Thermal pollutionassignment assignment



Describe the implications for life if a body of water is affected by thermal pollution. Thermal pollution is a temperature change in natural bodies of water of that can and often does have negative impacts on the nearby ecosystem caused by human influence. The temperature change can be upwards or downwards. The major sources of thermal pollution are power plants and industrial factories. In most power plants, heat is produced when coal, oil, or natural gas is burned or nuclear fuels undergo fission to release huge amounts of energy.

This heat turns water to steam, which spins turbines to produce electricity.

After cooling the used steam must be cooled and condensed back into water.

To condense the steam, cool water is brought into the plant and circulated next to the hot steam. In this process, the water used for cooling increases 5 to 10 Celsius degrees. Industries such as metalworking use large amounts of water as coolant, and then release this water back into a nearby source, such as a lake or river.

The released water then has a higher water temperature than the source of water, which then increases the temperature of that particular body of water. This affects the Aquatic organisms, as they are extremely sensitive to temperature change, in which when subject to this temperature change, like many other animals and plants pose the risk of dying of Thermal Shock. If these organisms die in that particular body of water, it poses a threat of disrupting/damaging the food chain, potentially leading to many other animals dying from starvation or in other instances overpopulation.