

1.1 **Pollution Control Agency**

1.2 **Adopted Permanent Rules Relating to Compost Facilities**

1.3 **7001.3050 PERMIT REQUIREMENTS.**

1.4 [For text of subp 1, see M.R.]

1.5 Subp. 2. **Exclusions.** A solid waste management facility permit is not required:

1.6 A. for backyard compost sites and small compost sites as defined in part
1.7 7035.0300;

1.8 [For text of items B to I, see M.R.]

1.9 [For text of subps 3 and 4, see M.R.]

1.10 **7001.3075 SOLID WASTE MANAGEMENT FACILITY PERMIT APPLICATION.**

1.11 [For text of subps 1 to 3, see M.R.]

1.12 Subp. 4. **Source-separated organic material compost facilities extended permit**
1.13 **term.**

1.14 A. For source-separated organic material compost facilities as defined in part
1.15 7035.2836 that have operated under an existing permit issued under parts 7001.0010 to
1.16 7001.0200, no application is required for permit reissuance upon the expiration date
1.17 of the permit and the term of the permit shall be extended indefinitely unless (1) the
1.18 commissioner requires the facility to be repermited as provided in part 7001.3410,
1.19 subpart 3, or (2) the owner or operator of the facility proposes a major modification to the
1.20 facility. In either of these cases, the owner and operator shall submit an application for
1.21 reissuance or modification of the permit as provided in this chapter. The commissioner
1.22 shall process the application following the procedures in this chapter. For purposes of this
1.23 part, "operated" means to have accepted source-separated organic material as defined in
1.24 part 7035.0300, subpart 105a, for composting at levels constituting normal expected
1.25 volumes for facilities for a minimum of one year during the most recent five-year term

2.1 of the permit, such that the agency can reasonably conclude that the facility is operating
2.2 in compliance with applicable rules and its permit. For purposes of this part, a "major
2.3 modification" means a change in the type of materials managed at the facility, an increase
2.4 beyond the original permitted capacity, or a change that could significantly affect
2.5 compliance with the design or operation standards of part 7035.2836, subparts 8 and 9.

2.6 B. Owners and operators of source-separated organic material compost
2.7 facilities operating under an extended permit may make minor modifications as listed in
2.8 part 7001.3550, subpart 3, at any time, provided that notice of the minor modification is
2.9 given to the agency as provided in part 7001.3410, subparts 1 and 2. Owners of facilities
2.10 operating under an extended permit must comply with the requirements in part 7001.0190,
2.11 subpart 2, before transferring ownership and control of the facility. Owners or operators of
2.12 source-separated organic material compost facilities operating under an extended permit,
2.13 as provided in this subpart, must submit to the agency the notification required by part
2.14 7001.3410, and the annual report required under part 7035.2585.

2.15 **7001.3375 FINAL APPLICATION INFORMATION REQUIREMENTS FOR**
2.16 **COMPOST FACILITIES.**

2.17 The application for a compost facility permit must include the following information
2.18 in addition to the information required by part 7001.3300:

2.19 [For text of items A to C, see M.R.]

2.20 D. a description of the composition of the rejects and residuals;

2.21 E. a description of the disposal method for the rejects and residuals;

2.22 [For text of items F to H, see M.R.]

2.23 I. an operating plan indicating how the provisions of part 7035.2836 will be
2.24 met, including a waste analysis plan;

2.25 J. a description of the proposed uses for the compost;

3.1 K. a workplan for any proposed soil characterization to comply with part
3.2 7035.2836, subpart 9, item B, subitem (8). Once the workplan is approved by the
3.3 commissioner, the owner or operator of a source-separated organic material compost
3.4 facility must submit a report summarizing field activities used for the site characterization
3.5 to the commissioner for review and approval prior to issuance of the permit; and

3.6 L. for source-separated organic material compost facilities, evidence that the
3.7 owner and operator have obtained all necessary approvals from the municipality, as defined
3.8 under part 7035.0300, subpart 67. A municipality that has submitted a permit application
3.9 under this part is not required to submit a municipality approval. The owner or operator
3.10 must submit a copy of any approvals obtained from a municipality. If the facility is located
3.11 in an area where no municipality approval is required, the owner or operator must submit
3.12 a signed written statement indicating that no municipality approval is required.

3.13 **7001.3410 EXTENDED PERMIT NOTIFICATION AND TERMINATION**
3.14 **PROCEDURES.**

3.15 Subpart 1. **Notification contents.** Owners or operators of transfer facilities or
3.16 source-separated organic material compost facilities operating under an extended permit
3.17 shall submit to the agency, upon the anniversary of the expiration date of the permit, and
3.18 every five years thereafter, a notification containing the following information:

3.19 [For text of items A to E, see M.R.]

3.20 [For text of subp 2, see M.R.]

3.21 Subp. 3. **Termination of extended permit operation as allowed under part**
3.22 **7001.3075.** The agency shall notify the owner or operator of a transfer facility or a
3.23 source-separated organic material compost facility operating under an extended permit
3.24 that the transfer facility or source-separated organic material compost facility is no longer
3.25 eligible to operate under an extended permit and must be repermited under chapter 7001
3.26 under any of the following conditions:

4.1 A. the transfer facility or source-separated organic material compost facility
4.2 has unresolved noncompliance or has not been operated substantially in accordance with
4.3 applicable standards;

4.4 [For text of items B and C, see M.R.]

4.5 D. the owner or operator has failed to submit the notification or the annual
4.6 report required under part 7035.2585.

4.7 In the termination notice, the agency shall state the reasons why the agency proposes
4.8 to require repermitting of the facility and shall provide the owner or operator with 30 days
4.9 to respond to the notice. Following receipt of the response, if any, the agency shall make
4.10 a final determination and shall notify the owner and operator of that decision. Upon
4.11 receipt of this final determination, the owner or operator may elect to seek to continue the
4.12 operation of the transfer facility or source-separated organic material compost facility by
4.13 submitting a permit application, or may close the facility. If the owner or operator elects to
4.14 continue the operation, the owner or operator shall submit a permit application within 30
4.15 days of receipt of the final determination. The commissioner shall process the application
4.16 following the procedures in chapter 7001. If the owner or operator elects to close the
4.17 facility, the owner or operator must notify the agency and initiate closure procedures
4.18 within 30 days of receipt of the final determination.

4.19 **7035.0300 DEFINITIONS.**

4.20 [For text of subps 1 to 6, see M.R.]

4.21 Subp. 7. **Backyard compost site.** "Backyard compost site" means a site used to
4.22 compost food scraps, garden wastes, weeds, lawn cuttings, leaves, and prunings from a
4.23 single family or household, ~~apartment building, or a single commercial office, a member~~
4.24 ~~of which is the owner, occupant, or lessee of the property.~~

4.25 [For text of subps 7a to 20, see M.R.]

5.1 Subp. 20a. **Contact water.** "Contact water" means water that has come into contact
5.2 with source-separated organic material in the tipping area, source-separated organic
5.3 material in the mixing area, rejects, residuals, or active compost. For purposes of this
5.4 subpart, compost is active until it has reached PFRP as described in part 7035.2836, subpart
5.5 11, item B, subitem (10), and the Solvita maturity index is greater than or equal to five
5.6 with ammonia greater than or equal to four. An owner or operator may use an alternative
5.7 test method as provided by part 7035.2836, subpart 9, item B, subitems (3) and (9).

5.8 [For text of subps 21 to 92, see M.R.]

5.9 Subp. 92a. **Rejects.** As applied to source-separated organic material compost
5.10 facilities, "rejects" means:

- 5.11 A. inorganic materials that cannot be rendered into a humus-like material;
- 5.12 B. materials that are unacceptable due to permit conditions;
- 5.13 C. materials that are unacceptable according to subpart 99a, item B; or
- 5.14 D. materials that are unacceptable according to subpart 105a, items B and C.

5.15 [For text of subps 93 and 93a, see M.R.]

5.16 Subp. 93b. **Residuals.** As applied to source-separated organic material compost
5.17 facilities, "residuals" means organic materials that require further composting due to their
5.18 large size, such as tree branches.

5.19 [For text of subps 94 to 99, see M.R.]

5.20 Subp. 99a. **Small compost site.** "Small compost site" means a site that:

- 5.21 A. is used to compost:
 - 5.22 (1) food scraps;
 - 5.23 (2) yard waste;

6.1 (3) poultry litter generated on site only if the compost produced is used on
6.2 site;

6.3 (4) nonrecyclable paper; or

6.4 (5) compostable materials meeting ASTM D6400 or ASTM D6868,
6.5 incorporated by reference under part 7035.0605;

6.6 B. does not accept fats, oils, grease, meat, dairy, animal manure, diapers, or
6.7 sanitary products;

6.8 C. does not exceed ~~80~~ 120 cubic yards on site at any one time, ~~including~~
6.9 ~~collected raw materials and compost being processed, but excluding finished compost; and~~

6.10 D. ~~is where the materials under item A are managed to minimize odor and~~
6.11 ~~the creation of nuisances and public health risks.~~ is where the materials under item
6.12 A are managed to:

6.13 (1) minimize odor;

6.14 (2) avoid the creation of nuisances and public health risks;

6.15 (3) prevent groundwater contamination as required by part 7035.2565,
6.16 subparts 1 and 2;

6.17 (4) prevent surface water contamination as required by part 7035.2565,
6.18 subparts 1 and 2;

6.19 (5) comply with air pollution rules as required by part 7035.2565, subpart
6.20 3; and

6.21 (6) minimize soil contamination as required by part 7035.2565, subpart
6.22 4; and

6.23 E. is not located in a floodplain, shoreland, or wetland according to part
6.24 7035.2555.

7.1 [For text of subps 100 to 105, see M.R.]

7.2 Subp. 105a. **Source-separated organic material.**

7.3 A. "Source-separated organic material" means:

7.4 (1) source-separated compostable materials and yard waste, as defined
7.5 under Minnesota Statutes, section 115A.03, except sanitary products and diapers;

7.6 (2) vegetative wastes generated from industrial or manufacturing processes
7.7 that prepare food for human consumption; and

7.8 (3) compostable materials that meet the standards in ASTM D6400 and
7.9 ASTM D6868, incorporated by reference under part 7035.0605.

7.10 B. Unless specifically permitted by the commissioner under part 7001.0150,
7.11 source-separated organic material does not include:

7.12 (1) animal wastes such as manure or carcasses;

7.13 (2) fish wastes generated from industrial or manufacturing processes;

7.14 (3) meat by-products generated from industrial or manufacturing processes;

7.15 (4) sanitary products; or

7.16 (5) diapers.

7.17 C. Source-separated organic material does not include:

7.18 (1) septage; or

7.19 (2) sewage sludge, as defined in part 7041.0100, subpart 49.

7.20 Subp. 105b. **Source-separated organic material compost facility.**

7.21 "Source-separated organic material compost facility" means:

7.22 A. a site used to compost source-separated organic material;

8.1 B. all structures or processing equipment used to compost source-separated
8.2 organic material; and

8.3 C. all structures or equipment used to:

8.4 (1) control drainage;

8.5 (2) manage contact water;

8.6 (3) manage storm water;

8.7 (4) manage incoming material;

8.8 (5) manage the finished product; or

8.9 (6) manage rejects and residuals resulting from the composting process.

8.10 [For text of subps 106 to ~~121~~ 111b, see M.R.]

8.11 Subp. 111c. **Vector.** "Vector" means any organism capable of transporting infectious
8.12 agents to or from a source-separated organic material compost facility. Examples of
8.13 vectors are rodents, flies, mosquitoes, and birds.

8.14 Subp. 111d. **Vector intrusion.** "Vector intrusion" means a situation where vectors
8.15 are present resulting in a nuisance condition at a source-separated organic material
8.16 compost facility.

8.17 [For text of subps 112 to 121, see M.R.]

8.18 **7035.0605 AVAILABILITY OF REFERENCES.**

8.19 A. The documents needed for analyzing and classifying soils as required in
8.20 parts 7035.0300 to 7035.2915 may be obtained by contacting the Engineering Library of
8.21 the University of Minnesota, through the Minitex interlibrary loan system, and requesting
8.22 the standards from the American Society for Testing and Material, in the Annual Book of
8.23 ASTM Standards, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

9.1 B. The publication for classification of wetlands, titled "Classification of
9.2 Wetlands and Deep Water Habitats of the United States," may be obtained through the
9.3 Minitex interlibrary loan system or by requesting the publication from the Superintendent
9.4 of Documents, United States Government Printing Office, Washington, D.C. 20402.

9.5 C. Test Methods for Evaluating Solid Waste, EPA SW-846, Third Edition,
9.6 November 1986, issued by the United States Environmental Protection Agency (EPA),
9.7 is incorporated by reference. Sections of this document which are directly relevant to
9.8 parts 7035.2885 to 7035.2915 are available through the Minitex interlibrary loan system.
9.9 The entire document is available from EPA Environmental Monitoring and Support
9.10 Laboratory, Cincinnati, Ohio, 45268. It is not subject to frequent change.

9.11 D. The document Standard Number 54: Flexible Membrane Liners, May 1990,
9.12 issued by the National Sanitation Foundation, is incorporated by reference. It is available
9.13 through the Minitex interlibrary loan system. It is not subject to frequent change.

9.14 E. EPA Document 600/4-79-020 Methods for Chemical Analyses of Water and
9.15 Wastes, appearing in Code of Federal Regulations, title 40, part 136, 1990, is incorporated
9.16 by reference. The document is available through the Minitex interlibrary loan system and
9.17 EPA Environmental Monitoring and Support Laboratory, Cincinnati, Ohio, 45268. It is
9.18 not subject to frequent change.

9.19 F. EPA Method 1312: the Synthetic Precipitation Leach Test for Soils (draft
9.20 document, no date available) is incorporated by reference. The method is available
9.21 through the Minitex interlibrary loan system. A copy of the method may also be obtained
9.22 from the commissioner. The draft method is not subject to frequent change.

9.23 G. EPA Method 8290, November 1990, is incorporated by reference. The
9.24 method is available through the Minitex interlibrary loan system and EPA Office of Solid
9.25 Waste, Characterization and Assessment Division, Technical Assessment Branch, OS-331,
9.26 Washington, D.C., 20460. The method is not subject to frequent change.

10.1 H. American Society for Testing and Materials (ASTM) Methods D3173 and
10.2 D3174 are incorporated by reference. These methods are published in the Annual Book of
10.3 ASTM Standards: Part 26, Gaseous Fuels; Coal and Coke; Atmospheric Analysis, 1981
10.4 Edition. This publication is available through the Minitex interlibrary loan system. The
10.5 methods are not subject to frequent change.

10.6 I. American Society for Testing and Materials (ASTM) Standards D6400
10.7 "Standard Specification for Labeling of Plastics Designed to be Aerobically Composted
10.8 in Municipal or Industrial Facilities" (2012 and as subsequently amended) and D6868
10.9 "Standard Specification for Labeling of End Items that e Incorporate Plastics and Polymers
10.10 as Coatings or Additives with Paper and Other Substrates Designed to be Aerobically
10.11 Composted in Municipal or Industrial Facilities" (2011 and as subsequently amended),
10.12 ASTM International, are incorporated by reference. The standards are not subject to
10.13 frequent change and are available through the Minitex interlibrary loan system.

10.14 J. Minnesota Department of Transportation, Road Design Manual (2012 and as
10.15 subsequently amended) is incorporated by reference, is subject to frequent change, and is
10.16 available at <http://www.roaddesign.dot.state.mn.us/roaddesign.aspx>.

10.17 **7035.2525 SOLID WASTE MANAGEMENT FACILITIES GOVERNED.**

10.18 [For text of subp 1, see M.R.]

10.19 Subp. 2. **Exceptions.** Parts 7035.2525 to 7035.2915 do not apply to the following
10.20 solid waste management facilities or persons, except as indicated:

10.21 A. ~~small compost sites must only comply with parts 7035.2535, subpart 1, items~~
10.22 ~~A to E; 7035.2555; and 7035.2565~~ backyard compost sites;

10.23 [For text of items B to ~~K~~I, see M.R.]

11.1 J. temporary community cleanup event transfer facilities in compliance with
11.2 part 7001.3050, subpart 2, item H, must only comply with parts 7035.2535, subpart 1;
11.3 7035.2565, subparts 1, 3, and 4; and 7035.2870, subpart 2; ~~and~~

11.4 K. limited collection transfer facilities in compliance with part 7001.3050,
11.5 subpart 2, item I, must only comply with parts 7035.2535, subpart 1; 7035.2555;
11.6 7035.2565, subparts 1, 3, and 4; and 7035.2870, subpart 2; and

11.7 L. small compost sites must only comply with parts 7035.2535, subpart 1,
11.8 items A to E; 7035.2555; and 7035.2565.

11.9 **7035.2585 ANNUAL REPORT.**

11.10 The owner or operator of a solid waste management facility shall prepare and
11.11 submit a single copy of an annual report to the commissioner no later than February 1
11.12 for the preceding calendar year. A report form and instructions may be obtained from the
11.13 commissioner. The annual report must cover all facility activities during the previous
11.14 calendar year and must include the following information:

11.15 [For text of items A to H, see M.R.]

11.16 I. the summary evaluation reports required for the specific solid waste
11.17 management facilities in parts 7035.2825, subpart 9; 7035.2836, subparts 3, item G, 5,
11.18 items J and K, and 11, item B, subitem (14); 7035.2845, subpart 4a; and 7035.2875,
11.19 subpart 5;

11.20 [For text of items J and K, see M.R.]

11.21 L. for transfer facilities or source-separated organic material compost facilities
11.22 operating under an extended permit term, the information required in part 7001.3410,
11.23 subpart 2.

11.24 Waste facilities that do not dispose of waste need not include items D, H, and I.

12.1 **7035.2836 COMPOST FACILITIES.**

12.2 Subpart 1. **Scope.** The owner or operator of a yard waste compost facility must
12.3 comply with subparts 2 and 3 only. The requirements of subparts 4 to 7 apply to the
12.4 owner and operator of a facility used to compost solid waste. The owner or operator of a
12.5 source-separated organic material compost facility must comply with subparts 6 to 11.

12.6 [For text of subps 2 to 7, see M.R.]

12.7 Subp. 8. **Location requirements for a source-separated organic material**
12.8 **compost facility.** An owner or operator must not establish or construct a source-separated
12.9 organic material compost facility in the following areas:

12.10 A. within locations described in part 7035.2555;

12.11 B. on a site with karst features including sinkholes, disappearing streams, and
12.12 caves;

12.13 C. within five vertical feet of the water table; and

12.14 D. unless a different distance is specified by a local unit of government by
12.15 ordinance, within 500 feet horizontal separation distance as measured from the closest edge
12.16 of all compost activities to the closest edge of a property boundary of the nearest residence,
12.17 place of business, or public area, such as parks, wildlife areas, and public buildings, except:

12.18 (1) upon approval of the commissioner, operational modifications,
12.19 geographic features, or other natural or man-made physical characteristics that reduce
12.20 nuisance conditions, such as noise, litter, and odor, may be used to reduce the 500-foot
12.21 horizontal separation distance; and

12.22 (2) adjacent commercial activities operated by the facility owner are
12.23 excluded from the 500-foot horizontal separation requirement for the owner's residence or
12.24 place of business.

13.1 Subp. 9. **Design requirements for a source-separated organic material compost**
13.2 **facility.**

13.3 A. The owner or operator of a source-separated organic material compost
13.4 facility must submit an engineering design report to the commissioner for approval with
13.5 the facility permit application.

13.6 B. The engineering design report must comply with the design requirements
13.7 in subitems (1) to (10).

13.8 (1) Site preparations must include clearing and grubbing for the compost
13.9 operating and storage areas, building locations, topsoil stripping, excavations, berm
13.10 construction, drainage control structures, storm water management systems, contact water
13.11 collection systems, access roads, screening, fencing, and other special design features.

13.12 (2) Access to the facility must be controlled to prevent unauthorized entry.
13.13 A perimeter fence and gate, enclosed structures, or other physical barriers must be used to
13.14 prevent unauthorized entry to the facility.

13.15 (3) Storm water drainage must be diverted around and away from the
13.16 compost storage and operating areas. The storm water drainage control system must be
13.17 designed to manage a 24-hour, 10-year storm event. A storm water drainage control
13.18 system, including changes in the site topography, ditches, berms, sedimentation ponds,
13.19 culverts, energy breaks, and erosion control measures, must comply with part 7035.2855,
13.20 subpart 3, items C to E. For purposes of this subpart, water that has come into contact
13.21 with compost in the curing and finished storage areas is considered storm water. For
13.22 purposes of this subpart, compost has reached the curing stage after PFRP as described
13.23 in subpart 11, item B, subitem (10), has been achieved and the Solvita maturity index is
13.24 greater than or equal to five with the ammonia greater than or equal to four. An owner
13.25 or operator may use alternative test methods that are approved by the commissioner as
13.26 equivalent to those listed in this subitem.

14.1 (4) Contact water must be diverted to a contact water collection and
14.2 treatment system. The contact water collection and treatment system must comply with
14.3 applicable portions of part 7035.2815, subpart 9. For purposes of this subpart, immature
14.4 compost is defined as not having reached the curing stage described in subitem (3).

14.5 (5) The facility must be designed for collection of rejects and residuals and
14.6 must provide for the final transportation and proper disposal of rejects and management of
14.7 residuals.

14.8 (6) The tipping, mixing, active composting, curing, and storage areas for
14.9 compost must be located on a hard-packed, all-weather surface capable of minimizing
14.10 migration of materials or contact water into the subsurface soil, groundwater, and surface
14.11 water.

14.12 (7) The working surface of a source-separated organic material compost
14.13 facility must have a minimum of five feet of soil separation to the water table.

14.14 (8) Unless designed as allowed under subitem (9), the site must have at least
14.15 five feet of any combination of the following soil types comprising the soil profile above
14.16 the water table: sandy clay loam, sandy clay, clay loam, silty clay loam, silty clay, and clay.
14.17 An owner or operator may use an alternate separation distance according to unit (a). Water
14.18 tables classified as perched or epi-saturated by the United States Department of Agriculture,
14.19 Natural Resources Conservation Service, are not considered to be the seasonal high water
14.20 table. The soil profile must be characterized by the use of soil borings, piezometers, or test
14.21 pits as certified by a Minnesota-licensed soil scientist, engineer, or geologist. The owner
14.22 or operator may propose the use of alternative methods for soil profiles according to unit
14.23 (b). If the site cannot meet the soil criteria, an impervious pad or liner must be installed
14.24 under all activity areas except curing and storage of finished compost.

15.1 (a) The owner or operator may use an alternative separation distance
15.2 that is approved by the commissioner as equivalent to that listed in this subitem if, during
15.3 the previous five years:

15.4 i. the site has experienced an abnormally wet period or an
15.5 abnormally dry period; and

15.6 ii. the elevation of the water table at the site has changed.

15.7 The alternative separation distance must maintain a sufficient distance between the water
15.8 table and compost activities to account for the movement of the water table through
15.9 normal wet and dry years.

15.10 (b) An owner or operator may use alternative methods that are
15.11 approved by the commissioner as equivalent if the owner or operator can demonstrate that
15.12 the alternative methods provide soil profile characterization substantially equivalent to
15.13 characterization by soil borings, piezometers, or test pits.

15.14 (9) Owners and operators whose sites are unable to meet the soil
15.15 requirement listed under subitem (8) must install a pad system in all areas where
15.16 source-separated organic materials will be managed and composted prior to curing. For
15.17 the purposes of this subpart, compost has reached the curing stage after PFRP as described
15.18 in subpart 11, item B, subitem (10), has been achieved and the Solvita maturity index
15.19 is greater than or equal to five with an ammonia test result of greater than or equal to
15.20 four. An owner or operator may use alternative test methods that are approved by the
15.21 commissioner as equivalent to those listed in this subitem. Sites requiring a pad must
15.22 comply with one of the options listed in units (a) to (c).

15.23 (a) If a geomembrane is used, the liner system must be designed and
15.24 built according to the applicable criteria in part 7035.2815, subpart 7. The surface must
15.25 comply with part 7035.2855, subpart 3, item A.

16.1 (b) If a concrete or asphalt pad is used, the surface must
16.2 at a minimum meet requirements established in the Minnesota Department of
16.3 Transportation, Road Design Manual (2012 and as subsequently amended). ~~The~~
16.4 ~~manual is incorporated by reference, is subject to frequent change, and is available at~~
16.5 ~~<http://www.roaddesign.dot.state.mn.us/roaddesign.aspx>, incorporated by reference under~~
16.6 part 7035.0605. The owner or operator must inspect the pad routinely and immediately
16.7 repair any cracks, crumbling, and failures. The owner or operator must include the results
16.8 of all inspections and repairs in the annual report submitted to the commissioner.

16.9 (c) An alternative liner system design may be used when approved
16.10 by the commissioner. The owner or operator must demonstrate that the proposed liner
16.11 system will control contact water migration, meet performance standards, and protect
16.12 human health and the environment.

16.13 (10) The owner or operator must design the site to minimize liquids; odors;
16.14 vectors, such as flies and rodents; and nuisance conditions, such as litter, noise, ponding
16.15 water, and erosion.

16.16 Subp. 10. **Construction requirements for a source-separated organic material**
16.17 **compost facility**. The owner or operator must include the construction requirements in
16.18 items A to G in the project specifications for all design features of a source-separated
16.19 organic material compost facility.

16.20 A. The owner or operator must notify the commissioner in writing at least ten
16.21 days before the day construction is expected to begin on any design features.

16.22 B. The construction firm's inspector must record all procedures completed
16.23 during construction at a source-separated organic material compost facility. The record
16.24 must document that design features were constructed according to parts 7035.2525 to
16.25 7035.2915. The record must include pictures, field notes, and all test results.

17.1 C. The owner or operator must install a permanent benchmark on site and show
17.2 its location on the facility as-built plan.

17.3 D. The owner or operator must complete tests for compaction, grain size
17.4 distribution, and field moisture density, at a minimum, for soil pads constructed at the
17.5 facility.

17.6 E. Flexible membranes must be installed during dry conditions. The seams
17.7 joining membrane panels must be inspected as construction proceeds. Seams must be air
17.8 tested and field seams must be tested for tensile strength. All flexible membranes must be
17.9 protected after placement. The natural layer above and below the barrier layer must be
17.10 free of roots, sharp objects, rocks, or other items that might puncture the liner.

17.11 F. A quality control and quality assurance program must be established for
17.12 all construction projects. The program must include the tests to be completed during
17.13 construction. The program must also establish the frequency of inspection and testing,
17.14 the accuracy and precision standards for the tests, procedures to be followed during
17.15 inspections and sample collection, and the method of documentation for all field notes
17.16 including testing, pictures, and observations.

17.17 G. If a geomembrane is used, the surface must comply with part 7035.2855,
17.18 subpart 5.

17.19 Subp. 11. **Operation requirements for a source-separated organic material**
17.20 **compost facility.**

17.21 A. The owner or operator of a source-separated organic material compost
17.22 facility must submit an operation and maintenance manual to the commissioner for
17.23 approval with the facility permit application. The manual must include a source-separated
17.24 organic materials management plan, a personnel training program plan, a contact water
17.25 management plan, a storm water management plan, an odor management plan, and a
17.26 compost sampling plan.

18.1 B. The facility operations must at a minimum meet the requirements in
18.2 subitems (1) to (16).

18.3 (1) All access points must be secured when the facility is not open for
18.4 business or when no authorized personnel are on site.

18.5 (2) All source-separated organic materials delivered to the facility must be
18.6 confined to a designated delivery area and processed or removed by the end of the day on
18.7 which the materials were delivered to prevent nuisances such as odors, vector intrusion,
18.8 and aesthetic degradation.

18.9 (3) All salvageable and recyclable materials must be containerized or
18.10 stored and removed from the facility in a manner that prevents nuisances such as odors,
18.11 vector intrusion, and aesthetic degradation.

18.12 (4) All rejects and residuals must be stored to prevent nuisances such
18.13 as odors, vector intrusion, and aesthetic degradation. All rejects and residuals must be
18.14 managed to prevent the generation of contact water. All contact water from ~~residuals~~
18.15 rejects and residuals storage areas must be diverted to the contact water collection and
18.16 treatment system. The commissioner shall grant an exception to contact water requirements
18.17 for residuals if the owner or operator demonstrates during the permit application process
18.18 or during a site inspection that residuals do not exceed three percent rejects by volume.

18.19 (5) Liquid that has come in contact with source-separated organic material,
18.20 immature compost, and residuals must be diverted to a collection and treatment system.

18.21 (6) Contact water or storm water may be reused in the compost process.
18.22 It must be added to the source-separated organic materials prior to initiating the PFRP
18.23 process described in subitem (10). Any water to be discharged into waters of the state must
18.24 meet all federal and state national pollutant discharge elimination system requirements.

19.1 (7) The owner or operator must operate and maintain a drainage system to
19.2 divert storm water around and away from the site operating area.

19.3 (8) The owner or operator must cover or otherwise manage all the material
19.4 on site to control wind dispersion of any particulate matter.

19.5 (9) The owner or operator must develop and maintain a source-separated
19.6 organic material management plan. The plan must, at a minimum:

19.7 (a) include a waste analysis plan to characterize source-separated
19.8 organic materials prior to acceptance at the facility;

19.9 (b) identify the area of the facility where source-separated organic
19.10 materials will be delivered; and

19.11 (c) describe management methods to be employed when
19.12 source-separated organic materials are delivered to the facility. The management
19.13 methods must address reducing odor, vectors, such as flies and rodents, and nuisance
19.14 conditions, such as litter, noise, ponding water, and erosion; minimizing liquids; and
19.15 mixing source-separated organic materials to achieve the proper moisture content,
19.16 carbon-to-nitrogen ratio (C:N ratio), porosity, and pH.

19.17 Acceptable source-separated organic materials are defined in part 7035.0300, subpart 105a,
19.18 and acceptable bulking agents include untreated wood waste, nonrecyclable paper, ground
19.19 tree and shrub materials, and other similar materials approved by the commissioner.

19.20 (10) Compost must be produced by a process to further reduce pathogens
19.21 (PFRP). The owner or operator must monitor and record the temperature and retention
19.22 time for the material being composted each working day until PFRP is achieved, and
19.23 weekly thereafter. Each time a windrow is turned, the temperature is ~~is~~ must be measured, it
19.24 ~~must be measured~~ no more than four hours before turning the pile windrow and no more
19.25 than 24 hours after turning the pile windrow. Acceptable methods of PFRP are described
19.26 in units (a) to (c).

20.1 (a) The windrow method for reducing pathogens consists of an
20.2 unconfined composting process involving periodic aeration and mixing. Construction of
20.3 each windrow must ~~include a minimum of 12 inches of~~ incorporate porous materials at
20.4 ~~the base of the windrow~~ that ~~promotes~~ promote aerobic conditions within the windrow.
20.5 ~~Blended source-separated organic materials may be placed on top of the porous material to~~
20.6 ~~a maximum height of~~ Windrow height must not exceed 12 feet. Aerobic conditions must
20.7 be maintained during the compost process. A temperature of 55 degrees Celsius must be
20.8 maintained in the windrow for at least 15 days, during which the windrow must be turned
20.9 at least once every three to five days, unless otherwise approved by the commissioner in
20.10 the operation and maintenance manual due to defined weather conditions.

20.11 (b) The static aerated windrow method for reducing pathogens consists
20.12 of an unconfined composting process involving mechanical aeration of insulated compost
20.13 piles. Windrow height must not exceed 12 feet. Aerobic conditions must be maintained
20.14 during the compost process. The temperature of the compost pile must be maintained at
20.15 55 degrees Celsius for at least seven days.

20.16 (c) The enclosed vessel method for reducing pathogens consists of
20.17 a confined compost process involving mechanical mixing of compost under controlled
20.18 environmental conditions. The retention time in the vessel must be at least 24 hours,
20.19 with the temperature maintained at 55 degrees Celsius. A stabilization period of at least
20.20 seven days must follow the enclosed vessel retention period. Temperature in the compost
20.21 pile must be maintained at least at 55 or more degrees Celsius for three days during the
20.22 stabilization period.

20.23 (11) The owner or operator must comply with subpart 5, item J. For Class I
20.24 compost as defined under subpart 6, the owner or operator may request removal of mercury
20.25 (Hg) and polychlorinated biphenyls (PCB) sampling and testing requirements based on five
20.26 years of sampling batch data. The data must demonstrate nondetect results for Hg and PCB.

21.1 (12) The owner or operator must develop and maintain an odor management
21.2 plan detailing the best management practices (BMPs) to be used during normal operations
21.3 to ~~prevent~~ minimize odors. These BMPs must address how the oxygen levels and porosity
21.4 will be managed to minimize odors. The plans must detail how the facility will handle
21.5 odor complaints and the ~~steps that would go beyond normal operations should the facility~~
21.6 ~~receive persistent~~ specific odor control measures and safeguards the owner or operator will
21.7 employ to resolve the complaints. At a minimum, the odor management plan must address
21.8 BMPs to minimize odor generation in the mixing and tipping areas, active compost
21.9 processing areas, and contact water and storm water ponding areas.

21.10 (13) The owner or operator must develop a personnel training program.
21.11 The personnel training program must address the requirements of part 7035.2545, subparts
21.12 3 and 4, and the specific training needed to operate a source-separated organic material
21.13 compost facility in compliance with this subpart and subparts 6 to 10. Personnel training for
21.14 a source-separated organic material compost facility must include a training schedule that:

21.15 (a) provides an initial training session of 24 contact hours within
21.16 12 months of employment; and

21.17 (b) provides five contact hours of training on an annual basis.

21.18 A contact hour means a pertinent instructional or training session of 50 minutes. The
21.19 commissioner shall prepare and make available to the operators and inspectors a list of
21.20 accredited training courses and approved educational activities. The commissioner shall
21.21 grant approval if the content includes topics such as the compost process, composting
21.22 methods, facility operations, odor control, source-separated organic materials management,
21.23 or other topics related to the best management practices of operating a compost facility.

21.24 (14) The owner or operator must submit an annual report according to
21.25 subpart 5, item K. The annual report must be submitted on a form prescribed by the
21.26 commissioner. For source-separated organic material compost facilities, the annual report

22.1 must include the county of origin and volume of source-separated organic materials
22.2 received.

22.3 (15) If for any reason the facility becomes inoperable, the owner or
22.4 operator must notify the commissioner within 48 hours and implement the contingency
22.5 action plan developed under part 7035.2615.

22.6 (16) If a geomembrane is used, the owner or operator must comply with
22.7 part 7035.2855, subpart 4.

22.8 **REPEALER.** ~~Minnesota Rules, part 7035.0300, subpart 7, is repealed.~~