

SOIL CONTAMINATION BY SUGAR FACTORY MOLASSES: CASE STUDY SOLAPUR DISTRICT AREA FROM INDIA

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In the area of Solapur, Maharashtra state, India, there are many sugar factories for producing sugar cane. During the manufacturing process of cane sugar there is lots of waste water released from the factory. This waste water contains many hazardous chemicals. This waste water is dropped in the fields. This water pores inside rocks

Every year in summer the water level in this area gets very deep. At that time free air fills the soil joints. After rains in monsoons, the water level in the soil rises and the air in the joints finds its way out. In this field, the water mixed with sugar mills waste is released by tankers and the water is accumulated in the pits in this area and this accumulated water is drained into the ground.

The chemical reaction of this water with the limestone in the soil releases gas and this is the sound coming from this soil. Sugarcane crop and mills exist with many uncertainties such as water scarcity, erratic monsoon, sugarcane price, crop yield, quality seeds etc. Indian agriculture is totally dependent. The environment baseline study was conducted in the project area by both secondary data and primary data collection. Abiotic factors including air, water and soil were studied for the core and buffer zone. Sugar production has a long history. But there has been a lot of change in present day sugar products and earlier sugar production methods. In the traditional sugar production method, the amount of pollution is very low due to the waste produced. But the pollution caused by today's plants is much more dangerous and hazardous to the water and soil. There are archeological, historical sites in this study area. These historical places also have temples and ancient water wells. The use of water from this well can be seen. The study observed that the surface water, groundwater, and soil were contaminated through the discharge of sugar mills untreated effluents severely degraded the environment of the areas. The well water sources and bore well sources and soil in the said area will be chemically contaminated.