

Industrial Pollution

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Abstract: Industrial pollution takes on many faces. It contaminates many sources of drinking water, releases unwanted toxins into the air and reduces the quality of soil all over the world. Major environmental disasters have been caused due to industrial mishaps, which have yet to be brought under control. Below are a few of the causes of industrial pollution that have resulted in environmental degradation.

1. WHAT IS INDUSTRIAL POLLUTION?

With the coming of the Industrial Revolution, humans were able to advance further into the 21st century. Technology developed rapidly, science became advanced and the manufacturing age came into view. With all of these came one more effect, industrial pollution. Earlier, industries were small factories that produced smoke as the main pollutant.

However, since the number of factories were limited and worked only a certain number of hours a day, the levels of pollution did not grow significantly. But when these factories became full-scale industries and manufacturing units, the issue of industrial pollution started to take on more importance.

Any form of pollution that can trace its immediate source to industrial practices is known as industrial pollution. Most of the pollution on the planet can be traced back to industries of some kind. In fact, the issue of industrial pollution has taken on grave importance for agencies trying to fight against environmental degradation. Countries facing sudden and rapid growth of such industries are finding it to be a serious problem which has to be brought under control immediately (*Winn and Pogutz, 2013*).

2. CAUSES OF INDUSTRIAL POLLUTION

2.1. Lack of Policies to Control Pollution

Lack of effective policies and poor enforcement drive allowed many industries to bypass laws made by the pollution control board which

resulted in mass scale pollution that affected the lives of many people.

2.2. Unplanned Industrial Growth

In most industrial townships, unplanned growth took place wherein those companies flouted rules and norms and polluted the environment with both air and water pollution.

2.3. Use of Outdated Technologies

Most industries still rely on old technologies to produce products that generate a large amount of waste. To avoid high cost and expenditure, many companies still make use of traditional technologies to produce high-end products.

2.4. Presence of a Large Number of Small Scale Industries

Many small scale industries and factories that don't have enough capital and rely on government grants to run their day-to-day businesses often escape environment regulations and release a large number of toxic gases in the atmosphere.

2.5. Inefficient Waste Disposal

Water pollution and soil pollution are often caused directly due to inefficiency in the disposal of waste. Long term exposure to polluted air and water causes chronic health problems, making the issue of industrial pollution into a severe one. It also lowers the air quality in surrounding areas which causes many respiratory disorders.

2.6. Leaching of Resources from Our Natural World

Industries do require a large amount of raw material to make them into finished products. This requires the extraction of minerals from beneath the earth. The extracted minerals can cause soil pollution when spilled on the earth. Leaks from vessels can cause oil spills that may prove harmful for marine life.

3. EFFECTS OF INDUSTRIAL POLLUTION ON OUR ENVIRONMENT

3.1. Water Pollution

The effects of industrial pollution are far-reaching and liable to affect the ecosystem for many years to come. Most industries require large amounts of water for their work. When involved in a series of processes, the water comes into contact with heavy metals, harmful chemicals, radioactive waste, and even organic sludge.

These are either dumped into open oceans or rivers. As a result, many of our water sources have a high amount of industrial waste in them which seriously impacts the health of our ecosystem. The same water is then used by farmers for irrigation purpose which affects the quality of food that is produced(Laws, 2018).

Water pollution has already rendered many groundwater resources useless for humans and wildlife. It can at best be recycled for further usage in industries.

3.2. Soil Pollution

Soil pollution is creating problems in agriculture and destroying local vegetation. It also causes chronic health issues to the people that come in contact with such soil on a daily basis.

3.3. Air Pollution

Air pollution has led to a steep increase in various illnesses and it continues to affect us on a daily basis. With so many small, mid and large scale industries coming up, air pollution has taken the toll on the health of the people and the environment(Brauer et al., 2012).

3.4. Wildlife Extinction

By and large, the issue of industrial pollution shows us that it causes natural rhythms and patterns to fail, meaning that the wildlife is getting affected in a severe manner. Habitats are being lost, species are becoming extinct and it is

harder for the environment to recover from each natural disaster. Major industrial accidents like oil spills, fires, the leak of radioactive material and damage to property are harder to clean-up as they have a higher impact in a shorter span of time (Pimm et al.,2014).

3.5. Global Warming

With the rise in industrial pollution, global warming has been increasing at a steady pace. Smoke and greenhouse gases are being released by industries into the air which causes an increase in global warming(Cook, 2016). Melting of glaciers, extinction of polar bears, floods, tsunamis, hurricanes are few of the effects of global warming(Sahney et al., 2010).

The issue of industrial pollution concerns every nation on the planet. As a result, many steps have been taken to seek permanent solutions to the problem. Better technology is being developed for the disposal of waste and recycling as much polluted water in the industries as possible.

Organic methods are being used to clean the water and soil, such as using microbes that naturally use heavy metals and waste as feed. Policies are being pushed into place to prevent further misuse of land. However, industrial pollution is still rampant and will take many years to be brought under control.

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