and radiations from radium 224, uranium 235 thorium 232 etc



# Man made sources

The background of the slide is a photograph of a nuclear power plant. It features four large, white, hyperboloid cooling towers arranged in a row. Each tower is emitting a thick plume of white steam that rises into the air. The sky is a pale, hazy blue. The overall lighting is somewhat dim, giving the scene a slightly somber or industrial feel.

- Nuclear weapons
- Reactors and Nuclear fuel
- Waste waters containing these wastes
- X-rays used in medical practices
- Ultra violet rays present in solar radiations



# Effects

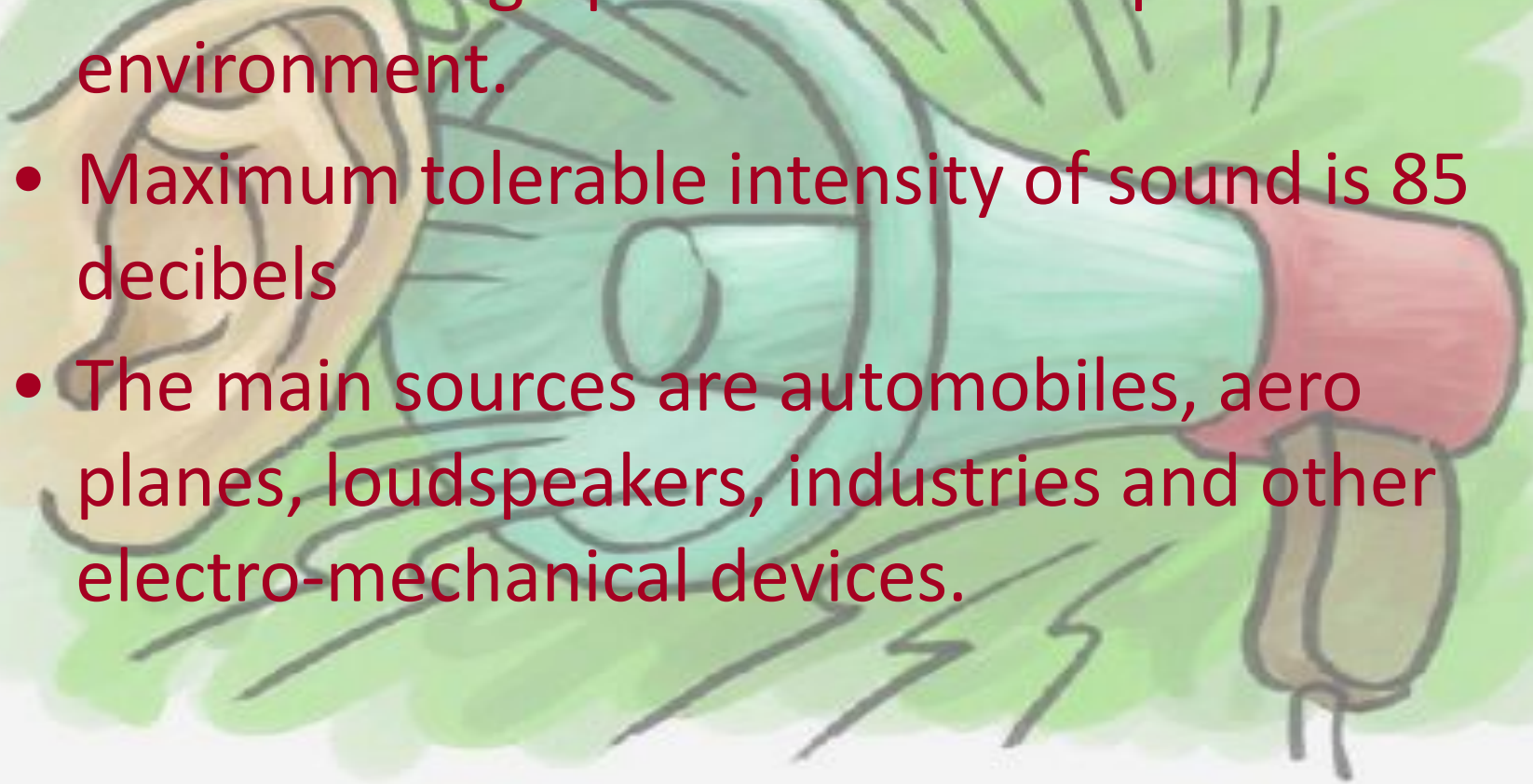
The background of the slide features a photograph of a nuclear power plant. Several large, white, hyperboloid cooling towers are visible, each emitting a thick plume of white steam that rises into the air. The scene is captured in a slightly hazy, overcast light, with the sky appearing greyish-blue. The overall composition is centered, with the towers and their steam plumes dominating the visual field.

- Mutation
- Cancer
- Radioactive substances in food chain cause retarded growth and bone cancer.
- Increases infant mortality rate



# Noise pollution

- Unwanted high pitch sound that pollutes the environment.
- Maximum tolerable intensity of sound is 85 decibels
- The main sources are automobiles, aero planes, loudspeakers, industries and other electro-mechanical devices.



# Effects of noise pollution

- Damage to ear drum and impairment to hearing.
- Damages heart, liver and brain
- Emotional disturbances and behavioral changes
- Leads to anxiety and stress





# Thermal Pollution

The term thermal pollution has been used to indicate the detrimental effects of heated effluents discharged by various power plants.

# Causes of thermal pollution

A large industrial power plant facility, likely a coal-fired or nuclear plant, is visible in the background. The plant features a complex network of metal scaffolding, pipes, and several tall, cylindrical smokestacks. The facility is situated near a body of water, with a dark, rocky or earthen embankment in the foreground. The sky is clear and blue, suggesting a bright day. The overall scene illustrates the industrial infrastructure associated with thermal power generation.

- Nuclear power plants
- Coal fired power plants
- Industrial effluents



# The End

