

Plan of Operation Checklist for Compost Facilities

[NR 502.12(13)]

Publication WA 1586
Rev. 2012



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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 ([Recycling Waste Management Specialist](#)).

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:
- Estimated annual weight (tons)
 - Estimated annual volume (cubic yards)
 - Typical C:N ratio
 - 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 turning equipment – <http://cwmi.css.cornell.edu/compostfs7.pdf>
- What are the potential markets for the compost and what type of compost is needed to meet the markets?
- Contact UW-Extension Solid and Hazardous Waste Education Center at www.uwex.edu/shwec
- 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?
- Information on compost pads – <http://cwmi.css.cornell.edu/compostfs6.pdf>
 - 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/>

- 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 608/266-2111 or DNRWasteMaterials@wisconsin.gov for further information.

Disclaimers: This document is intended solely as guidance and does not include any mandatory requirements except where requirements found in statute or administrative rule are referenced. This guidance does not establish or affect legal rights or obligations and is not finally determinative of any of the issues addressed. This guidance does not create any rights enforceable by any party in litigation with the State of Wisconsin or the Department of Natural Resources. Any regulatory decisions made by the Department of Natural Resources in any manner addressed by this guidance will be made by applying the governing statutes and administrative rules to the relevant facts.

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