

Metal finishing sludges:

Many of the processes used in metal finishing either utilises hazardous materials and/or generates hazardous wastes.

Any end-products or residues that are removed from the premises and /or stored on the premises can be considered as waste. In terms of the precautionary principle, it is the responsibility of the operator of the facility or the applicant to convince the Department that something is not a waste. If you are paying some-one to remove it, it is almost certainly a waste. Even in some cases where you are paid for something which is removed, it may still be considered a waste.

The starting point in the management of any waste is to classify the waste. This is done by doing as complete an analysis on the waste as is practically possible, for both organic and inorganic components. (at least a scan of major organic components using Gas-chromatography and Mass Spectroscopy, and a scan of inorganic species using Inductively Coupled Plasma (ICP).

The purpose of this full analysis, is to make sure that there are no nasty surprises later on. Even if there are no known organic contaminants, as in some metal finishing processes, these may still be present as contaminants or from unexpected sources. By doing an analysis up front, and making sure that there is nothing unsuspected, you protect yourself. You should see this as a form of insurance policy. If, sometime in the future, somebody alleges that your operations and/or your waste disposal actions have caused a certain pollution, you have a strong case if you can show that the specific component does not occur in your waste, process or raw materials from analysis results. Like wise, a number of background analyses from the situation before your operations commence, is a powerful argument if you are ever have to defend yourself against an allegation that your process is responsible for something that already occurs in the environment before you start your operations.

For known components it is necessary to do the most sensitive and appropriate analysis possible. Always make sure that the minimum detectable amount of the method is at least below the ARL (acceptable risk level in the Minimum Requirements), else the minimum detectable level will be used as the level to be tested against.

The classification with the minimum requirements will tell you what disposal methods are acceptable.