Compost sites that accept more than 20,000 cubic yards of yard residuals or more than 50 cubic yards of source-separated compostable material are required to submit a plan of operation. This document outlines the expected content of a compost facility plan of operation. If you still have questions about the contents of a plan of operation after reading this document, please contact the waste management specialist assigned to the county where the compost site is located.

Note: The plan of operation must be certified by a licensed professional engineer for yard residuals facilities exceeding 20,000 cubic yards’ capacity or source-separated compostable material facilities exceeding 5,000 cubic yards’ capacity.

☐ Enclose a drawing of proposed facility (consider using a mapping tool such as Google Maps) and include:
   a. Property boundaries
   b. A scale and north arrow
   c. Location and size of active piles or windrows, the staging piles, curing piles and finished compost storage area
      Note: Allow a minimum of 6-8 ft. for equipment between rows
   d. Direction pad is sloping relative to windrow direction
   e. On-site traffic and process flow
      Note: Trucks need room to enter, dump, turn around and leave
   f. Staging areas
   g. Routes to transport raw materials and finished compost to and from facility
   h. Land use denoted on adjoining properties

☐ Where is the property located?
   • Include name of project, address and township, section, range
   • Describe the land use within ¼ mile of the proposed facility. Will this be in a residential, light industrial, rural area, etc.?

☐ Describe the project including what area will be served and what materials will be used for feedstock. Indicate the source of the feed stocks.
Provide the following information about each of the raw materials in the feedstock:

a. Estimated annual weight (tons)
b. Estimated annual volume (cubic yards)
c. Typical C:N ratio
d. Typical moisture content

Describe what will happen to the material after it enters the site and before it is incorporated into a windrow. For example, will it be stored, reduced in size, placed in a bay, emptied out of bags? Include estimated time for each step.

Describe the recipe for your compost and how you will test the C:N ratio. Calculators for C:N ratios are available at:

- Cornell Waste Management Institute under the first reference under “Large Composting” – C:N ratio calculator
- Klickitat County, Goldendale, Washington – Compost Mix Calculator

Describe how you will monitor the compost process to ensure that it is performing properly (i.e., temperature, moisture content, when turning will occur). How will you know when the compost is done and ready for curing?

- Temperature – http://compost.css.cornell.edu/monitor/monitortemp.html
- Moisture content – http://compost.css.cornell.edu/monitor/monitormoisture.html
- Turning – http://compost.css.cornell.edu/Factsheets/FS7.html
- Refer to the DNR publication “Temperature Monitoring and Recordkeeping at Licensed Compost Facilities”

What type of vehicles will be used to transport raw materials and finished compost to and from the site? What type of equipment will be used for turning or mixing and screening?

- Information on compost equipment – Compost Fact Sheet

What are the potential markets for the compost and what type of compost is needed to meet the markets?

What types of non-compostable waste, such as bags, will be generated while making compost and which solid waste disposal facility will be used for disposal of the waste?

What type of pad will be used below the compost site and how thick will it be?

- Possible options: compacted clay or other fine-grained soil, recycled asphalt or concrete, new asphalt, new concrete, gravel

Do you plan to test the finished compost?

- If you wish to sell the compost as Class A compost, you’ll need to run specific testing of the finished compost specified in NR 502.12(16). If you’re not planning to sell the compost as Class A compost, testing is not required unless you are using animal manure as one of the raw materials.

Provide a summary of the storm water pollution prevention plan (SWPPP) for the site.

- Use the “Storm Water Pollution Prevention Plan” worksheet http://dnr.wi.gov/files/PDF/pubs/wa/wa1587.pdf to develop a SWPPP.
What local zoning and permit requirements apply to the proposed site?

**Note:** The DNR Storm Water Management program requires a new or expanding compost site that disturbs 1 acre or more to obtain a construction site storm water permit. This permit is needed to assure that run-off from the construction does not impact nearby surface water. The permit expires once the site has been constructed and areas are vegetated and stabilized. More information on obtaining a construction permit is available at: [http://dnr.wi.gov/topic/stormwater/construction/](http://dnr.wi.gov/topic/stormwater/construction/)

Provide an estimate of closure costs and proof of financial responsibility for those costs if the materials on site at any one time will exceed:

- 40,000 cy of yard residuals and clean chipped wood
- 10,000 cy of SSCM other than yard residuals and clean chipped wood
- 5,000 cy of food residuals

**Note:** Closure includes the removal, transport and ultimate disposal of all remaining waste material and compost at the site.

**Note:** In addition to preparing a plan of operation, compost facilities accepting greater than 20,000 cubic yards of yard residuals or greater than 5,000 cubic yards of source-separated compostable material must also meet minimum operational standards in NR 502.12(10), minimum design standards in NR 502.12(11) and additional operational and design standards in NR 502.12(12).

Contact [DNRWasteMaterials@wisconsin.gov](mailto:DNRWasteMaterials@wisconsin.gov) for further information.

**Disclaimer:** This document is intended solely as guidance and does not contain any mandatory requirements except where requirements found in statute or administrative rule are referenced. Any regulatory decisions made by the Department of Natural Resources in any matter addressed by this guidance will be made by applying the governing statutes and administrative rules to the relevant facts.

**Equal Opportunity Employer and Americans with Disabilities Act Statement:** The Wisconsin Department of Natural Resources provides equal opportunity in its employment, programs, services, and functions under an Affirmative Action Plan. If you have any questions, please write to Chief, Public Civil Rights, Office of Civil Rights, U.S. Department of the Interior, 1849 C. Street, NW, Washington, D.C. 20240.

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**Pursuant to ch. 227, Wis. Stats., the Wisconsin Department of Natural Resources has finalized and hereby certifies the following guidance document.**

<table>
<thead>
<tr>
<th>DOCUMENT ID</th>
<th>WA-19-1586-C</th>
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<tbody>
<tr>
<td>DOCUMENT TITLE</td>
<td>Plan of Operation Checklist for Compost Facilities</td>
</tr>
<tr>
<td>PROGRAM/BUREAU</td>
<td>Waste and Materials Management</td>
</tr>
<tr>
<td>STATUTORY AUTHORITY OR LEGAL CITATION</td>
<td>Ch. 289, Wis. Stats., Ch. NR 502, Wis. Adm. Code</td>
</tr>
<tr>
<td>DATE SENT TO LEGISLATIVE REFERENCE BUREAU (FOR PUBLIC COMMENTS)</td>
<td>November 18, 2019</td>
</tr>
<tr>
<td>DATE FINALIZED</td>
<td>December 11, 2019</td>
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<tr>
<td>DNR CERTIFICATION</td>
<td>I have reviewed this guidance document or proposed guidance document and I certify that it complies with sections 227.10 and 227.11 of the Wisconsin Statutes. I further certify that the guidance document or proposed guidance document contains no standard, requirement, or threshold that is not explicitly required or explicitly permitted by a statute or a rule that has been lawfully promulgated. I further certify that the guidance document or proposed guidance document contains no standard, requirement, or threshold that is more restrictive than a standard, requirement, or threshold contained in the Wisconsin Statutes.</td>
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_____________________________  December 11, 2019
Signature                      Date