

When water is heated, oxygen and carbon dioxide levels drop. The heated water becomes harmful to many aquatic organisms because it does not contain enough oxygen.

When the source of thermal pollution is discontinued another problem can arise. The water temperature returns to normal and the organisms that have adapted to the warm water or have remained in the warm area rather than follow their usual migration pattern are then in jeopardy.

B. POINT SOURCE POLLUTION (PS): Water is used in homes, schools, businesses, restaurants, dry cleaners and makes our lives clean, comfortable and sanitary. Water is used to manufacture things we use every day such as (tooth paste, medicine, televisions, soap, cars, telephones, paper, clothing, paper bags and gasoline) to name a few.

- It takes 40,000 gallons of water (150,000 liters) to make one ton of steel.
- It takes 150 gallons of water (570 liters) to make just one copy of a Sunday newspaper.
- Oil companies use about 6 gallons of water for every 1 gallon of gasoline they produce.
- It takes about 770 gallons of water to refine 1 forty-three (43) gallon barrel of petroleum.
- It takes 75,000 gallons of water to produce a ton of high grade paper.
- It takes 600,000 gallons of water to produce a ton of synthetic rubber.
- It takes 44,000 gallons of water to produce the steel in a car.
- It takes 1,000 gallons of water to produce a ton of sugar.
- The American automobile industry uses 400,000,000,000 gallons of water to produce 5 million cars each year.
- The consumption of water nationwide is 2,000 gallons per person per day, including industrial use.

When an industry manufactures these things, pollutants such as chemicals, oils and toxic metals may be carried away with the used water through a pipe into a waterway, or in some cases industries may be asked to pretreat for the substances before the effluent is discharged into a waterway. Point source pollution comes directly from a known source such as industry or the home or the business or sewage outfall pipe.

IV. WHY CLEAN UP DIRTY WATER?

A. Water Pollution Can Cause Disease

1. Water has been one of man's most precious commodities throughout history. Water, although essential for life, is frequently squandered. The misuses of water became a problem during the Industrial Revolution when populated cities developed. Wastes from the cities' homes and factories were discharged directly into the rivers and streams near the cities. The contaminated rivers became a major threat to the public health because they transmitted virulent disease. Fifty thousand people died from cholera in London in 1831. Dysentery and typhoid fever rampaged urban areas late in the 19th century.

