

**Marilyn's Landing Commercial Re-use Area  
Off Plymouth Street, Bridgewater, MA 02324  
(SOIL RE-USE APPROVAL REQUEST)**

**Instructions:** Complete this form with required attachments and submit to Marilyn MacDonald via email [marilynslanding@hotmail.com](mailto:marilynslanding@hotmail.com). At least three (3) business days will be required to review a Soil Re-Use Approval Request once received by the project engineer. Technical questions should be directed to Richard Stromberg, LSP the point of contact.

**Technical Point of Contact:**

Mr. Richard Stromberg, LSP  
Boston Environmental Corporation  
338 Howard Street  
Brockton, MA 02302  
Telephone: 508-897-8051 (cell) 617-908-7094  
[rstromberg@bostonenvcorp.com](mailto:rstromberg@bostonenvcorp.com)

**SECTION A:**

**Project Name:**

**Site Location/Address:**

**Site or Sub-Area Identifier (if applicable)**

**Site Owner's Name/Address:**

**Contact Person for Soils Approval:**

**Name:**  
**Company:**  
**Address:**  
**Email:**  
**Telephone:**  
**Fax:**

**Estimated Quantity of Soil for Approval:**

*Cubic Yards*

*Tons*

**Anticipated Shipping Duration:**

*Start / / 201 End / / 201*

**Description of Source, Type of Release, and Contamination**

**Current and Former Site Usage:**

**Has this soil been impacted by a release from a known specific petroleum source?**

**Soil Location at Time of Testing (check one):**

In-Situ

Stockpiled

**Has the Generator used Due Diligence in Characterizing the Soil (check one):**

NO

YES

**Is this soil being generated from an MCP Site? (check one):**

NO

YES

RTN #

**Have any other releases or spills occurred in the vicinity of the site which may have affected the site (check one):**

YES

NO

## **SECTION B**

### **Testing Frequency:**

The following are Minimum Sampling Frequencies established based on input from MassDEP for soil re-use at the Generator or Candidate Site (i.e. The Sending Site). The sampling frequencies shall be completed from the Candidate Site, prior to shipping to the Receiving Site.

Multi-point composite samples (3-5 grab samples per composite) shall be used for test samples, except use discreet samples for VOC analyses of the highest PID screening result for that test profile. PID results must be less than 5 ppmv. Soil density is to be considered at 1.5 tons per cyd., for a stockpile sample, and less than 1.7 ton per cyd. for in-situ samples from borings or test pits. Technical justification is required for the acceptance of soil with an assumed density greater than 1.7 ton per cyd.

**TABLE 1: Testing Frequency**

<b>SOIL CATERGORY</b>	<b>GENERAL SOURCE/ORIGIN DESCRIPTION</b>	<b>MINIMUM TEST PROFILE FREQUENCY</b>
1. Nat. Soil	Naturally Deposited Soil: Not from an area of known or suspected high background levels of constituents (i.e., not Worcester County arsenic belt or 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.
2. Nat. Soil	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 re-view.
3. Nat. Soil	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.
4. Fill	Urban Fill Soil/Street Sweepings	1 test profile per 500 cubic yards (750- 850 tons) for initial review. Additional Tests at QEP/LSP Discretion. Test Profile must include MCP-14 metals.
5. Fill	Catch Basin Cleanings	Urban Center Roads: 1 sample per 100/CY* Non-Urban Center Roads: 1 sample per 500/CY *Minimum of 2 samples per 500 cy)

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#### **Notes:**

- 1.) 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 cyds or as accepted by LSPs.
- 2.) Soil includes Remediation Waste as defined in the MCP and Non-remediation Waste

## **SECTION B (cont.)**

### **Laboratory Testing Requirements (Minimum Analytical Data):**

The following parameters are to be analyzed at the Sending Site for each sample prior to shipment to the Receiving Site. Attach a legible copy (not a faxed copy) of laboratory analytical data, including all results and QA/QC information, from a Massachusetts Certified laboratory, for the following parameters, as required per the Revised Soil Re-use Management Plan.

- Volatile Organic Compounds (VOCs) by EPA Method 8260;
- Semi-Volatile Organic Compounds (SVOCs) by EPA Method 8270;
- Total MCP-14 by EPA Methods 6010, 7470 (for mercury) and 7010 (for thallium) (refer to Section XIV for analyte list);
- Polychlorinated Biphenyls (PCBs) by EPA Method 8082; (non-soxhlet extraction acceptable)
- Pesticides by EPA Method 8081 (may be excluded or limited based on site history);
- Herbicides by EPA Method 8151 (may be excluded or limited based on site history);
- Total Petroleum Hydrocarbons (TPH) (summation of EPH fractions can be substituted);
- Reactivity (cyanide/sulfide) by EPA Method Ch. 7.3;
- pH/Corrosivity by EPA Method 9045;
- Ignitibility/flashpoint by EPA Method 1010;
- Specific Conductance (Conductivity) by EPA Method SM2510; and
- Any other potential constituents based on location-specific history;
- Analysis for hexavalent chromium will be required on every sample that exceeds RCS-1 for total chromium, and
- TCLP analysis is required of each sample that exceeds potential threshold values.
- Fecal Coliform SM18-20-9222
- Averaging of concentrations is not acceptable!

## **SECTION C**

**Site Soil Acceptance Criteria:** The MassDEP's derivation of the Soil Acceptance Criteria (SAC) for the Site is summarized below. The complete SAC is provided in Table 1 of the Revised SRMP.

<b>PARAMETER</b>	<b>SOIL ACCEPTANCE CRITERIA</b>
VOCs (EPA 8260)	List analytes individually, with criteria based on < 10% of RCS-1 in Table 1. Lab Report to MDLs to achieve some SAC.
SVOCs (EPA 8270)	List analytes individually. SVOCs < RCS-2 except 5 PAHs 50% of RCS-2 in Table 1.
EPH	Total of carbon ranges < 3,000 ppm (TPH RCS-2 equivalent).
TPH	RCS-2 (i.e., 3,000 mg/kg)
Pesticides (EPA 8081)	List analytes individually, with criteria based on < 10% of RCS-1 in Table 1. Lab Report to MDLs to achieve some SAC.
Herbicides (EPA 8151)	List analytes individually, with criteria based on < 10% of RCS-1 in Table 1. Lab Report to MDLs to achieve some SAC.
PCBs (EPA 8082)	Each PCB isomer at or Below 10% of RCS-1 Value, 0.1 ppm, See note on Table 1.
MCP-14 (with Vanadium)	See SAC on Table 1 of SRMP.
Hexavalent Chromium	See SAC on Table 1 of SRMP.
Specific Conductance (EPA SM2510)	2,000 umhos/cm (1/2 COMM 97-001 limit)
Flashpoint (EPA 1010)	> 140 degrees
pH/Corrosivity (EPA 9045}	5.0-9.0
Reactive Sulfide/Cyanide (EPA Ch. 7.3)	500/250
PID Screening	<5 ppmV
Fecal Coliform	1,000 MPN/Gram Dry Weight

### **Notes:**

- 1.) See also Table 1 of SRMP.

<b>SECTION D</b>			
Was additional analysis required besides those listed in <b>Minimum Analytical Data (SECTION B)</b> of this application? (check one)			
	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Was there any detection of additional chemicals besides those listed in <b>Minimum Analytical Data (SECTION B)</b> ? (check one)			
	<input type="checkbox"/> YES (Fill out <b>SECTION D</b> )	<input type="checkbox"/> NO (Skip to <b>SECTION E</b> )	
If additional chemicals are detected, the soil shall be deemed acceptable if one or both of the following conditions are met. Please check the applicable condition(s).			
<input type="checkbox"/> <sup>1</sup>	A) The detected chemicals are solely the result of background conditions and not the result of a release at the site or anthropogenic activities.		
<input type="checkbox"/>	B) The concentrations of detected chemicals are less than the applicable RCS-1 reporting concentrations as defined in 310 CMR 40.1600.		
<sup>1</sup> If Box A is checked, please include the additional information in <b>SECTION F</b> with the LSP Opinion Letter as detailed below.			

<b>SECTION E</b>	
<b>LSP Opinion Letter (Required Statements):</b> Attach a letter from a Licensed Site Professional or a Qualified Environmental Professional indicating they have reviewed the analytical data and have formed the opinion that the soil is suitable for use as subgrade fill at the Marilyn's Landing Commercial Re-use Area. At a minimum, the letter <b>MUST</b> contain the following statements:	
- <i>"In my opinion, the analyses performed and submitted for review are sufficient to adequately characterize the identity and concentrations of contaminants in the soil proposed for reuse at the Marilyn's Landing Commercial Re-use Area in Bridgewater, Massachusetts."</i>	
- <i>"Based on my review of the attached data, it is my opinion as a Licensed Site Professional (or Qualified Environmental Professional) that the soil is appropriate for fill material at the Marilyn's Landing Commercial Re-use Area in Bridgewater, Massachusetts."</i>	

<b>SECTION F</b>	
<b>LSP Opinion Letter (Additional Information):</b> Only if <b>BOX A</b> is checked in <b>SECTION D</b> , include the following statement and information in the LSP Opinion Letter:	
- <i>"In my opinion, the chemicals that were detected that are not specifically listed in Table 1 of the Soil Re-use Management Plan for the Marilyn's Landing Commercial Re-use Area in Bridgewater, Massachusetts represent background conditions (naturally occurring) and are not the result of a release or anthropogenic activities and are therefore appropriate for reuse as fill material at the Marilyn's Landing Commercial Re-use Area in Bridgewater, MA." The letter shall include sufficient information concerning the site of generation, regional background concentrations, and contaminants associated with those releases, and any additional information sufficient to justify this opinion.</i>	

<b>SECTION G</b>			
<b>Receiving Facility Information:</b> The receiving facility information for use on any shipping documents is as follows:			
	Operator/Facility Name:	Marilyn's Landing Commercial Re-use Area, Bridgewater, MA	
	Contact Person:	Ms.Marilyn MacDonald	
	Street:	Off Plymouth Street	
	City/Town:	Bridgewater	
	State and Zip Code:	MA, 02324	
	Phone:	508-294-0173 (508-294-0174 Dave)	

## **SECTION H**

### **Required Information Checklist (check box if "yes"):**

<input type="checkbox"/>	Is there 1 test profile for every 500 cubic yards Fill soil, 1 sample for 100/500 CY Catch Basin Cleanings, or 1 test profile for every 1,000 cubic yards Natural Soil listed on Table 1 in SECTION B of the Soil Re-Use Approval Request Form?
<input type="checkbox"/>	Is there a signed Licensed Site Profession (LSP) or Qualified Engineering Professional (QEP) Opinion letter containing the mandatory statements specified in SECTION E and SECTION F (if applicable) of the Soil Re-Use Approval Request Form?
<input type="checkbox"/>	Does the QEP Opinion letter describe current and former site usage/history justifying the applicable Category?
<input type="checkbox"/>	Does the QEP Opinion letter describe site contaminants?
<input type="checkbox"/>	Is a site sketch included? Does it identify soil source location and sample locations?
<input type="checkbox"/>	Is material free of visual signs of impact or nuisance conditions, such as staining and discoloration?
<input type="checkbox"/>	Is material free of solid wastes?
<input type="checkbox"/>	Is field screening data from the time of sample collection provided?
<input type="checkbox"/>	Is sample data from multi-point composite samples (3-5 grab samples per composite), with the exception of discrete samples for VOC analysis?
<input type="checkbox"/>	Is all of the Minimum Analytical Data Analysis performed as identified in SECTION B of the Soil Re-Use Approval Request Form?
<input type="checkbox"/>	Is there a data table(s) comparing the laboratory analytical results to the applicable Marilyn's Landing SAC on Table 1 of the SRMP (Jan. 2022)?
<input type="checkbox"/>	Are the detection limits for all analysis parameters lower than the maximum acceptable levels listed in Table 1 of the SRMP, or there is a statement in the LSP/QEP opinion letter explaining why this is not the case?
<input type="checkbox"/>	Is material free of visible asbestos?
<input type="checkbox"/>	Are complete copies of the laboratory data, chain(s) of custody, and the QA/QC package for the analysis performed included?
<input type="checkbox"/>	If there is data for any sample(s) that are included with the submitted laboratory reports that are <u>not</u> part of the material package and should be disregarded during our review, are they crossed-out in the submittal and is there a statement in the QEP Opinion letter explaining why the data should not be considered in the review?
<input type="checkbox"/>	Was TCLP testing performed for metals or organic compounds when the total concentrations in the material are above the theoretical 20:1 levels?
<input type="checkbox"/>	Is asphalt, brick, and/or concrete mixed with reclamation materials?
<input type="checkbox"/>	Is there a signed Material Shipping Record? Does the quantity of material requested for acceptance match the quantity listed on the MSR?
<input type="checkbox"/>	Is there a signed Soil Reuse Application Form with all fields completed, including Marilyn's Landing Trucking Rules?

<b>SECTION I</b>
Additional Information / Comments

<b>SECTION J</b>	
<b>Generators Signature:</b> The Generator or duly authorized representative of the Generator shall sign and date this soils approval request certifying the following:	
<p>"To the best of my knowledge, I certify the information on this form is accurate and complete."</p>	
	<p>Signature _____ Date _____</p>