



Guidance on submitting Waste Characterization data to the NYC Clean Soil Bank

This document instructs construction teams on how to gather and present waste characterization data to the Mayor’s Office of Environmental Remediation (OER) for its determination of whether a site has surplus fill that is clean, native soil and therefore eligible for the City stockpile or Clean Soil Bank. The goal here is for construction teams to produce high quality data packages that OER can review and approve quickly.

More information can be found at: <https://www1.nyc.gov/site/oer/safe-land/clean-soil-bank.page>

A standard data package should include:

- A description of **Site Stratigraphy**;
- **Boring Logs**: these can be Waste Class, Phase II, RIR or Geotechnical logs;
- A **Site Survey** (if available) if the grade change across the site is greater than two feet;
- A **Sample Table**;
- A **Sample Map(s)**; and
- The **full laboratory report of Waste Class data and SCO comparison Summary Tables**.

A few basic points:

- 1) The City stockpile and Clean Soil Bank accept only clean native material that meets Track 1, General Fill or Restricted Residential soil standards. (See 6 NYCRR Part 375 Tables 6.8(a) and 6.8(b)). No man-made fill (such as brick, concrete, or debris of any kind) can be accepted.
- 2) Soil proposed for the City stockpile or Clean Soil Bank **must** be sampled at the frequency required by Part 360.13(e), Table 1. This is likely to vary from private disposal facilities.

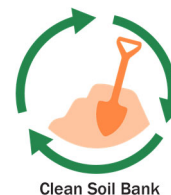
The City stockpile and Clean Soil Bank require the following sampling frequency:

Fill Material Quantity (Cubic Yards)	Minimum Number of Analyses for Volatile Organic Compounds, if required. ¹	Minimum Number of Analyses for all other parameters
0-300	2	1
301-1000	4	2
1001-10,000	6	3

- a. Samples must be analyzed for:
 - i. Metals
 - ii. PCBs/pesticides, and
 - iii. Semi-volatile compounds (SVOCs).

¹At OER’s discretion, sampling for volatile organic compounds (VOCs) may not be required unless their presence is possible based on a historic petroleum spill, odors, PID meter or other field instrument readings. Part 360.13(e)(2).

- 3) Sample the native soil layer by itself. Do not sample fill material and native soil together. Composited samples that include fill and native material may disqualify the full native layer in that sample/grid.



To facilitate review and approval of your site's native soil, follow these guidelines:

- Provide a short, written summary of **site stratigraphy**²
 - Specify the site-wide thickness of the upper fill layer as shown in boring logs;
 - Include the depth to native material (in most cases, this is the bottom of the fill layer);
 - Estimate the depth of the bottom of the excavation across the site; and
 - Estimate the depth to groundwater (especially if the excavation crosses the water table).
- Include **Boring Logs**; Waste Class, Phase II, RIR and/or Geotechnical logs. Logs should identify the transition from the overlying fill layer to native soil. Boring locations should be shown on a Site Map of the excavation area. If no boring logs are available, this may make approval difficult and require additional sampling to confirm native vs. fill intervals. Test pits and corresponding logs are also acceptable.
- If available, include a **Site Survey** if the change in the grade of the site is greater than two feet.
- Include a **Sample Table** and corresponding **Sample Map(s)**:
The Sample Map must show the scale and location of each sample and boring. No review can be performed without this information. A Sample Table and Sample Map are shown below in Table 1 and Figure 1, respectively.

The Sample Table should include:

- All samples within each grid interval that represent a specific soil volume under consideration. (If grid volumes are estimated in tons, convert tons into cubic yards using a rate of 1.5 tons to 1 CY before submitting the data.)
- A description of the multi-point compositing across each grid interval which identifies which samples are composites and which are grab.
- The depths of each composite and grab sample.

² Important Note: Sampling is typically based on depth below grade, yet when excavation starts, depths are routinely measured in elevation. If the data, logs, and sampling are based on depth below grade, OER's approval will reflect this. Under such circumstances, construction teams need to provide elevation correction data to allow conversion of below grade depths to elevation. Where grade change is greater than two feet across a site, reporting in elevation is preferred.

- Submit the full laboratory report of the **Waste Class data**:
 - In accompanying **Summary Tables**, sample results should be compared to:
 - Unrestricted Soil Cleanup Objectives (SCOs) (Part 375 Table 6.8(a));
 - The lower of Residential Land Use and Protection of Groundwater SCOs (Part 375 Table 6.8(b)). This soil category is often referred to as General Fill (Part 360.13(f), Table 2); and
 - Restricted Residential SCOs (Part 375 Table 6.8(b)).

Teams should instruct analytical labs to highlight exceedances of the above four soil criteria.



The following are common data issues that should be looked at prior to submitting packages in order to allow review to move forward in the most reasonable time period:

- 1) Dilution factors should be properly identified in the tables.
- 2) If VOCs such as methylene chloride or acetone are identified in samples and are not believed to be associated with site fill, the laboratory should provide a written explanation that the reported concentrations are lab contaminants.
- 3) Method Detection Limits (MDL) should be checked to insure they are all above SCOs. Non detects with MDLs above SCOs will not be evaluated and will eliminate samples and grids from consideration.

Once OER approves soil for delivery to the City stockpile, a qualified entity (e.g. qualified environmental professional, QEP) must observe the excavation to ensure that only approved depths and grids are being removed, loaded and delivered to the stockpile. The soil manifests that accompany each truckload of soil will specify the originating grid and depth interval.

NYS Department of Environmental Conservation regulations can be found at the DEC website:

<https://www.dec.ny.gov/regs/2491.html>

The OER Clean Soil Bank Memorandum of Agreement with NYS DEC can be found at:

https://www1.nyc.gov/assets/oer/downloads/pdf/MOA_OER-DEC_CleanSoilBank.2020-10-01.pdf



Table 1. An example of a Waste Class Sample Table for interval WC-1, which is six to 12 feet below grade and contains 1,000 CY of soil. Two five-point composite samples and four VOC grab samples were collected from this interval. This includes five borings sampled to excavation depth.

Grid	Depth Interval	Sample ID	Sample type	Boring	Sample Depth (feet)	Volume
WC-1	6-12	WC-1 6-9	Composite	WC-1-1	6-9	1000
				WC-1-2	6-9	
				WC-1-3	6-9	
				WC-1-4	6-9	
				WC-1-5	6-9	
		WC-1 9-12	Composite	WC-1-1	9-12	
				WC-1-2	9-12	
				WC-1-3	9-12	
				WC-1-4	9-12	
				WC-1-5	9-12	
		WC-1-2 7-8	VOC grab	WC-1-2	7-8	
		WC-1-4 11-12	VOC grab	WC-1-4	11-12	
WC-1-3 6-7	VOC grab	WC-1-3	6-7			
WC-1-5 9-10	VOC grab	WC-1-5	9-10			
WC-2...						

Figure 2. An example of a Waste Class Sample Map of grid cell WC-1 with five borings used to create five-point composite samples and to collect four VOC grab samples.

