



# 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. There are patches of green algae or vegetation along the banks and in the water. The surrounding land is dry and brown, suggesting a semi-arid or arid environment.

- 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 industrial buildings and structures are visible against the sky. The overall scene conveys a sense of industrial activity and its associated environmental impact.

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. Two prominent, tall, dark smokestacks are visible, each emitting a thick plume of white smoke that rises into the sky. The sky is filled with large, billowing white clouds. In the foreground, the dark silhouettes of industrial buildings and structures are visible against the lighter sky.

## 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 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 several large, white, hyperboloid cooling towers. Each tower is emitting a thick plume of white steam that rises into the air. The sky is a pale, hazy blue. The overall scene is industrial and represents a man-made source of energy.

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

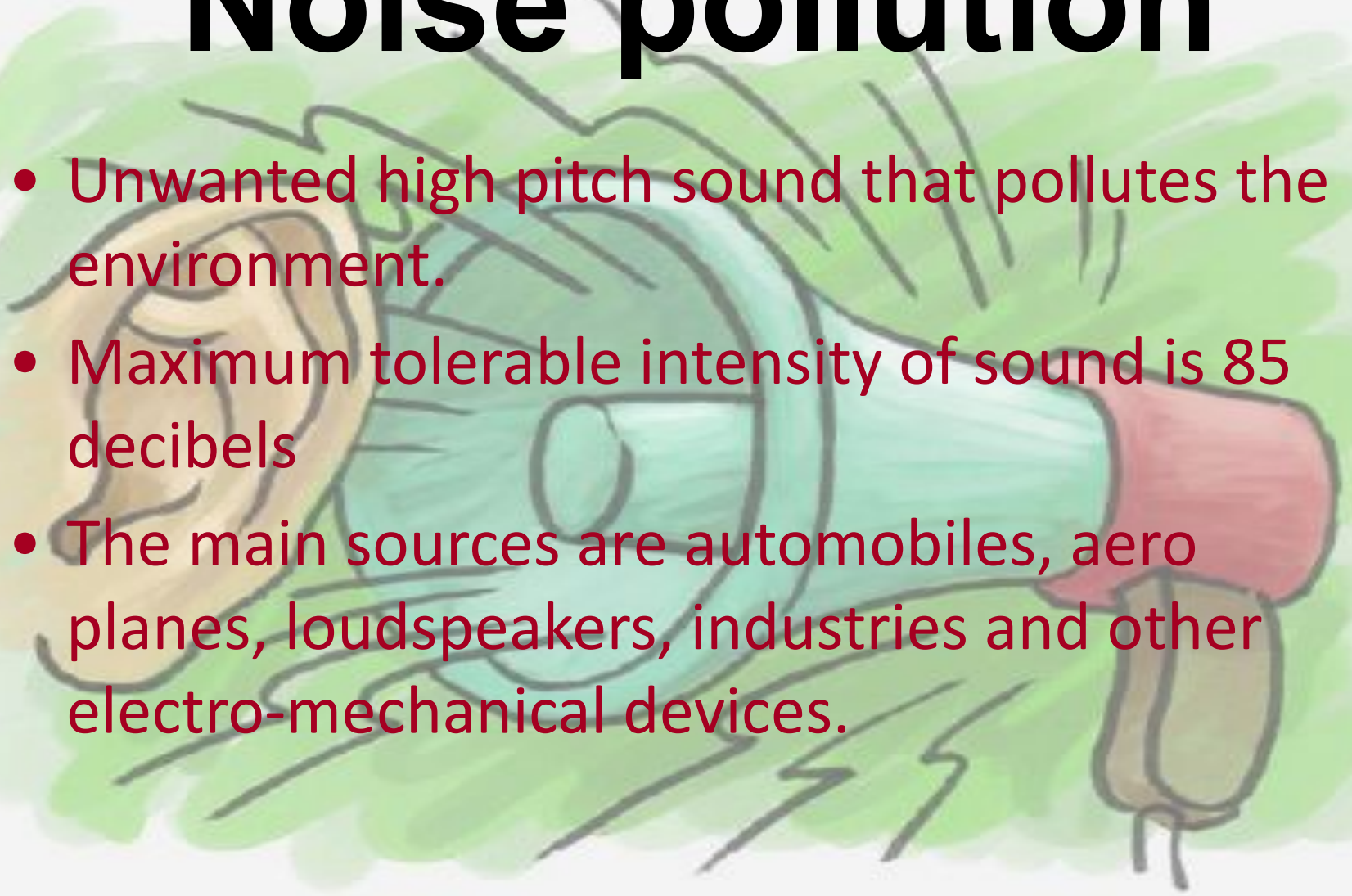
# Effects

The background of the slide is a photograph of a nuclear power plant. It features several large, white, hyperboloid cooling towers that are emitting thick plumes of white steam or smoke. The scene is set against a clear, bright sky. The overall color palette is dominated by the white of the towers and steam, and the blue of the sky.

- 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 responsible for thermal pollution.

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

# The End

