



**Maryland State Highway Administration  
Office of Materials Technology  
Landscaping Soils Eligibility List**

**Soils and Aggregate Technology Division  
7450 Traffic Drive  
Hanover, Maryland 21076**

# Landscaping Soils Eligibility List

## Contacts

**Dan Sajedi, *Division Chief***

**443-572-5162 or [dsajedi@sha.state.md.us](mailto:dsajedi@sha.state.md.us)**

**Darren Swift, Soils Lab Team Leader**

**443-572-5276 or [dswift@sha.state.md.us](mailto:dswift@sha.state.md.us)**

**Toll Free: 866-926-8501**

# Maryland State Highway Administration

## Landscaping Soils Eligibility List

### 1. INTRODUCTION

Maryland State Highway Administration (the Administration) has the responsibility to effectively and efficiently assure the quality of landscaping soils used on the Maryland roadway system. Products placed must meet the system preservation, safety and environmental needs of the state's communities. The Administration is publishing this Landscaping Soils Eligibility List as a tool for providing information and guidance on how the quality of landscaping soils used on Maryland road projects can be assured.

The Landscaping Soils Eligibility List contains a list of producers which are eligible for Furnished Topsoil and Bioretention Soil Mix (BSM) used on the Administration's projects. The eligibility list will be updated on a biannual basis. It will be published on the last day of January and July. The eligibility of producers will be valid for six months.

The Administration encourages producers to keep track of their records, including due dates in order to submit their requests for renewal on time. Producers are responsible for informing the Soils and Aggregate Technology Division (SATD) of any changes to producer information, such as producer name, location of stockpiles, subsidiary producer's name, and contact information.

### 2. PROCESS FOR LISTING AS AN ELIGIBLE SOURCE OF LANDSCAPING SOILS

#### 2.1 PRODUCER REQUIREMENTS

##### 2.1.1 Submission of Written Request

The landscaping soil producer shall submit a written request to be considered as an eligible source to:

Dan Sajedi, Division Chief  
Soils and Aggregate Technology Division  
Maryland State Highway Administration  
Office of Materials Technology  
7450 Traffic Drive  
Hanover, MD 21076 OR  
[dsajedi@sha.state.md.us](mailto:dsajedi@sha.state.md.us)

- A. The Administration requires producers to submit their written requests no later than 45 days prior to the next landscaping soils Eligibility List publication date. Please refer to the flow chart in Section 7 for "MDSHA Biannual Quality Testing Process."

- B. Please refer to Appendix A for “Quality Test Request” Form. Producers shall complete and submit this form for each landscaping material produced (i.e. Bioretention Soil Mix and Furnished Topsoil).

### **2.1.2 Material Sampling and Testing**

- A. The Producer shall sample furnished topsoil in conformance to Section 920.01.02 and bioretention soil mix in conformance to 920.01.05.
- B. A 10 pound soil sample shall be taken of equal gatherings per AASHTO T2 from a minimum of 10 different locations to accurately represent the designated area within the site or stockpile. The soil shall be sampled at representative depths and not from the surface. Save a portion of this sample for QA testing by the Administration.
- C. The sample shall be labeled with the following information:
1. Date of sampling.
  2. Name of the producer and contact phone number.
  3. Street address of the stockpile location.
  4. Identify whether the sample is to be tested as furnished topsoil or BSM.
- D. The Producer shall submit the labeled landscaping soil sample to an accredited soil testing laboratory recognized by the Administration for testing.
- E. The list of recognized Soil Testing Laboratories can be found on the SHA Internet at the following address:
- <http://www.roads.maryland.gov/Index.aspx?PageId=52>
- F. The testing laboratory may reduce the composite 10 pound sample, in accordance with AASHTO T 248, to a minimum of one pound.

## **2.2 ADMINISTRATION RESPONSIBILITIES**

- A. SATD will review the soil test results to determine if the material conforms to the Administration’s requirements.
- B. If the furnished topsoil test results are acceptable, SATD will send a response to the Producer indicating that the material is eligible to be tested for use on Administration projects. The response will also indicate the expiration date of that eligibility.

### 3 TESTING PROCEDURES

The soil testing laboratory recognized by the Administration shall determine the following:

- A. Grading Analysis (R 58)
- B. Textural Analysis (T 88)
- C. Soils pH (D 4972)
- D. Organic Matter (T 267)
- E. Soluble Salts (EC1:2 (V:V))

### 4 TEST RESULTS SUBMISSION

The sample information required in the “Material Sampling and Testing” shall be included on the outsource laboratory test report form when submitted to the Administration.

Results for each test listed in the TESTING PROCEDURES shall be included on the submitted test report.

A copy of the landscaping soil test results shall be submitted to SATD at the following address:

Office of Materials Technology  
Soils and Aggregate Technology Division  
7450 Traffic Drive  
Hanover, MD 21076

[dswift@sha.state.md.us](mailto:dswift@sha.state.md.us)

### 5 Sample Quality Requirements

Source acceptance or rejection will be based on the MDSHA landscaping soil test results meeting or exceeding the requirements provided in Table 1 (Furnished Topsoil) or Table 2 (Bioretention Soil Mix) depending on the type of landscaping soil.

**Table 1: Furnished Topsoil Test Value Specifications**

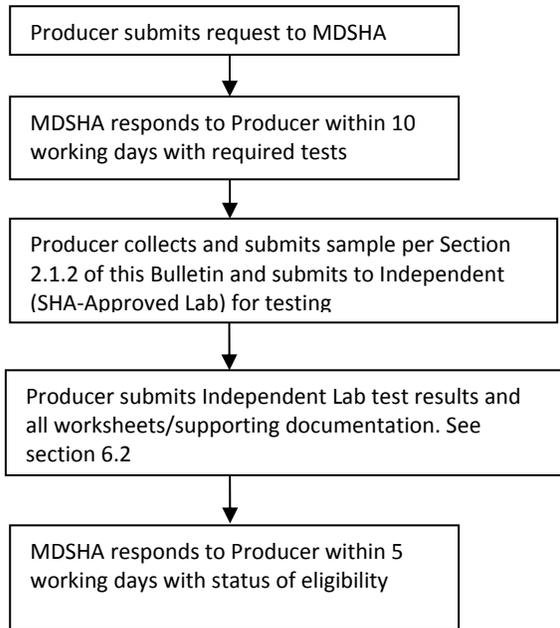
<b>COMPOSITION – FURNISHED TOPSOIL</b>					
<b>TEST PROPERTY</b>	<b>TEST<sup>1</sup> METHOD</b>	<b>TEST VALUE AND AMENDMENT</b>			
Prohibited Weeds	—	Free of live stems and roots of species in 920.01.01 as well as live stems and roots of Bermuda grass, Quack grass, and Yellow Nutsedge.			
Debris	—	1.0 % or less by weight of cement, concrete, asphalt, crushed gravel or construction debris when inspected.			
Grading Analysis	R-58	<b>Sieve Size</b>		<b>Passing by Weight Minimum %</b>	
		2 in.		100	
		No. 4		90	
		No. 10		80	
Textural Analysis	T-88	<b>Particle</b>		<b>% Passing by Weight</b>	
		<b>Size</b>	<b>mm</b>	<b>Minimum</b>	<b>Maximum</b>
		Sand	2.0 – 0.050	20	75
		Silt	0.050 – 0.002	Combined Silt and Clay	75
		Clay	less than 0.002		25
Soil pH	ASTM D 4972	pH 6.1 to pH 7.2			
Organic Matter	T-267	4.0 to 8.0% OM by weight			
Nutrient Content	—	Administration will assess. Apply fertilizer per NMP for nitrogen requirement and optimum fertility index values (FIV) for phosphorus and potassium.			
Soluble Salts	EC 1:2(V:V)	500 ppm (0.78 mmhos/cm) or less.			
Harmful Materials	—	Topsoil shall not contain substances in concentrations that are harmful to human health, water quality, or plant growth. Industrial waste such as ash, slag, raw sludge, dredge spoil, or similar materials shall not be soil components.			

**Table 2: Bioretention Soil Mix Test Value Specifications**

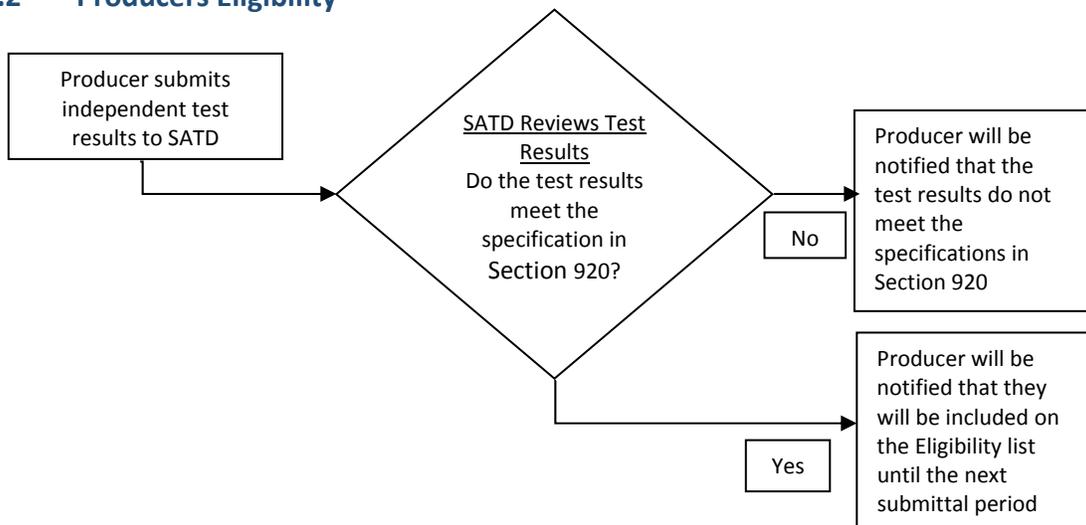
COMPOSITION- BIORETENTION SOIL MIX (BSM)						
TEST PROPERTY	TEST <sup>1</sup> METHOD	TEST VALUE				
Weeds	—	Free of seed and viable plant parts of species in 920.06.02(a)(b)(c) when inspected.				
Debris	—	No observable content of cement, concrete, asphalt, crushed gravel or construction debris.				
Hardwood Mulch	—	20% of the loose volume of BSM when inspected.				
Textural Analysis	T-88	Particle		% Passing by Weight		
		Size	mm	Minimum	Maximum	
		Sand	2.0 – 0.050	79	94	
		Silt	0.050 – 0.002	4	20	Combined Silt and Clay 21
		Clay	less than 0.002	1	10	
Soil pH	ASTM D4972	pH of 5.7 to 7.4.				
Organic Matter	T-267	Minimum 1.5 % by weight.				
Soluble Salts	EC 1:2(V:V)	500 ppm (0.78 mmhos/cm) or less.				
Harmful Materials	—	920.01.01(a).				

## 6 PROCESS FLOW CHARTS

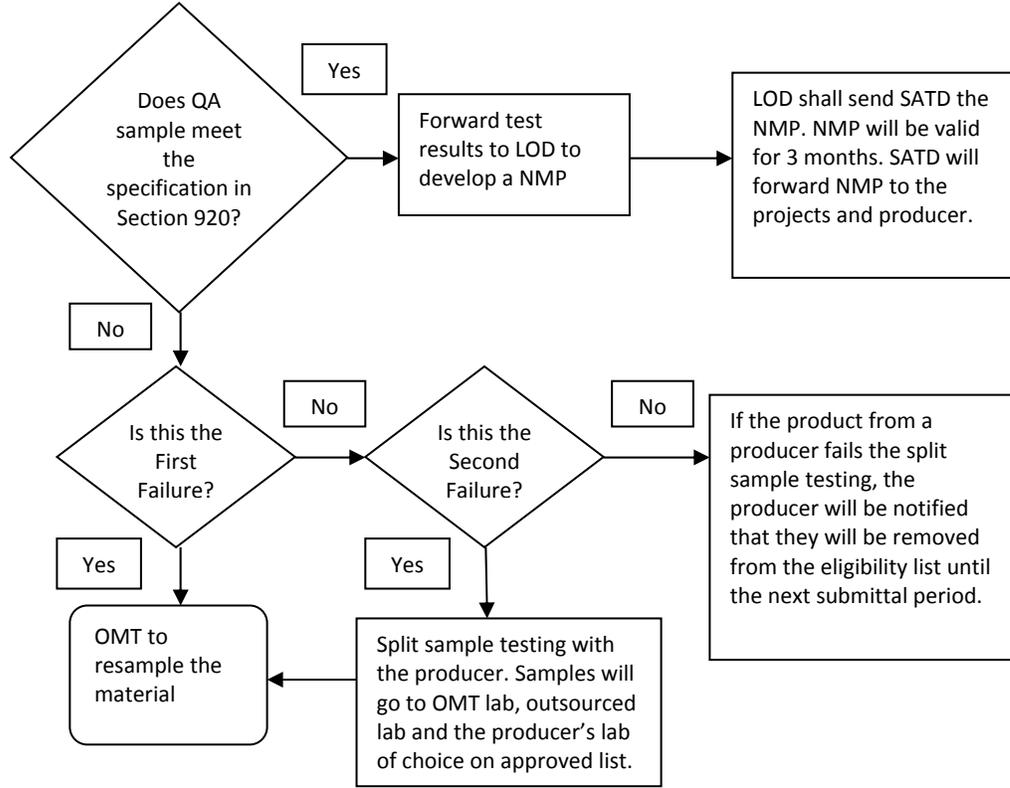
### 6.1 Landscaping Producer Biannual Eligibility Testing Process



### 6.2 Producers Eligibility



### 6.3 Addressing Failures with Administration QA Testing



## 7 LANDSCAPING SOIL TESTING FREQUENCY

The frequency of testing landscaping soils shall be in accordance with Table 3.

Table 3: Landscaping Soil Testing Frequency

Type of Test	Test Methods	Testing Frequency
Producer Eligibility Furnished Topsoil and BSM	–	EVERY SIX MONTHS
Administration’s QA sample of Furnished Topsoil	Section 5 Tables 1 and 2	If Producer has an active contract number, their soil will be tested every other month to develop a Nutrient Management Plan <sup>1</sup>
Administration’s QA sample of BSM	Section 5 Tables 1 and 2	If Producer has an active contract number, their soil will be tested every other month to develop a Nutrient Management Plan <sup>1</sup>
Salvaged and Other Landscaping Soils	Section 3	One Test prior to usage on a project <sup>1</sup>
<p><sup>1</sup> Please note that, for quality assurance purposes, the Administration has the right to request landscaping soil testing to be performed more frequently (i.e., Quality Assurance (QA) Testing) than the testing frequency specified above.</p>		

**Appendix A**  
**Landscaping Soil Producer Information**

**Office of Materials Technology  
Soils and Aggregate Technology Division  
Landscaping Soil Producer's Information Sheet**

**Name of Organization (Producer):**

\_\_\_\_\_

**Office / Facility (Subsidiary Landscaping Soils Producer):** *Same as above* \_\_\_\_\_  
or \_\_\_\_\_

Supervising Office's Mailing Address:

Street or P.O. Box: \_\_\_\_\_

Town / City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

Phone No(s): \_\_\_\_\_

Fax No.: \_\_\_\_\_

**Stockpile Location (Name, If Applicable):** \_\_\_\_\_

Street or P.O. Box: \_\_\_\_\_

Town / City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Entitled Point of Contact: \_\_\_\_\_

Title / Position: \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

Phone No(s): \_\_\_\_\_

Fax No.: \_\_\_\_\_

**Landscaping Soil to supply(s):** Topsoil \_\_\_\_\_ BSM \_\_\_\_\_

Do you want this location to be listed on the Eligibility List on MD Roads? Yes \_\_\_\_\_ No \_\_\_\_\_

**Stockpile Location (Name, If Applicable):** \_\_\_\_\_

Street or P.O. Box: \_\_\_\_\_

Town / City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Entitled Point of Contact: \_\_\_\_\_

Title / Position: \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

Phone No(s): \_\_\_\_\_

Fax No.: \_\_\_\_\_

**Landscaping Soil to supply(s):** Topsoil \_\_\_\_\_ BSM \_\_\_\_\_

Do you want this location to be listed on the Eligibility List on MD Roads? Yes \_\_\_\_\_ No \_\_\_\_\_

**Note:** Shaded areas will be published on-line.