



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Central Regional Office • 8 New Bond Street, Worcester MA 01606 • 508-792-7650

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June 30, 2022

VIA ELECTRONIC MAIL
(mnatural49@yahoo.com)

William Page, Jr.
President
Massachusetts Natural Fertilizer Company, Inc.
65 Bean Porridge Hill Road
Westminster, MA 01473

Re: Massachusetts Natural Fertilizer Company, Inc. – MassDEP Comments on Revised Stockpile Sampling Plan prepared by Lessard Environmental, Inc. and revised by Tighe & Bond, Inc. dated June 30, 2022.

Dear Mr. Page:

The Massachusetts Department of Environmental Protection ("MassDEP") has reviewed the Revised Stockpile Sampling Plan, dated June 30, 2022 ("Plan"), prepared by Lessard Environmental, Inc. and revised by Tighe and Bond, Inc. for the Massachusetts Natural Fertilizer Company, Inc. (MNF) Site in Westminster, Massachusetts and hereby approves the attached plan with the following conditions:

1. MassDEP does not require the bark mulch (labeled as "BM" on the Plan figure) to be sampled and analyzed as part of this sampling program since according to the description of this material in the Plan the bark mulch is purchased in bulk and re-sold as-is, without any processing onsite.
2. MassDEP requires the sampling and analysis of the tailings stockpiles (labeled as "Q" on the Plan figure) since this material is a byproduct from the screening process for the Top Shelf loam and compost.
3. MassDEP does not require the additional stockpiles of finished compost/paper worm castings (labeled as "F" on the Plan figure) to be sampled and analyzed as part of this sampling program. According to the description of these stockpiles included in the Plan, they are not sold as-is, but are blended with other materials. Since the resulting stockpiles, which these materials were blended with, will be sampled and analyzed as part of the sampling program, they do not need to be sampled separately.
4. MassDEP requires the sampling and analysis of the stockpiles of intermediate material that have been spread in the two locations to support hay fields (labeled as "E" on the Plan figure) even though this material is not sold to the public.

This information is available in alternate format. Contact Glynis Bugg at 617-348-4040.

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5. MassDEP shall be notified, 14-days prior to performing any laboratory analysis, if there is a change in the laboratory analytical method proposed for this sampling program, for MassDEP review and approval.
6. MassDEP requires the Stockpile Materials Report shall include, where necessary, a description of the composition of the material in the stockpile. For example, the pile composition description will provide information such as *Red Mud stockpile is composed of insect excrement, tree bark, and diatomaceous earth or the Screened Top Shelf Loam stockpile consists of composted short paper fiber, sand, etc.*

As stated in the Plan, material sampling will be performed within ten calendar days of the date of this approval, and Mass Natural will provide me with at least three calendar days' notice prior to the sampling event. If you have any questions or comments regarding this matter, please contact me at 508-767-2759 or james.mcquade@mass.gov.

Sincerely,


James A. McQuade
Section Chief
Solid Waste Management Program

Attachment: Revised Stockpile Sampling Plan for Mass Natural, dated June 30, 2022

Ecc: Phil Leger, Interim Health Agent, Westminster Board of Health, 11 South Street, Westminster, MA 01473
(pleger@westminster-ma.gov)

Abby Conlin, Assistant Health Agent, Westminster Board of Health, 11 South Street, Westminster, MA 01473
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Michael Backunas, Senior Project Manager, Lessard Environmental, Inc., 121 Loring Avenue, Suite 454, Salem, MA 01970 (mbackunas@lessard-environmental.com)

George Hailer, Esq., Lawson & Weitzen, LLP, 88 Black Falcon Terminal, Boston, MA 02210 (ghailer@lawson-weitzen.com)

O-5028-001
June 30, 2022

James McQuade
MassDEP
8 New Bond Street
Worcester, MA 01606

Re: **Revised Stockpile Sampling Plan
Massachusetts Natural Fertilizer Co.
Westminster, MA**

Dear Mr. McQuade:

Massachusetts Natural Fertilizer (MNF) is in receipt of your letter dated June 7, 2022, regarding the Department's comments on the Proposed Stockpile Sampling Plan previously submitted by Lessard Environmental Inc. (LEI) on May 24, 2022. Tighe & Bond is working with LEI to assist MNF in characterizing the raw materials and finished compost to evaluate their suitability for composting and potential future uses of the finished compost; staff from either company may collect samples in the future. Please refer to the attached figure which shows the active site areas and locations of various stockpiles currently present on-site. We have modified the sampling plan in consideration of your comments, as follows:

Task 1: Stockpile Sampling and Laboratory Analysis

Incoming Staged Stockpile Sampling and Laboratory Analysis

Samples of incoming materials will be sampled prior to being composted. According to Massachusetts Natural Fertilizer Company (MNF), raw materials are currently stockpiled in an open area to the southeast of the office building with a second raw material storage area located to the north of office building. The generators of these materials have specific locations assigned to them to clearly maintain the identity of the materials. These stockpiles are typically small (<100 cy), requiring only one composite sample per pile. If the stockpiles exceed 100 cy, the pile will be divided such that each characterization sample represents no more than 100 cy of material.

Samples will be collected as composite samples comprised of at least nine aliquots; each pile will be divided into three sections with three aliquots collected from the top, middle and bottom of each section, to ensure the representativeness of the final composite sample. The aliquots will be placed in a stainless-steel bowl and homogenized prior to placement in the laboratory-supplied container for PFAS analysis. Clean nitrile gloves will be worn during all soil handling activities. The samples will be analyzed for PFAS using the laboratory's isotope dilution standard operating procedure for soil samples. Any samples collected following the issuance of EPA Method 1633 will be analyzed for PFAS by that method. MassDEP will be provided notice of changing methods prior to making such a change, for their approval.

Raw materials currently stockpiled on-site are shown on the attached figure and are listed below (as of June 14, 2022):

- Greif Paper/Bio-Pellets (mixed, A)
- Lettuce leaf/Rockwool (B)
- Seaman Paper sludge (C)
- Ball Company Filter Cake (Diatomaceous earth (DE), D)
- Tea leaves/Utz Chips (mixed, G)
- Medical marijuana roots (Potting Soil, I)
- Furniture Wood shavings/sawdust (Affordable Fines, Leominster, MA, M)
- Brewery grain (Wachusett Brewing, none left, not accepting more)
- Red Mud (Rust-O-leum, insect secretion, tree bark, DE, water, N)
- Cow manure (Jordan Farm, Rutland, MA, P)

Stockpiles labeled "J" are sand/gravel used to increase the permeability of the finished compost.

Ready for Retail Sale Staged Stockpile Sampling and Laboratory Analysis

MNF has indicated that there are currently three material stockpiles, which were considered ready for retail sale (no material is currently being sold).

According to MNF, three stockpiles, which consist of compost material ready for retail sale, is also staged onsite. The stockpiles are also approximately 100 cubic yards. As discussed above for the raw materials, this pile will be sampled as described above (dividing the pile into three sections with at least nine aliquots collected from the top, middle and bottom of each section) for PFAS analysis by isotope dilution analysis. Laboratory reporting limits must meet the RCS-1 Reportable Concentrations to be considered acceptable by MassDEP. These three piles are identified on the attached plan as piles H, K and L. Stockpile F is finished compost that is blended with other materials; it is not sold as-is.

Bark mulch (BM) is purchased and re-sold; it is not made on-site. Tailings (O) are generated from screening material from Top Shelf topsoil and compost. This has been sold as fill.

Staged Windrow Stockpile Sampling and Laboratory Analysis

Will be sampled

There is one large windrow of material staged onsite, along with several smaller piles of intermediate material. Field measurements will verify the volume of material of each windrow. The windrow will be sampled at a rate of one sample per 100 cy using the approach described previously and will be analyzed for PFAS by the laboratory's isotope dilution method. Laboratory reporting limits must meet the RCS-1 Reportable Concentrations to be considered acceptable by MassDEP.

These piles are identified as "E" on the attached plan.

There are two additional areas where "E" intermediate material is visible at the eastern extent of the site and in the north-central portion of the site. Material has been placed and spread at these locations to support hay fields and is not for sale to the public.

Laboratory Analysis

As stated above, material analysis will be performed by the isotope dilution method. The laboratory has expressed reservations about being able to achieve reporting limits (RLs) that are sufficiently low to meet the RCS-1 values. It is important to keep in mind that these samples are not soil; they are high organic content materials that have limited solids content. These two characteristics hinder the analytical process and make it difficult to achieve sufficiently low RLs. It is our understanding that the isotope dilution method used is very similar to EPA Method 1633, so using that method, once approved for use by USEPA, is not expected to perform any better than the current method. Given these uncertainties, it may be necessary to modify the analytical approach. We will notify MassDEP of any proposed changes to the laboratory methods used.

Material sampling will be performed within ten calendar days of our receipt of MassDEP's approval of this plan. We will provide James McQuade (james.mcquade@mass.gov) with at least three calendar days' notice prior to the sampling event. All samples will be tracked using standard chain-of-custody protocols. For QA/QC purposes, one field blank and one equipment blank will be collected per sampling day.

Task 2: Stockpile Materials Report – The data for the raw and finished materials will be provided to MassDEP as it is received from the laboratory. Within 30 days of the completion of the sample collection, a summary report documenting the results and how those results compare to the RCS-1 values provided in the Massachusetts Contingency Plan (MCP), as required by MassDEP's May 17, 2022, Unilateral Administrative Order, will be prepared.

MNF is proposing that rather than generate a surveyed site plan, that an aerial photograph taken by drone, showing current conditions (similar to the attached plan), be marked up to show the current location and dimensions of the various piles of raw, in-process and finished materials. This plan will identify the material piles and the sample designations applicable to each pile.

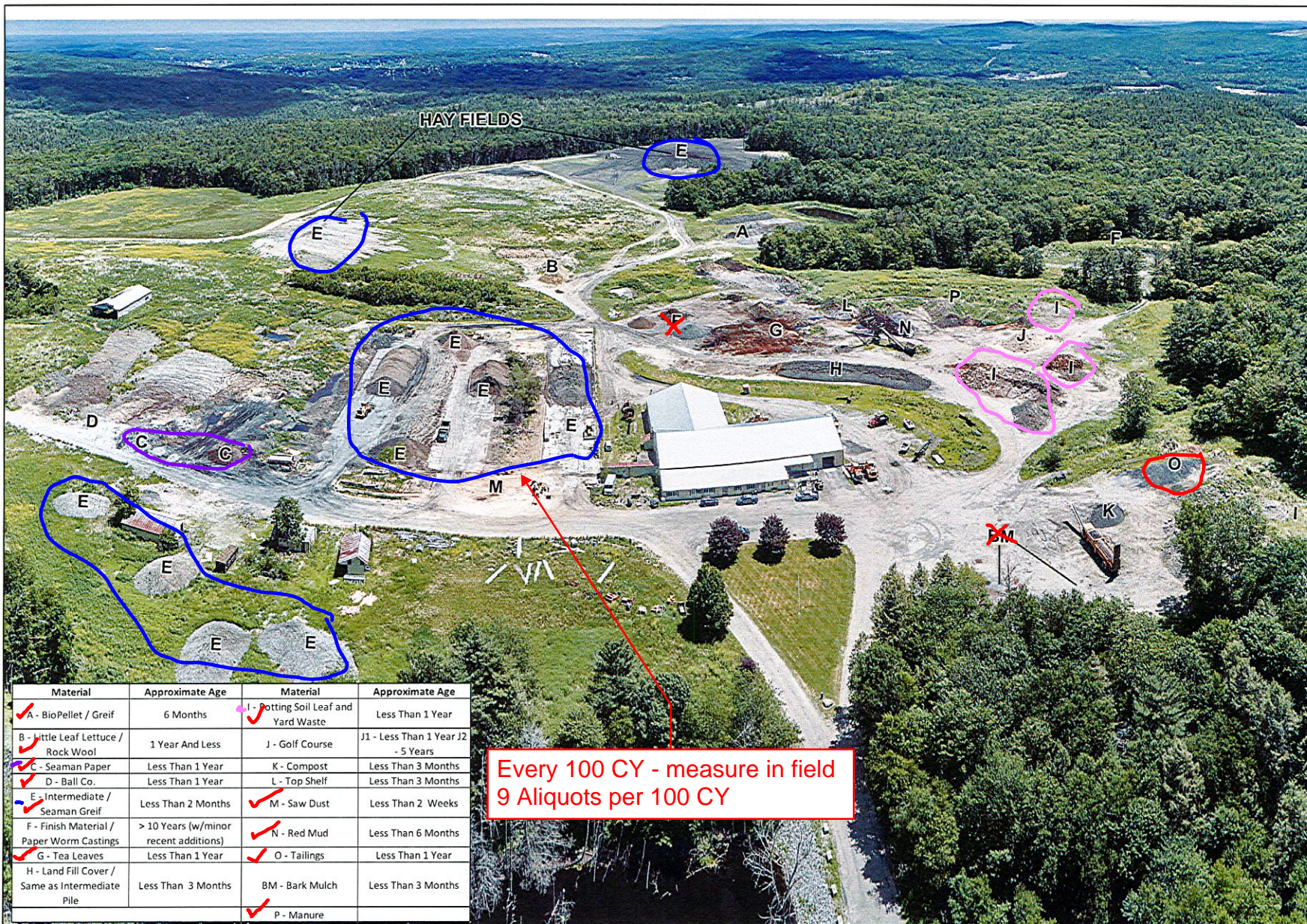
As MassDEP may be aware, some initial grab samples were collected from various materials prior to receipt of the Department's comments on the sampling plan, and as such, were not collected in conformance with those comments. We are preparing a data submittal to convey those results to the Department no later than June 30, 2022.

Very truly yours,

TIGHE & BOND, INC.



Jeffrey L. Arps, LSP
Vice President



HAY FIELDS

MATERIAL LOCATIONS

LOCUS MAP



NOTES

1. Aerial photo was taken by Larry Lessard on June 14, 2022.



Massachusetts Natural Fertilizer
65 Bean Porridge Hill Road
Westminster, Massachusetts

June 2022



Material	Approximate Age	Material	Approximate Age
✓ A - BioPellet / Greif	6 Months	✓ I - Potting Soil Leaf and Yard Waste	Less Than 1 Year
✓ B - Little Leaf Lettuce / Rock Wool	1 Year And Less	J1 - Golf Course	J1 - Less Than 1 Year J2 - 5 Years
✓ C - Seaman Paper	Less Than 1 Year	K - Compost	Less Than 3 Months
✓ D - Ball Co.	Less Than 1 Year	L - Top Shelf	Less Than 3 Months
✓ E - Intermediate / Seaman Greif	Less Than 2 Months	✓ M - Saw Dust	Less Than 2 Weeks
F - Finish Material / Paper Worm Castings	> 10 Years (w/minor recent additions)	✓ N - Red Mud	Less Than 6 Months
✓ G - Tea Leaves	Less Than 1 Year	✓ O - Tailings	Less Than 1 Year
H - Land Fill Cover / Same as Intermediate Pile	Less Than 3 Months	BM - Bark Mulch	Less Than 3 Months
		✓ P - Manure	

Every 100 CY - measure in field
9 Aliquots per 100 CY