Managing Spent "High Flash" Mineral Spirits & Petroleum Naphtha Wastes

Many Massachusetts businesses - including auto and truck repair garages and dealerships, machine shops, and shops that rebuild, repair and maintain engines - use petroleum distillates in cold solvent degreasing tanks to clean metal surfaces. When degreasing agents no longer work for this purpose, they become wastes.

How the Massachusetts Department of Environmental Protection (MassDEP) regulates these wastes depends on how flammable they are:

- Waste solvents with flash points lower than 140°F, including "low flash" mineral spirits and petroleum naphtha, are regulated as ignitable hazardous waste.

- Waste solvents with flash points of 140°F or higher, including "high flash" mineral spirits and petroleum naphtha, are regulated as waste oil because "high flash" petroleum distillates meet the definition of oil in Massachusetts hazardous waste regulations.

You can find the content and flash point of a degreasing agent in its Material Safety Data Sheet (MSDS), which is available from the supplier or manufacturer.

If you mix a "high-flash" solvent with a flammable material as you use them, you should test the mixture's flash point when it is spent, since the flashpoint might now be below 140°F. If you do not want to test the mixture, you should assume that it has a flash point of less than 140°F and manage it as an ignitable hazardous waste.

Management Options & Requirements

Recycle On-Site: You may be able to recycle waste solvents at your facility by reusing them for cleaning. If you generate more than 27 gallons of waste solvents per month or at one time for recycling on-site, you will need to file a one-time notification with MassDEP.

Manage Off-Site: If you need to ship waste mineral spirits or petroleum naphtha off-site, you have several management options depending on the material's flashpoint. Whenever waste solvents are shipped off-site, the generator must prepare the proper shipping documents, which must 1) include the proper waste code for the type(s) of waste solvents that you are shipping, and 2) identify the permitted recycling or disposal facility that will receive the wastes.
Spent "low flash" mineral spirits or petroleum naphtha wastes must be managed as:

- Ignitable Hazardous Waste (Waste Code D001). Prepare a "uniform hazardous waste manifest" and ship your spent petroleum distillates directly to a treatment, storage, or disposal facility. Additional waste codes may apply if your solvents become mixed with other hazardous wastes. If you select this option, you must use a Massachusetts-licensed transporter to ship your waste solvents; or

- Class A Regulated Recyclable Material (RRM, Waste Code MA97). Prepare a shipping paper [see the regulations at 310 CMR 30.223(4)(b) for requirements] that identifies your wastes by the recycling code MA97 and also identifies the facility that will actually recycle your spent petroleum distillates by re-using them as an ingredient in (or as a substitute for) a commercial product. You may use either a Massachusetts-licensed hazardous waste transporter or a common carrier to collect your waste petroleum distillates, but your wastes must be transported directly either to the actual recycling facility or to a MassDEP-licensed facility that is authorized to store MA97 recyclable material.

Spent "high flash" mineral spirits or petroleum naphtha wastes must be managed as:

- Waste Oil (Waste Code MA01). Use a "uniform hazardous waste manifest" and ship your spent petroleum distillates off-site directly to a storage, treatment or disposal facility; or

- Class A Regulated Recyclable Material (RRM, Waste Code MA97). Follow the same procedures as with "low flash" mineral spirits or petroleum naphtha wastes. Please note that in addition to the options for reusing "low flash" waste described above, "high flash" wastes may also be sent directly to a facility that will reclaim them to produce fresh solvents; or

- Off-Specification Used Oil Fuel (Waste Code MA98). If testing confirms that spent degreasing agents meet the criteria for off-specification used oil fuel, you may either ship them directly to a recycling facility using Waste Code MA98 on the manifest, or burn them at your location in a used oil space heater that meets MassDEP requirements (which include notifying MassDEP that you are using a waste oil-burning unit). See the fact sheet on Safe Handling of Waste Oil for Burning in Space Heaters.

If you choose to ship either "low flash" or "high flash" spent solvents off-site as Class A Regulated Recyclable Material and your business generates more than 27 gallons of these wastes per month or at one time, you will need to apply to MassDEP for a Class A hazardous waste recycling permit and receive this permit before you begin shipments.

Whenever your wastes are shipped off-site, you will need to retain copies of all waste manifests and/or shipping papers (signed by you, the transporter and the receiving facility) for at least three (3) years and make them available for MassDEP review if the agency asks to see them.

Please note that spent petroleum distillates and petroleum naphtha that (a) exhibit the characteristics of a hazardous waste (i.e., the waste is corrosive, ignitable, reactive or toxic), or that (b) have been mixed with other hazardous wastes may need to be handled as Hazardous Waste.