

Acid Rain

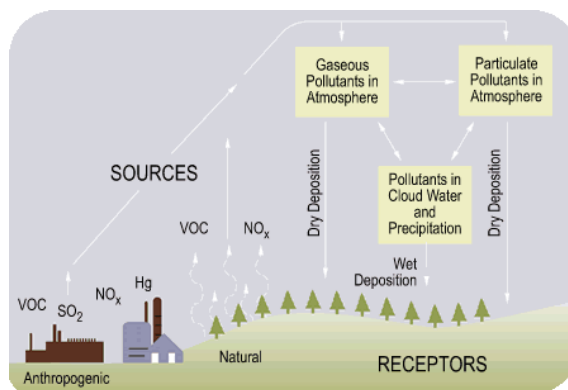
Acid Rain

- Buildings such as power plants or refineries expel sulfur and nitrogen oxides into the air, which combine with water vapor to produce sulfuric and nitric acids.
- These acids in the atmosphere then are deposited onto the environment in the form of acid rain. It can also be deposited as fog, snow, or particulates (in dry areas).
- **Acid rain** typically has a pH of less than 5.0, whereas regular rain has a pH of around 5.6.
- The **pH scale** measures the acidity of a substance, the lower the pH value, the more acidic a substance is (more **alkaline**).
- Acid rain is typically found in industrialized areas

Study Tip

To remember the pollutants which cause acid rain:

SNAP: Sulfur Nitrogen Are Pollutants



Sulfuric acid, nitric acid, and mercury are among the many types of pollutants that cause acid rain

The Effects of Acid Rain

- Acid rain destroys plants and makes them more vulnerable to destruction.
- Some acids deposit on the ground dry, resulting in the soil being stripped of its basic nutrients.
- Small animals often die when they are exposed to acid rain, causing larger animals to lose a valuable food source.
- Fish die in water that is too acidic, and crops cannot grow in soil exposed to acid rain.
- Ruins buildings
- Since acid rain can travel far, its effects can be spread to far distances.



Acid rain can deteriorate trees and other plants as well.

Concept Check

- Discuss how acid forms, beginning with the formation of acid from refineries or power plants
- What is acid rain and why is it bad?