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Proposed Permanent Rules Relating to Compost Facilities

7001.3075 SOLID WASTE MANAGEMENT FACILITY PERMIT APPLICATION.

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

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

A. For source-separated organic material compost facilities as defined in part 7035.2836 that have operated under an existing permit issued under parts 7001.0010 to 7001.0200, no application is required for permit reissuance upon the expiration date of the permit and the term of the permit shall be extended indefinitely unless (1) the commissioner requires the facility to be repermitted as provided in part 7001.3410, subpart 3, or (2) the owner or operator of the facility proposes a major modification to the facility. In either of these cases, the owner and operator shall submit an application for reissuance or modification of the permit as provided in this chapter. The commissioner shall process the application following the procedures in this chapter. For purposes of this part, "operated" means to have accepted source-separated organic material as defined in part 7035.0300, subpart 105a, for composting at levels constituting normal expected volumes for facilities for a minimum of one year during the most recent five-year term of the permit, such that the agency can reasonably conclude that the facility is operating in compliance with applicable rules and its permit. For purposes of this part, a "major modification" means a change in the type of materials managed at the facility, an increase beyond the original permitted capacity, or a change that could significantly affect compliance with the design or operation standards of part 7035.2836, subparts 8 and 9.

B. Owners and operators of source-separated organic material compost facilities operating under an extended permit may make minor modifications as listed in part 7001.3550, subpart 3, at any time, provided that notice of the minor modification is

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2.1	given to the agency as provided in part	t 7001.3410, subp	arts 1 and 2. Owners	of facilities
2.2	operating under an extended permit mu	ust comply with th	ne requirements in par	t 7001.0190,
2.3	subpart 2, before transferring ownership	ip and control of the	he facility. Owners or	operators of
2.4	source-separated organic material com	post facilities ope	rating under an exten	ded permit,
2.5	as provided in this subpart, must subm	nit to the agency th	ne notification require	d by part
2.6	7001.3410, and the annual report requ	ired under part 70	<u>35.2585.</u>	
2.7	7001.3375 FINAL APPLICATION	INFORMATION	REQUIREMENTS	S FOR

7001.3375 FINAL APPLICATION INFORMATION REQUIREMENTS FOR COMPOST FACILITIES.

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

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

- D. a description of the residue's composition of the rejects and residuals;
- E. a description of the disposal method for the residue rejects and residuals;

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

- I. an operating plan indicating how the provisions of part 7035.2836 will be met, including a waste analysis plan; and
 - J. a description of the proposed uses for the compost-;
- K. a workplan for any proposed soil characterization to comply with part 7035.2836, subpart 9, item B, subitem (8). Once the workplan is approved by the commissioner, the owner or operator of a source-separated organic material compost facility must submit a report summarizing field activities used for the site characterization to the commissioner for review and approval prior to issuance of the permit; and
- L. for source-separated organic material compost facilities, evidence that the owner and operator have obtained all necessary approvals from the municipality, as defined under part 7035.0300, subpart 67. A municipality that has submitted a permit application

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under this part is not required to submit a municipality approval. The owner or operator must submit a copy of any approvals obtained from a municipality. If the facility is located in an area where no municipality approval is required, the owner or operator must submit a signed written statement indicating that no municipality approval is required.

7001.3410 EXTENDED PERMIT NOTIFICATION AND TERMINATION PROCEDURES.

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Subpart 1. **Notification contents.** Owners or operators of transfer facilities <u>or</u> <u>source-separated organic material compost facilities</u> operating under an extended permit shall submit to the agency, upon the anniversary of the expiration date of the permit, or <u>five years after November 30, 2005</u>, whichever is sooner, and every five years thereafter, a notification containing the following information:

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

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

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

A. the transfer facility <u>or source-separated organic material compost facility</u> has unresolved noncompliance or has not been operated substantially in accordance with applicable standards;

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

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

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

7035.0300 DEFINITIONS.

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

Subp. 7. [See repealer.]

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

Subp. 20a. Contact water. "Contact water" means water that has come into contact with source-separated organic material in the tipping area, source-separated organic material in the mixing area, rejects, residuals, or active compost. For purposes of this subpart, compost is active until it has reached PFRP as described in part 7035.2836, subpart 11, item B, subitem (10), and the Solvita maturity index is greater than or equal to five with ammonia greater than or equal to four.

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

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

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5.1	A. inorganic materials that cannot be rendered into a humus-like material;
5.2	B. materials that are unacceptable due to permit conditions;
).2	b. materials that are anaeceptable due to permit conditions,
5.3	C. materials that are unacceptable according to subpart 99a, item B; or
5.4	D. materials that are unacceptable according to subpart 105a, items B and C.
5.5	[For text of subps 93 and 93a, see M.R.]
5.6	Subp. 93b. Residuals. As applied to source-separated organic material compost
5.7	facilities, "residuals" means organic materials that require further composting due to their
5.8	large size, such as tree branches.
5.9	[For text of subps 94 to 99, see M.R.]
5.10	Subp. 99a. Small compost site. "Small compost site" means a site that:
5.11	A. is used to compost:
5.12	(1) food scraps;
5.13	(2) yard waste;
5.14	(3) poultry litter generated on site only if the compost produced is used on
5.15	site;
5.16	(4) nonrecyclable paper; or
5.17	(5) compostable materials meeting ASTM D6400 or ASTM D6868,
5.18	incorporated by reference under part 7035.0605;
5.19	B. does not accept fats, oils, grease, meat, dairy, animal manure, diapers, or
5.20	sanitary products;
5.21	C. does not exceed 80 cubic yards on site at any one time, including collected
5.22	raw materials and compost being processed, but excluding finished compost; and

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6.1	D. is where the materials under item A are managed to minimize odor and the
6.2	creation of nuisances and public health risks.
6.3	[For text of subps 100 to 105, see M.R.]
6.4	Subp. 105a. Source-separated organic material.
6.5	A. "Source-separated organic material" means:
6.6	(1) source-separated compostable materials and yard waste, as defined
6.7	under Minnesota Statutes, section 115A.03, except sanitary products and diapers;
5.8	(2) vegetative wastes generated from industrial or manufacturing processes
6.9	that prepare food for human consumption; and
6.10	(3) compostable materials that meet the standards in ASTM D6400 and
6.11	ASTM D6868, incorporated by reference under part 7035.0605.
6.12	B. Unless specifically permitted by the commissioner under part 7001.0150,
6.13	source-separated organic material does not include:
6.14	(1) animal wastes;
6.15	(2) fish wastes generated from industrial or manufacturing processes;
6.16	(3) meat by-products generated from industrial or manufacturing processes;
6.17	(4) sanitary products; or
6.18	(5) diapers.
6.19	C. Source-separated organic material does not include:
6.20	(1) septage; or
6.21	(2) sewage sludge, as defined in part 7041.0100, subpart 49.
6.22	Subp. 105b. Source-separated organic material compost facility.
6.23	"Source-separated organic material compost facility" means:

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7.1	A. a site used to compost source-separated organic material;
7.2	B. all structures or processing equipment used to compost source-separated
7.3	organic material; and
7.4	C. all structures or equipment used to:
7.5	(1) control drainage;
7.6	(2) manage contact water;
7.7	(3) manage storm water;
7.8	(4) manage incoming material;
7.9	(5) manage the finished product; or
7.10	(6) manage rejects and residuals resulting from the composting process.
7.11	[For text of subps 106 to 121, see M.R.]
7.12	7035.0605 AVAILABILITY OF REFERENCES.
7.13	A. The documents needed for analyzing and classifying soils as required in
7.14	parts 7035.0300 to 7035.2915 may be obtained by contacting the Engineering Library of
7.15	the University of Minnesota, through the Minitex interlibrary loan system, and requesting
7.16	the standards from the American Society for Testing and Material, in the Annual Book of
7.17	ASTM Standards, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.
7.18	B. The publication for classification of wetlands, titled "Classification of
7.19	Wetlands and Deep Water Habitats of the United States," may be obtained through the
7.20	Minitex interlibrary loan system or by requesting the publication from the Superintendent
7.21	of Documents, United States Government Printing Office, Washington, D.C. 20402.
7.22	C. Test Methods for Evaluating Solid Waste, EPA SW-846, Third Edition,
7.23	November 1986, issued by the United States Environmental Protection Agency (EPA),
7.24	is incorporated by reference. Sections of this document which are directly relevant to

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parts 7035.2885 to 7035.2915 are available through the Minitex interlibrary loan system.

The entire document is available from EPA Environmental Monitoring and Support

Laboratory, Cincinnati, Ohio, 45268. It is not subject to frequent change.

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- <u>D.</u> The document Standard Number 54: Flexible Membrane Liners, May 1990, issued by the National Sanitation Foundation, is incorporated by reference. It is available through the Minitex interlibrary loan system. It is not subject to frequent change.
- <u>E.</u> EPA Document 600/4-79-020 Methods for Chemical Analyses of Water and Wastes, appearing in Code of Federal Regulations, title 40, part 136, 1990, is incorporated by reference. The document is available through the Minitex interlibrary loan system and EPA Environmental Monitoring and Support Laboratory, Cincinnati, Ohio, 45268. It is not subject to frequent change.
- <u>F.</u> EPA Method 1312: the Synthetic Precipitation Leach Test for Soils (draft document, no date available) is incorporated by reference. The method is available through the Minitex interlibrary loan system. A copy of the method may also be obtained from the commissioner. The draft method is not subject to frequent change.
- <u>G.</u> EPA Method 8290, November 1990, is incorporated by reference. The method is available through the Minitex interlibrary loan system and EPA Office of Solid Waste, Characterization and Assessment Division, Technical Assessment Branch, 0S-331, Washington, D.C., 20460. The method is not subject to frequent change.
- H. American Society for Testing and Materials (ASTM) Methods D3173 and D3174 are incorporated by reference. These methods are published in the Annual Book of ASTM Standards: Part 26, Gaseous Fuels; Coal and Coke; Atmospheric Analysis, 1981 Edition. This publication is available through the Minitex interlibrary loan system. The methods are not subject to frequent change.
- I. American Society for Testing and Materials (ASTM) Standards D6400"Standard Specification for Labeling of Plastics Designed to be Aerobically Composted

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9.1	in Municipal or Industrial Facilities"	(2012 and as subse	quently amended) and I	<u> 26868</u>
9.2	"Standard Specification for Labeling of	of End Items that e	Plastics and Polymers as	s Coatings
9.3	or Additives with Paper and Other Su	bstrates Designed	to be Aerobically Comp	osted
9.4	in Municipal or Industrial Facilities"	(2011 and as subse	quently amended), AST	<u>ΓΜ</u>
9.5	International, are incorporated by refe	erence. The standar	ds are not subject to fre	equent
9.6	change and are available through the	Minitex interlibrary	loan system.	
) .7	7035.2525 SOLID WASTE MANA	GEMENT FACIL	ITIES GOVERNED.	
9.8	[For tex	at of subp 1, see M	.R.]	
0.9	Subp. 2. Exceptions. Parts 7035	5.2525 to 7035.291	5 do not apply to the fo	llowing
9.10	solid waste management facilities or p	persons, except as i	ndicated:	
9.11	A. backyard compost sites_	small compost sites	s must only comply wit	h parts
9.12	7035.2535, subpart 1, items A to E; 7	035.2555; and 703	<u>5.2565</u> ;	
0.13	[For text o	f items B to K, see	M.R.]	
0.14	7035.2585 ANNUAL REPORT.			
0.15	The owner or operator of a solid	waste managemen	t facility shall prepare a	and
0.16	submit a single copy of an annual rep	ort to the commiss	ioner no later than Febr	uary 1
0.17	for the preceding calendar year. A rep	oort form and instru	actions may be obtained	from the
0.18	commissioner. The annual report mus	st cover all facility	activities during the pre	evious
0.19	calendar year and must include the fo	llowing informatio	n:	
0.20	[For text o	f items A to H, see	M.R.]	
0.21	I. the summary evaluation	reports required for	r the specific solid wast	te
0.22	management facilities in parts 7035.2	825, subpart 9; 703	35.2836, subparts 3, iter	m D,
0.23	and 6 G, 5, items J and K, and 11, ite	m B, subitem (14);	7035.2845, subpart 4a	; and
0.24	7035.2875, subpart 5;			

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

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L. for transfer facilities or source-separated organic material compost facilities 10.1 operating under an extended permit term, the information required in part 7001.3410, 10.2 subpart 2. 10.3 Waste facilities that do not dispose of waste need not include items D, H, and I. 10.4 7035.2836 COMPOST FACILITIES. 10.5 Subpart 1. Scope. The owner or operator of a yard waste compost facility must 10.6 comply with subparts 2 and 3 only. The requirements of subparts 4 to 7 apply to the 10.7 owner and operator of a facility used to compost solid waste, including source separated 10.8 compostables except as provided in part 7035.2525, subpart 2. The owner or operator of a 10.9 yard waste compost facility must comply with subparts 2 and 3 only. The owner or operator 10.10 of a source-separated organic material compost facility must comply with subparts 6 to 11. 10.11 [For text of subps 2 to 7, see M.R.] 10.12 10.13 Subp. 8. Location requirements for a source-separated organic material **compost facility.** An owner or operator must not establish or construct a source-separated 10.14 organic material compost facility in the following areas: 10.15 10.16 A. within locations described in part 7035.2555; B. on a site with karst features including sinkholes, disappearing streams, and 10.17 10.18 caves; C. within five vertical feet of the water table; and 10.19 D. unless a different distance is specified by a local unit of government by 10.20

(1) upon approval of the commissioner, operational modifications, geographic features, or other natural or man-made physical characteristics that reduce

ordinance, within 500 feet horizontal separation distance as measured from the closest edge

of all compost activities to the closest edge of a property boundary of the nearest residence,

place of business, or public area, such as parks, wildlife areas, and public buildings, except:

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nuisance conditions, such as noise, litter, and odor, may be used to reduce the 500-foot horizontal separation distance; and

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- (2) adjacent commercial activities operated by the facility owner are excluded from the 500-foot horizontal separation requirement for the owner's residence or place of business.
- Subp. 9. Design requirements for a source-separated organic material compost facility.
- A. The owner or operator of a source-separated organic material compost facility must submit an engineering design report to the commissioner for approval with the facility permit application. 11.10
 - B. The engineering design report must comply with the design requirements in subitems (1) to (10).
 - (1) Site preparations must include clearing and grubbing for the compost operating and storage areas, building locations, topsoil stripping, excavations, berm construction, drainage control structures, storm water management systems, contact water collection systems, access roads, screening, fencing, and other special design features.
 - (2) Access to the facility must be controlled to prevent unauthorized entry. A perimeter fence and gate, enclosed structures, or other physical barriers must be used to prevent unauthorized entry to the facility.
 - (3) Storm water drainage must be diverted around and away from the compost storage and operating areas. The storm water drainage control system must be designed to manage a 24-hour, 10-year storm event. A storm water drainage control system, including changes in the site topography, ditches, berms, sedimentation ponds, culverts, energy breaks, and erosion control measures, must comply with part 7035.2855, subpart 3, items C to E. For purposes of this subpart, water that has come into contact

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with compost in the curing and finished storage areas is considered storm water. For purposes of this subpart, compost has reached the curing stage after PFRP as described in subpart 11, item B, subitem (10), has been achieved and the Solvita maturity index is greater than or equal to five with the ammonia greater than or equal to four. An owner or operator may use alternative test methods that are approved by the commissioner as equivalent to those listed in this subitem.

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- (4) Contact water must be diverted to a contact water collection and treatment system. The contact water collection and treatment system must comply with applicable portions of part 7035.2815, subpart 9. For purposes of this subpart, immature compost is defined as not having reached the curing stage described in subitem (3).
- (5) The facility must be designed for collection of rejects and residuals and must provide for the final transportation and proper disposal of rejects and management of residuals.
- (6) The tipping, mixing, active composting, curing, and storage areas for compost must be located on a hard-packed, all-weather surface capable of minimizing migration of materials or contact water into the subsurface soil, groundwater, and surface water.
- (7) The working surface of a source-separated organic material compost facility must have a minimum of five feet of soil separation to the water table.
- (8) Unless designed as allowed under subitem (9), the site must have at least five feet of any combination of the following soil types comprising the soil profile above the water table: sandy clay loam, sandy clay, clay loam, silty clay loam, silty clay, and clay. An owner or operator may use an alternate separation distance according to unit (a). Water tables classified as perched or epi-saturated by the United States Department of Agriculture, Natural Resources Conservation Service, are not considered to be the seasonal high water table. The soil profile must be characterized by the use of soil borings, piezometers, or test

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pits as certified by a Minnesota-licensed soil scientist, engineer, or geologist. The owner or operator may propose the use of alternative methods for soil profiles according to unit (b). If the site cannot meet the soil criteria, an impervious pad or liner must be installed under all activity areas except curing and storage of finished compost.

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- (a) The owner or operator may use an alternative separation distance that is approved by the commissioner as equivalent to that listed in this subitem if, during the previous five years:
- i. the site has experienced an abnormally wet period or an abnormally dry period; and
 - ii. the elevation of the water table at the site has changed.

 The alternative separation distance must maintain a sufficient distance between the water table and compost activities to account for the movement of the water table through normal wet and dry years.
 - (b) An owner or operator may use alternative methods that are approved by the commissioner as equivalent if the owner or operator can demonstrate that the alternative methods provide soil profile characterization substantially equivalent to characterization by soil borings, piezometers, or test pits.
 - (9) Owners and operators whose sites are unable to meet the soil requirement listed under subitem (8) must install a pad system in all areas where source-separated organic materials will be managed and composted prior to curing. For the purposes of this subpart, compost has reached the curing stage after PFRP as described in subpart 11, item B, subitem (10), has been achieved and the Solvita maturity index is greater than or equal to five with an ammonia test result of greater than or equal to four. An owner or operator may use alternative test methods that are approved by the commissioner as equivalent to those listed in this subitem. Sites requiring a pad must comply with one of the options listed in units (a) to (c).

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14.1	(a) If a geomembrane is used, the liner system must be designed and
14.2	built according to the applicable criteria in part 7035.2815, subpart 7. The surface must
14.3	comply with part 7035.2855, subpart 3, item A.
14.4	(b) If a concrete or asphalt pad is used, the surface must at
14.5	a minimum meet requirements established in the Department of Transportation,
14.6	Road Design Manual (2012 and as subsequently amended). The manual is
14.7	incorporated by reference, is subject to frequent change, and is available at
14.8	http://www.roaddesign.dot.state.mn.us/roaddesign.aspx. The owner or operator must
14.9	inspect the pad routinely and immediately repair any cracks, crumbling, and failures. The
14.10	owner or operator must include the results of all inspections and repairs in the annual
14.11	report submitted to the commissioner.
14.12	(c) An alternative liner system design may be used when approved
14.13	by the commissioner. The owner or operator must demonstrate that the proposed liner
14.14	system will control contact water migration, meet performance standards, and protect
14.15	human health and the environment.
14.16	(10) The owner or operator must design the site to minimize liquids; odors
14.17	vectors, such as flies and rodents; and nuisance conditions, such as litter, noise, ponding
14.18	water, and erosion.
14.19	Subp. 10. Construction requirements for a source-separated organic material
14.20	compost facility. The owner or operator must include the construction requirements in
14.21	items A to G in the project specifications for all design features of a source-separated
14.22	organic material compost facility.
14.23	A. The owner or operator must notify the commissioner in writing at least ten
14.24	days before the day construction is expected to begin on any design features.
14.25	B. The construction firm's inspector must record all procedures completed
14.26	during construction at a source-separated organic material compost facility. The record

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15.1	must document that design features w	vere constructed ac	cording to parts 703:	5.2525 to
15.2	7035.2915. The record must include	pictures, field notes	, and all test results.	

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- <u>C.</u> The owner or operator must install a permanent benchmark on site and show its location on the facility as-built plan.
- D. The owner or operator must complete tests for compaction, grain size distribution, and field moisture density, at a minimum, for soil pads constructed at the facility.
- <u>E.</u> <u>Flexible membranes must be installed during dry conditions. The seams joining membrane panels must be inspected as construction proceeds. Seams must be air tested and field seams must be tested for tensile strength. All flexible membranes must be protected after placement. The natural layer above and below the barrier layer must be free of roots, sharp objects, rocks, or other items that might puncture the liner.</u>
- F. A quality control and quality assurance program must be established for all construction projects. The program must include the tests to be completed during construction. The program must also establish the frequency of inspection and testing, the accuracy and precision standards for the tests, procedures to be followed during inspections and sample collection, and the method of documentation for all field notes including testing, pictures, and observations.
- G. If a geomembrane is used, the surface must comply with part 7035.2855, subpart 5.
- Subp. 11. Operation requirements for a source-separated organic material compost facility.
- A. The owner or operator of a source-separated organic material compost facility must submit an operation and maintenance manual to the commissioner for approval with the facility permit application. The manual must include a source-separated

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organic materials management plan, a personnel training program plan, a contact water management plan, a storm water management plan, an odor management plan, and a compost sampling plan.

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- B. The facility operations must at a minimum meet the requirements in subitems (1) to (16).
- (1) All access points must be secured when the facility is not open for business or when no authorized personnel are on site.
- (2) All source-separated organic materials delivered to the facility must be confined to a designated delivery area and processed or removed by the end of the day on which the materials were delivered to prevent nuisances such as odors, vector intrusion, and aesthetic degradation.
- (3) All salvageable and recyclable materials must be containerized or stored and removed from the facility in a manner that prevents nuisances such as odors, vector intrusion, and aesthetic degradation.
- (4) All rejects and residuals must be stored to prevent nuisances such as odors, vector intrusion, and aesthetic degradation. All rejects and residuals must be managed to prevent the generation of contact water. All contact water from residuals and residuals storage areas must be diverted to the contact water collection and treatment system.
- (5) Liquid that has come in contact with source-separated organic material, immature compost, and residuals must be diverted to a collection and treatment system.
- (6) Contact water or storm water may be reused in the compost process.

 It must be added to the source-separated organic materials prior to initiating the PFRP process described in subitem (10). Any water to be discharged into waters of the state must meet all federal and state national pollutant discharge elimination system requirements.

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17.1	(7) The owner or operator must operate and maintain a drainage system to
17.2	divert storm water around and away from the site operating area.
17.3	(8) The owner or operator must cover or otherwise manage all the material
17.4	on site to control wind dispersion of any particulate matter.
17.5	(9) The owner or operator must develop and maintain a source-separated
17.6	organic material management plan. The plan must, at a minimum:
17.7 17.8	(a) include a waste analysis plan to characterize source-separated organic materials prior to acceptance at the facility;
17.9	(b) identify the area of the facility where source-separated organic
17.10	materials will be delivered; and
17.11	(c) describe management methods to be employed when
17.12	source-separated organic materials are delivered to the facility. The management
17.13	methods must address reducing odor, vectors, such as flies and rodents, and nuisance
17.14	conditions, such as litter, noise, ponding water, and erosion; minimizing liquids; and
17.15	mixing source-separated organic materials to achieve the proper moisture content,
17.16	carbon-to-nitrogen ratio (C:N ratio), porosity, and pH.
17.17	Acceptable source-separated organic materials are defined in part 7035.0300, subpart 105a,
17.18	and acceptable bulking agents include untreated wood waste, nonrecyclable paper, ground
17.19	tree and shrub materials, and other similar materials approved by the commissioner.
17.20	(10) Compost must be produced by a process to further reduce pathogens
17.21	(PFRP). The owner or operator must monitor and record the temperature and retention time
17.22	for the material being composted each working day until PFRP is achieved, and weekly
17.23	thereafter. Each time temperature is measured, it must be measured before turning the pile
17.24	and after turning the pile. Acceptable methods of PFRP are described in units (a) to (c).

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(a) The windrow method for reducing pathogens consists of an unconfined composting process involving periodic aeration and mixing. Construction of each windrow must include a minimum of 12 inches of porous materials at the base of the windrow that promotes aerobic conditions within the windrow. Blended source-separated organic materials may be placed on top of the porous material to a maximum height of 12 feet. Aerobic conditions must be maintained during the compost process. A temperature of 55 degrees Celsius must be maintained in the windrow for at least 15 days. The windrow must be turned at least once every three to five days.

- (b) The static aerated windrow method for reducing pathogens consists of an unconfined composting process involving mechanical aeration of insulated compost piles. Windrow height must not exceed 12 feet. Aerobic conditions must be maintained during the compost process. The temperature of the compost pile must be maintained at 55 degrees Celsius for at least seven days.
- (c) The enclosed vessel method for reducing pathogens consists of a confined compost process involving mechanical mixing of compost under controlled environmental conditions. The retention time in the vessel must be at least 24 hours, with the temperature maintained at 55 degrees Celsius. A stabilization period of at least seven days must follow the enclosed vessel retention period. Temperature in the compost pile must be maintained at least at 55 or more degrees Celsius for three days during the stabilization period.
- (11) The owner or operator must comply with subpart 5, item J. For Class I compost as defined under subpart 6, the owner or operator may request removal of mercury (Hg) and polychlorinated biphenyls (PCB) sampling and testing requirements based on five years of sampling batch data. The data must demonstrate nondetect results for Hg and PCB.
- (12) The owner or operator must develop and maintain an odor management plan detailing the best management practices (BMPs) to be used during

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normal operations to prevent odors. These BMPs must address how the oxygen levels and porosity will be managed to minimize odors. The plans must detail how the facility will handle odor complaints and the steps that would go beyond normal operations should the facility receive persistent complaints. At a minimum, the odor management plan must address BMPs to minimize odor generation in the mixing and tipping areas, active compost processing areas, and contact water and storm water ponding areas.

The personnel training program must address the requirements of part 7035.2545, subparts 3 and 4, and the specific training needed to operate a source-separated organic material compost facility in compliance with this subpart and subparts 6 to 10. Personnel training for a source-separated organic material compost facility must include a training schedule that:

- (a) provides an initial training session of 24 contact hours within 12 months of employment; and
- (b) provides five contact hours of training on an annual basis.

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

(14) The owner or operator must submit an annual report according to subpart 5, item K. The annual report must be submitted on a form prescribed by the commissioner. For source-separated organic material compost facilities, the annual report must include the county of origin and volume of source-separated organic materials received.

20.1	(15) If for any reason the facility becomes inoperable, the owner or
20.2	operator must notify the commissioner within 48 hours and implement the contingency
20.3	action plan developed under part 7035.2615.
20.4	(16) If a geomembrane is used, the owner or operator must comply with
20.5	part 7035.2855, subpart 4.
20.6	REPEALER. Minnesota Rules, part 7035.0300, subpart 7, is repealed.

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