

7 Minimum Sampling Frequencies

The following are minimum sampling frequencies established by MADEP for soil re-use at the Site:

Soil Category	General Source/Origin Description	Minimum Test Profile Frequency
1	Naturally Deposited Soil: Not from an area of known or suspected high background levels of constituents (i.e., arsenic belt, Boston Blue clay); not proximate to urban fill soil; no MCP disposal sites nearby; and no industrial or manufacturing history.	1 test profile per 1,000 cubic yards (1,500-1,700 tons) for initial review. Supplemental testing of specific areas for specific contaminants that exceed any Soil Acceptance Criteria (SAC) to define/confirm limits of acceptable soil at 1 test per 100 cu. yd.
2	Naturally Deposited Soil: In proximity to urban fill or an MCP disposal site.	1 test profile per 1,000 cubic yards (1,500-1,700 tons) for initial review. Supplemental testing of specific areas for specific contaminants that exceed any SAC to define/confirm limits of acceptable soil at 1 test per 100 cu. yd.
3	Naturally Deposited Marine Soils and Boston Blue Clay: From areas of known or Suspected naturally occurring high background levels of constituents or otherwise regulated soil.	1 test profile per 1,000 cubic yards (1,500-1,700 tons) for initial review. Test Profile must include MCP-14 metals. Supplemental testing of specific areas for specific contaminants that exceed any SAC to define/confirm limits of acceptable soil at 1 test per 100 cu. yd.
4	Urban Fill Soil	1 test profile per 500 cubic yards (750-850 tons) for initial review. Test Profile must include MCP-14 metals. Supplemental testing of specific areas for specific contaminants that exceed any SAC to define/confirm limits of acceptable soil at 1 test per 100 cu. yd. Additional test parameters such as cyanide and asbestos may be required.
5	Soil from Industrial, Commercial or Manufacturing site with history of any of the following: tannery, textiles, chemical/paint production, circuit board manufacturing, plating/metal finishing, foundry operations, coal gasification, dry cleaning, salvage yards, pesticide/herbicide use, storage or distribution. A LSP, LSRP or LEP must provide a report detailing why such soils conform to the SAC.	1 test profile per 500 cubic yards (750-850 tons) for initial review. Test Profile must include MCP-14 metals. Supplemental testing of specific areas for specific contaminants that exceed any SAC to define/confirm limits of acceptable soil at 1 test per 100 cu. yd. Additional test parameters such as cyanide may be required.
6	Soil from sources not otherwise described above where historic test data indicate potential exceedance of any SAC or where past use or storage of OHM at more than household quantities.	1 test profile per 500 cubic yards (750-850 tons) for initial review. Supplemental testing of specific areas for specific contaminants that exceed any SAC to define/confirm limits of acceptable soil at 1 test per 100 cu. yd. Additional test parameters based on historic test data may be required.

Test profile soil samples should be multi-point composite samples with the exception of VOC samples, which should be a grab sample of the highest PID screening result for that test profile.

For acceptance purposes, soil density will be considered 1.5 tons per cu. yd. for soil sampled from a stockpile, and no greater than 1.7 ton per cu. yd. for soil sampled in-situ via borings or test pits. Further technical justification will be required for acceptance of soil with assumed density greater than 1.7 ton per cu. yd.

8 Site Soil Acceptance Criteria

The following table summarizes MADEP's derivation of the Soil Acceptance Criteria (SAC) for the Site:

VOCs (EPA 8260)	List analytes individually, with criteria based on 10% of RCS-1. For analytes with no RCS-1 value.
SVOCs (EPA 8270)	Similar Soil Policy Table 2. For analytes not listed in Table 2: 10% of RCS-1. For analytes with no RCS-1: to be determined on a case by case basis.
EPH	Each carbon range 1/2 RCS-1. Target analytes from Similar Soil Policy Table 2
TPH	1/2 RCS-1 (i.e., 500 mg/kg)
Pesticides (EPA 8081)	ND Trace levels of pesticides/herbicides can be accepted on a case by case basis
Herbicides (EPA 8151)	ND Trace levels of pesticides/herbicides can be accepted on a case by case basis
PCBs (EPA 8082)	10% of RCS-1 for total PCBs
MCP-14 (with Vanadium)	Similar Soil Policy Table 2 or calculate site specific criteria
Hexavalent Chromium	Similar Soil Policy Table 2 or calculate site specific criteria
Specific Conductance (EPA SM2540)	2000 umhos/cm (1/2 Comm 97 limit)
Flashpoint (EPA 1010)	>140
pH/Corrosivity (EPA 9045)	5.0-9.0
Reactive Sulfide/Cyanide (EPA Ch. 7.3)	500/250
PID Screening	<2 ppmV
asbestos fibers	ND

The Site Soil Acceptance Criteria have been revised to reflect limiting concentrations for SVOCs and metals for a RCS-1 receiving location assuming natural background conditions that have been established in the Similar Soils Provision Guidance and MADEP's recommendations for other constituents set forth in the above referenced table. The revised Site Soil Acceptance Criteria are presented in **Table 1 (attached)**.