Environmental Management-4 credits

Control and Management of Pollutants in Air, Land and Water.

Wed 12-1pm; Thur 9-10am

CONTROL AND MANAGEMENT OF AIR POLLUTION

Pollution control is a term used in environmental management. It means the **control of emissions and effluents into air, water or soil**. Most of the air pollution is produced by stationary and vehicular sources **resulting from the incomplete combustion of fuel or industrial processing**.

Air pollutants

- Dust, droplets, noise, waste heat,
- Chlorofluorocarbons (CFCs), hydrocarbons (HCs), oxides of nitrogen (NO_X).
- sulfur dioxide, carbon monoxide, carbon dioxide, ozone,
- Volatile organic compounds (VOCs), airborne particles and radioactivity and electromagnetic pulses.

Methods for controlling air pollution include

1. The most effective way to improve air quality is to **identify and eliminate potential sources of pollution or significantly reduce their impact by controlling their emissions** (Remember the RRR-Reduce, Reuse and Recycle).
2. Drive less, walk more, bike, take public transportation, use car-pool, or buy a vehicle that gets at least 12.6 km/l.
3. Replace old appliances with new, energy-efficient models.
4. Produce less waste, buy minimally packaged goods and reusable products and recycle waste
5. Replace standard light bulb with long lasting energy bulbs.
6. Use less polluting fuel to reduce air pollution.
    - Use of **low sulfur fuel** instead of high sulfur fuel is an example of this method. Remember that **low sulfur fuel is much more expensive than high sulfur fuel**.
    - **Use of natural gas,** propane, ethanol and oxygenated fuels **as a fuel**.
    - **Nuclear power plants are relatively pollution free** when compared to the coal fired power plants. However, they have been subjects of controversy in their overall environmental impact.
    - New and renewable sources of energy -**Solar, wind, hydroelectricity, tides and waves, biomass technologies, geothermal sources.**