THE PROBLEMS OF AUTOMOBILE ENTERPRISE STUDYING MUD SWEATS AND STORING THEM IN A LAND

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Annotation: *The article deals with the storage of sludge waste at the landfill and the impact of sludge waste on human health at the moment.*

Keywords: *landfill, automotive industry, cuttings, paint.*

The main source of hazardous sludge waste in an automobile plant is usually formed during the painting process [1]. Automobile plants generate 1.5 to 5.0 kg of paint sludge waste for each painted vehicle. This sludge waste can be solvent or water based depending on the type of paint used. Water-based paint is mainly used in layered and transparent layers in solvent-based paints. The solvent content of the solvent-based paint project could be restored by distillation. However, a common method of processing the resulting water-based paint project is not yet available [2]. Due to its high solubility in organic carbon solvents, EU legislation does not allow paint sludge to be buried in the ground. [2].

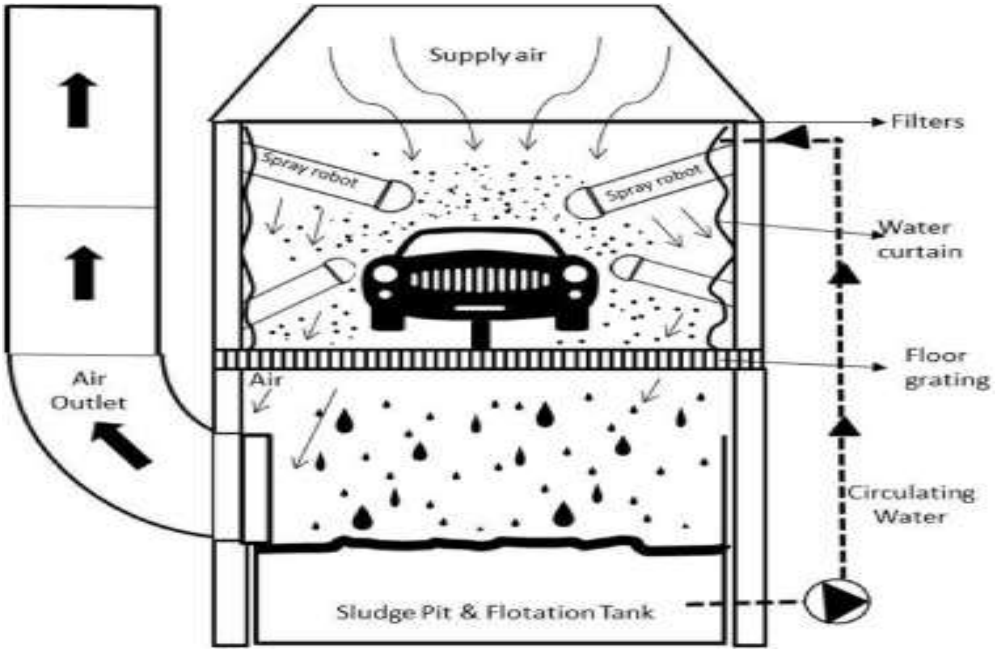
Due to the growing demand for motor vehicles and the production of cars in the world, and these processes do not bypass the automotive industry in our country, and automakers are moving from lacquer paints to water paints to meet the requirements of environmental regulations. Restoration of water-based paint project. The high content of organic carbon, nitrogen and low solvent content in water-based paint sludge leads to the hypothesis that this sludge can be composted or bioiodized.

The aim of the study is to study the solid waste-sludge waste landfill of this automobile enterprise and to develop proposals to reduce their negative impact.

First of all, we will look at the sludge waste and how it is formed through Figure 1.

To do this, the polluted air is discharged into the special pool by the air supply system through a paint spray booth. The circulating water curtain must pass through the water curtain to reach the air outlet filters along the airways.

Figure 1. The process of sludge waste formation



As the air passes through the water curtain, the paint mist is “cleaned” of air and is usually carried to a pool of paint located under the paint spray cabinet. At this point, the dye particles are separated from the water so that the water is recycled and the dye particles are discarded as sludge.

Nowadays, paint sludge from automobile manufacturing enterprises is not dumped in landfills because it contains high concentrations of hazardous materials such as chromium, aluminum, titanium, barium, copper, iron, magnesium, strontium and others. Thus, it is very important to find solutions to neutralize them or offer cost-effective methods, which are also environmentally friendly. This clay contains large amounts of Ti pigments and unbaked resins. These pigments are very harmful. There is the issue of organizing special landfills. However, there are problems with the storage of sludge waste at the Asaka Automobile Plant in special landfills, as special landfills are insufficient and insufficient work has been done in this regard. Because titanium dioxide (TiO2) is widely used as the main pigment in automotive paints, it is found in sludge waste, damaging groundwater streams as a result of its absorption into the ground. This means that a landfill project needs to

be developed in order to set up special landfills for sludge waste storage. Landfill project:

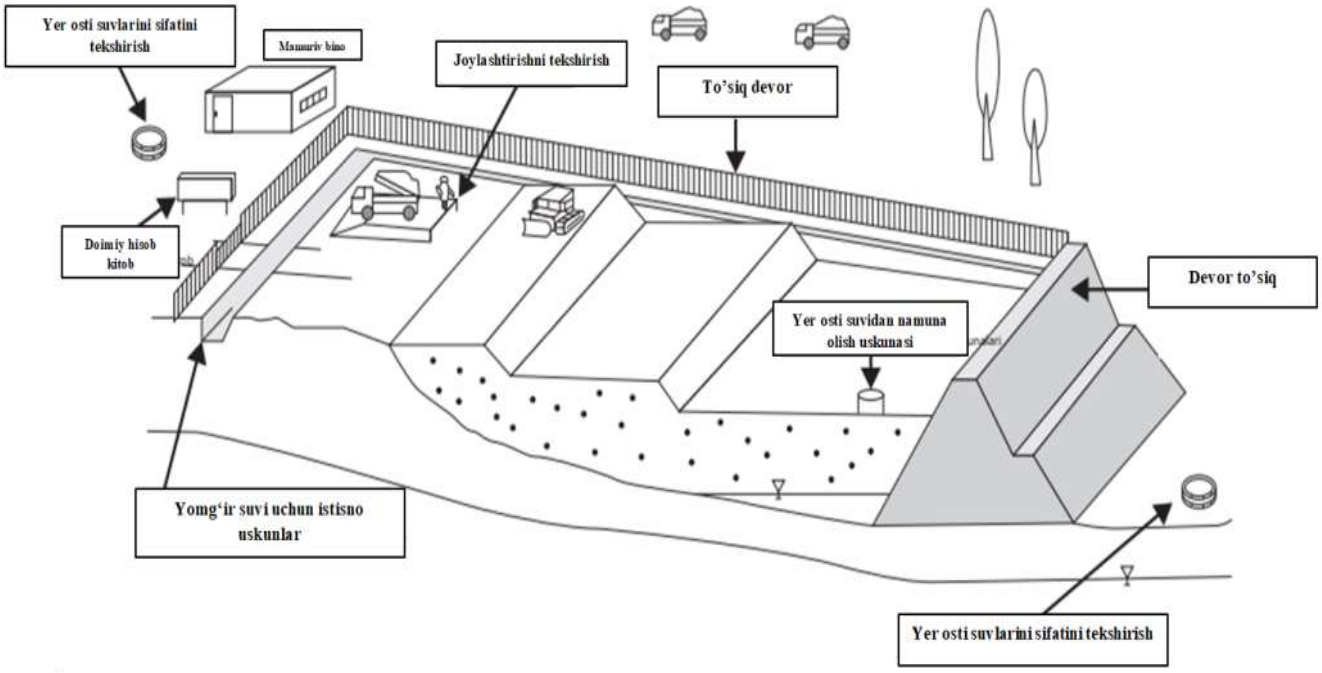


Figure 2. Schematic of the final disposal site.

There are many detailed rules regarding landfills. In particular, problems related to environmental pollution occur when sludge waste is disposed of at the landfill. To overcome these problems, the landfill waste generated at the Asaka Automobile Plant can be disposed of through the landfill project shown in Figure 2. Therefore, this project should be put into practice. Because the current condition of the landfill does not meet the established requirements. Through the above project, it will eliminate potential environmental problems related to the use of underground streams by the local population living in Asaka. It has been established that the existing landfill belonging to the Asaka Automobile Plant does not meet the requirements and pollutes the underground watercourses. I believe that this project can positively address the issue of public health and prevention of pollution of groundwater. At the same time, it is necessary to urgently address the issue of recycling of sludge waste collected at landfills.

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