**Liquid waste pollution Cours N°05**

**What is Liquid Waste?**

* **According to the Environmental Protection Agency (EPA), liquid waste is defined as any waste material that must pass through a 0.45 micron filter at a pressure differential of 75 psi**
* **Liquid waste can be defined as such Liquids as: wastewater, fats, oils, or grease (FOG), sludges and hazardous household liquids and Liquid Industrial Waste**
* **These liquids are hazardous or potentially harmful to human health and the environment.**

 **according to the EPA the main producers of liquid waste are animals and human beings as natural excretion of waste is flushed into sewage and waste lines.**

**Why is Liquid Waste pollution Important?**

**Liquid waste is such an important category of waste management because it is**

 **so difficult to deal with:**

* **Unlike solid wastes, liquid wastes cannot be easily picked up and removed from an environment.**
* **Liquid wastes spread out, and easily pollute other sources of liquid if brought into contact.**
* **Liquid waste can also soak into objects such as soil and groundwater.**
* **Liquid wastes pollute the plants we eat, the animals in the ecosystem, as well as the humans within the area of the pollution.**
* **Liquid waste is a major problem in the world, due to approximately 71% of the Earth’s surface being covered in water.**

**Types of liquid waste**

**1. DOMESTIC SEWAGE**

* **This type of waste is created by humans in houses, schools, and other buildings.**
* **The proper management and disposal of domestic sewage waste require a sewage treatment plant where the proper methods and equipment are applied to purify and dispose of waste.**

**3. COMMERCIAL WASTEWATER**

**Commercial wastewater includes waste from commercial practices Commercial waste often includes potential hazards**

**The disposal of commercial waste involves the filtration of waste before transportation to ensure safe and proper disposal.**

**4. INDUSTRIAL WASTE**

**Industrial waste is created by industrial processes and production.**

**It can include chemical and hazardous waste.**

**The industrial waste management process requires the inspection and testing of liquid waste before it undergoes the disposal process.**

**5. RUNOFF WASTE ( stormwater)**

**Runoff waste is the liquid waste that comes from runoff and excess stormwater in cities.**

**The management of stormwater requires the planning and implementation of sewer systems and drainage plans.**

**Runoff waste can cause contamination and flooding if not handled properly.**

**Impacts of liquid pollution on human health and environment**

**Water Pollution**

* **Liquid waste can alter the chemical composition of water**
* **In this way, water for humans, animals and agriculture can be contaminated, and entire aquatic ecosystems can be damaged or otherwise disrupted.**

**Air Pollution**

* **liquid wastes have the potential to negatively impact air quality.**
* **Foul smells are the most common impact of liquid waste pollution**
* **Spilled hazardous liquids can also carry toxins through the air to pose a risk to humans and animals and plants.**

**Soil Contamination**

**Liquid waste quickly soaks into the ground and pollute the soil causing damage or destruction to plants growing in that soil, as well as causing harm to the people or animals that eat the foods that grew in the contaminated soil.**

**Economic Impact**

**In addition to the environmental impact, liquid waste also has a significant economic impact on businesses and municipalities.**

* **Communities living in an affected area area suffer the negative impacts of large-scale liquid waste contamination.**
* **The property values in the affected areas can drop as well.**
* **Businesses too are financially affected as they need to spend on clean-up costs.**
* **When a business has caused liquid waste pollution, the media backlash can impact its profitability because customers tend to avoid business relationships with companies that have a doubtful environmental record.**