Flowchart for Classification of Soil to be Removed During Construction when Contamination is Suspected

**Determine if soil is classified as a hazardous waste according to 6NYCRR part 371**:  
Yes (to any)  

**Determine if soil contaminant concentrations exceed Soil Cleanup Objectives (SCOs) or Guidance Levels**:  
Yes

**Are there PID hits above level specified in FOVMP, nuisance odors, and/or other field indications of contamination?**

- Yes  
- No

Can this material be re-used on-site? Is there a need?  
Yes (to both)

- Yes
- No

**Soil is not contaminated, Handle according to §107-10A, Excess Soil and Rock**

**Notes on Classifications and Contaminant Concentrations**

1. A Hazardous Waste Soil is either a) specifically listed, b) has a characteristic of hazardous waste [ignitability, reactivity, or toxicity], or c) contains PCBs at a concentration of 50 ppm or greater. Wastes that are solid, such as soil, are precluded from being characterized as a hazardous waste based on the corrosivity characteristic. The toxicity characteristic identifies wastes that can leach any of 39 constituents (8 metals, 6 pesticides, and 25 organic compounds) to the environment. Heavy metals, especially lead, are the most common contaminants encountered in DOT projects that can cause soils to be hazardous wastes. Toxicity is determined by analysis using the Toxicity Characteristic Leaching Procedure (TCLP), which is different from total weight analysis. TCLP data will typically be reported in milligrams/liter (mg/l), also sometimes referred to as parts per million (ppm) or possibly in micrograms/liter (μg/l), also sometimes referred to as parts per billion (ppb). Laboratory data reported in total weight concentrations (ppm = milligrams/kilogram [mg/kg] or ppb = micrograms/kilogram [μg/kg]) are not TCLP data and cannot be used to reliably determine whether or not a waste is hazardous. However, the theoretical maximum TCLP concentration can be predicted based on total weight concentrations using the “20 Times Rule” (in theory, the TCLP concentration in mg/l can be no more than 1/20 the total weight concentration in mg/kg).

2. The location of the site, the contaminants of concern, and the agency providing regulatory oversight (and the specific regulatory program) and other factors will govern which guidance levels/soil cleanup objectives (SCO’s) are used at the site. The appropriate guidance levels/SCOs will be specified in the contract documents. Guidance levels/SCOs for these purposes are generally provided in total weight concentrations (ppm=mg/kg or ppb=μg/kg), and total weight analyses are needed to compare soil to guidance levels/SCO’s.

3. The reuse of contaminated soil may be deemed appropriate based on: an investigation conducted prior to the contract award; a BUD; and/or, DOT approval during construction as determined by laboratory analysis and site conditions. Before any soil can be reused on-site, it must meet the required engineering and construction criteria for the intended application.

4. The Contractor is to procure an appropriately permitted facility, chosen based upon soil contaminants/concentrations, handling capacity, geographic location, overall cost, and and possibly other factors. Such facilities might include (but are not limited to) solid waste landfills, soil recyclers, asphalt plants and incinerators.

5. A Beneficial Use Determination (BUD) is a designation by NYSDEC that allows the beneficial reuse of a material previously considered a solid waste under 6 NYCRR part 360 before the BUD was issued. NYSDEC lists 16 pre-determined BUDs in 6 NYCRR Part 360-1.15(b) and also may issue site-specific buds on a case by case basis.