

1 Pollution Control Agency

2

3 Adopted Rules Relating to Hazardous Waste Facility Permits

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5 Rules as Adopted

6 6 MCAR S 4.4201 Scope.

7 Rules 6 MCAR SS 4.4001-4.4021 and 4.4201-4.4224 govern the  
8 application procedures, the issuance, and the conditions of  
9 hazardous waste facility permits. Rules 6 MCAR SS  
10 4.3001-4.3011, 4.4001-4.4021, and 4.4201-4.4224 shall be  
11 construed to complement each other.

12 6 MCAR S 4.4202 Definitions.

13 The definitions in 6 MCAR SS 4.4001, 4.9100, and 4.9380 B.  
14 apply to the terms used in 6 MCAR SS 4.4201-4.4224.

15 6 MCAR S 4.4203 Permit requirements.

16 A. Permit required. Except as provided in B., no person may  
17 do any of the following without obtaining a hazardous waste  
18 facility permit from the agency:

- 19 1. treat, store, or dispose of hazardous waste;
- 20 2. establish, construct, operate, or close a hazardous  
21 waste facility;
- 22 3. make an expansion, a production increase, or a process  
23 modification that results in new or increased capabilities of a  
24 permitted hazardous waste facility; or
- 25 4. operate a permitted hazardous waste facility or part  
26 of a facility that has been changed, added to, or extended, or  
27 that has new or increased capabilities.

28 B. Exclusions. A person who conducts any of the following  
29 activities is not required to obtain a hazardous waste facility  
30 permit for that activity:

- 31 1. The accumulation by generators of hazardous waste on  
32 site for fewer than 90 days as provided in 6 MCAR S 4.9216.
- 33 2. The disposal by farmers of hazardous wastes that have  
34 been generated by their own use of pesticides as provided in 6  
35 MCAR S 4.9222.

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1           3. The ownership or operation of a totally enclosed  
2 treatment facility as defined in 6 MCAR S 4.9100.

3           4. The storage by transporters of manifested shipments of  
4 hazardous waste in containers that meet the requirements of 6  
5 MCAR S 4.9214 A. at a transfer facility for a period of ten days  
6 or fewer as provided in 6 MCAR S 4.9253.

7           5. An activity conducted to immediately contain or treat  
8 a spill or an imminent and substantial threat of a spill of  
9 hazardous waste or a material that, when spilled, becomes a  
10 hazardous waste. This exclusion does not apply to a person who  
11 treats, stores, or disposes of the spilled material or spill  
12 residue or debris after the immediate response activities have  
13 been completed.

14          6. The addition of absorbent material to hazardous waste  
15 in a container, or the addition of hazardous waste to absorbent  
16 material in a container, if the addition occurs at the time  
17 waste is first placed in the container, and if the addition is  
18 accomplished in accordance with 6 MCAR SS 4.9283 B. and 4.9315  
19 B. and C.

20          7. The ownership or operation of a facility that is used  
21 to manage hazardous waste described in 6 MCAR S 4.9129 B.1. or  
22 2. that is to be beneficially used, reused, recycled, or  
23 reclaimed, unless 6 MCAR S 4.9129 B.1. ~~+~~ j. provides otherwise.

24          8. To the extent provided by 6 MCAR S 4.9129 B.3., 4., or  
25 5., the ownership or operation of a facility that beneficially  
26 uses, reuses, recycles, or reclaims hazardous waste.

27          9. The management of hazardous waste as provided in 6  
28 MCAR SS 4.9128 C.12.; 4.9130 A.; 4.9134 E.3. and 5.; 4.9209; or  
29 4.9210 B.

30          C. Permits by rule. The owner or operator of the following  
31 facilities shall be deemed to have obtained a hazardous waste  
32 facility permit without making application for it unless the  
33 director finds that the following conditions are not met:

34           1. Barges or vessels operating in Minnesota that are  
35 intended to be operated elsewhere as ocean disposal facilities,  
36 if the owner or operator:

1 a. has obtained a permit for ocean disposal under Code  
2 of Federal Regulations, title 40, part 220;

3 b. complies with the conditions of the permit for  
4 ocean disposal; and

5 c. complies with 6 MCAR SS 4.9281 B.; 4.9292; 4.9293;  
6 4.9294 A., B., and C.1.-3.; and 4.9296 A., B., and C.

7 2. Publicly owned treatment works that accept hazardous  
8 waste for treatment, if the owner or operator:

9 a. has obtained a National Pollutant Discharge  
10 Elimination System permit, a state disposal system permit, or  
11 both, from the agency;

12 b. complies with the conditions of the National  
13 Pollutant Discharge Elimination System permit or the state  
14 disposal system permit;

15 c. complies with 6 MCAR SS 4.9281 B.; 4.9292; 4.9293;  
16 4.9294 A., B., and C.1.-3.; and 4.9296 A., B., and C.; and

17 d. accepts a waste that meets all applicable federal,  
18 Minnesota, and local pretreatment requirements for that waste if  
19 it were to be discharged into the publicly owned treatment works  
20 through a sewer, pipe, or other conveyance.

21 3. Elementary neutralization, pretreatment, or wastewater  
22 treatment units, provided that:

23 a. the unit does not receive hazardous waste from  
24 generators other than the owner or operator of the unit;

25 b. the owner or operator complies with the  
26 requirements of 6 MCAR SS 4.9480-4.9481; and

27 c. the owner or operator's eligibility to be permitted  
28 under this rule has not been terminated under D.

29 4. That portion of a combustion waste facility that is  
30 used to manage hazardous wastes produced in conjunction with the  
31 combustion of fossil fuels, if:

32 a. the wastes are generated on-site;

33 b. the wastes traditionally have been and actually are  
34 mixed with and co-disposed or co-treated with fly ash, bottom  
35 ash, boiler slag, or flue gas emission control wastes resulting  
36 from coal combustion;

1 c. the wastes are necessarily associated with the  
2 production of energy, such as boiler cleaning solutions, boiler  
3 blowdown, demineralizer regenerant, pyrites, and cooling tower  
4 blowdown;

5 d. the owner or operator complies with the  
6 requirements of 6 MCAR SS 4.9480-4.9481; and

7 e. the owner or operator's eligibility to be permitted  
8 under this rule has not been terminated under D.

9 D. Termination of eligibility for permit by rule. The  
10 eligibility of an owner or operator of an elementary  
11 neutralization unit, a pretreatment unit, a wastewater treatment  
12 unit, or a combustion waste facility to be permitted under this  
13 rule is subject to termination by the agency after notice and  
14 opportunity for a contested case hearing or a public  
15 informational meeting if the agency makes any of the findings  
16 set forth in 1.-4. An owner or operator whose eligibility to be  
17 permitted under this rule has been terminated shall apply for  
18 and obtain an individual permit under these rules. The  
19 following findings constitute justification for the director to  
20 commence proceedings to terminate eligibility:

21 1. that any applicable conditions set forth in C.3. or 4.  
22 are not met;

23 2. that the owner or operator has violated a requirement  
24 of 6 MCAR SS 4.9480-4.9481;

25 3. that the owner or operator is conducting other  
26 activities that are required to be covered by a hazardous waste  
27 facility permit; or

28 4. that under the circumstances, in order to protect  
29 human health or the environment, the permitted facility should  
30 be subject to the requirements of 6 MCAR SS 4.9281-4.9322.

31 6 MCAR S 4.4204 Hazardous waste facility permit application.

32 A. Form. The application for a hazardous waste facility  
33 permit consists of Part A and Part B. The information  
34 requirements of Part A are set forth in 6 MCAR S 4.4206. The  
35 information requirements of Part B are set forth in 6 MCAR SS  
36 4.4207-4.4215. A person who submits Part B of the application

1 shall submit the information required by 6 MCAR S 4.4207 and  
2 shall also submit any information required by 6 MCAR SS  
3 4.4208-4.4215 that is applicable to the facility which is the  
4 subject of the application.

5 B. Timing of application. Deadlines for the submission of a  
6 permit application for existing and new hazardous waste  
7 facilities and for reissuance of existing permits are as follows:

8 1. The owner or operator of an existing hazardous waste  
9 facility shall submit Part A of the application to the director  
10 on or before the 90th day after the effective date of 6 MCAR SS  
11 4.4201-4.4224. An owner or operator who has already submitted  
12 Part A of the application to the Environmental Protection Agency  
13 need not submit Part A of the application to the director if the  
14 information submitted to the Environmental Protection Agency is  
15 complete with respect to all portions of the facility and all  
16 wastes stored, treated, or disposed of at the facility that are  
17 subject to regulation under 6 MCAR SS 4.9100-4.9560. If the  
18 information submitted to the Environmental Protection Agency is  
19 not complete, the owner or operator shall submit an amended Part  
20 A of the application to the director on or before the 90th day  
21 after the effective date of this rule. The owner or operator  
22 may submit Part B of the application at any time except that  
23 upon the request of the director the owner or operator shall  
24 submit Part B of the application not later than six months after  
25 the date of receipt of the director's request. A later date for  
26 submission of Part B for a thermal treatment facility may be  
27 made under 6 MCAR S 4.4221 K.

28 2. If a person proposes to construct a new hazardous  
29 waste facility, the person shall submit Part A and Part B of the  
30 application at least 180 days before the planned date of the  
31 commencement of facility construction.

32 3. Rule 6 MCAR S 4.4004 C. governs the application for  
33 the reissuance of existing permits except as provided in this  
34 rule. When the director receives a written request that shows  
35 good cause for an extension of time to file the application for  
36 permit reissuance, the director shall grant the extension if the

1 final date for filing the application does not extend beyond the  
2 expiration date of the permit. The application must contain  
3 Part B of the application, completed to show all information  
4 that is new or different from that contained in previously  
5 submitted applications.

6 C. Updating permit applications. An owner or operator of an  
7 existing hazardous waste facility who has submitted Part A of  
8 the application but has not yet submitted Part B of the  
9 application shall submit to the director an amended Part A of  
10 the application under the following circumstances:

11 1. if the submission of an amended application is  
12 necessary to comply with 6 MCAR S 4.4216 E.; or

13 2. if 6 MCAR SS 4.9128-4.9137 is amended to list or  
14 designate as hazardous a waste being treated, disposed of, or  
15 stored by the owner or operator which was not listed or  
16 designated as hazardous at the time the original Part A was  
17 submitted.

18 The owner or operator shall file the amended Part A not  
19 later than 90 days after the effective date of the amendment to  
20 6 MCAR SS 4.9128-4.9137. An owner or operator who fails to  
21 submit an amended Part A when required to do so shall not  
22 receive interim status for any wastes not covered by a submitted  
23 Part A application.

24 6 MCAR S 4.4205 Certification of permit applications and reports.

25 A person who signs a permit application or any portion of  
26 it or any report required by a permit to be submitted to the  
27 director or to the agency shall make the certification required  
28 by 6 MCAR S 4.4007 and shall make the following additional  
29 certification: "I am aware that there are significant penalties  
30 for submitting false information, including the possibility of  
31 fine and imprisonment." Technical documents, such as design  
32 drawings and specifications and engineering studies required to  
33 be submitted as part of a permit application or by permit  
34 conditions, must be certified by a registered professional  
35 engineer.

1 6 MCAR S 4.4206 Contents of Part A of application.

2 Part A of the application must contain the following  
3 information:

4 A. the information set forth in 6 MCAR S 4.4005;

5 B. on the topographic map submitted under 6 MCAR S 4.4005,  
6 an identification of all wells, springs, and surface water  
7 bodies listed in public records or otherwise known to the  
8 applicant to exist within one-quarter mile of the property  
9 boundaries of the hazardous waste facility;

10 C. the name, mailing address, and exact location of the  
11 hazardous waste facility, including the latitude and longitude  
12 of the location;

13 D. an identification by use of up to four standard  
14 industrial classification codes that best reflect the principal  
15 products or services provided by the applicant;

16 E. a list of the wastes designated under 6 MCAR SS  
17 4.9128-4.9137 as hazardous to be treated, stored, or disposed of  
18 by the applicant and an estimate of the quantity of each  
19 hazardous waste to be treated, stored, or disposed of annually  
20 by the applicant;

21 F. a description of the processes to be used for treating,  
22 storing, or disposing of hazardous waste, and the design  
23 capacity of the facility;

24 G. whether the facility is new or existing and whether the  
25 application is an initial or amended application;

26 H. if the facility is an existing facility, a scale drawing  
27 of the facility showing the location of all past, present, and  
28 proposed future treatment, storage, and disposal areas;

29 I. if the facility is an existing facility, photographs of  
30 the facility clearly showing all existing structures; existing  
31 treatment, storage, and disposal areas; and sites of proposed  
32 future treatment, storage, and disposal areas; and

33 J. a statement as to which, if any, of the following permits  
34 the applicant has applied for or received that pertains to the  
35 facility or a portion of the facility that is the subject of the  
36 application:

1           1. a hazardous waste facility permit required by 6 MCAR S  
2 4.4203, other than the permit that is the subject of the current  
3 application, or a hazardous waste facility permit issued by the  
4 United States Environmental Protection Agency;

5           2. a National Pollutant Discharge Elimination System  
6 permit required by 6 MCAR S 4.4104;

7           3. an air emission facility permit required by 6 MCAR S  
8 4.4303; or

9           4. a dredge or fill permit issued under section 404 of  
10 the Clean Water Act, United States Code, title 33, section 1344.

11 6 MCAR S 4.4207 General information requirements for Part B of  
12 application.

13       Part B of the application must contain the following  
14 information:

15       A. A general description of the facility, unless an accurate  
16 and complete Part A of the application has been submitted.

17       B. Chemical and physical analyses of the hazardous wastes to  
18 be handled at the facility. At a minimum, these analyses must  
19 contain all information that is necessary in order to treat,  
20 store, or dispose of the wastes properly in accordance with 6  
21 MCAR SS 4.9280-4.9322.

22       C. A copy of the waste analysis plan required by 6 MCAR S  
23 4.9284 B.

24       D. A description of the security procedures and equipment  
25 required by 6 MCAR S 4.9281 D. or a justification as to why  
26 these security procedures are unnecessary at the facility.

27       E. A copy of the inspection schedule required by 6 MCAR S  
28 4.9281 E.2., including, if applicable, the information set forth  
29 in 6 MCAR SS 4.9315 E.; 4.9316 D.; 4.9317 E.; 4.9318 E. and F.;  
30 4.9319 D.; 4.9320 E.; and 4.9321 G.

31       F. A description of procedures, structures, or equipment  
32 used at the facility as required to comply with 6 MCAR SS 4.9286  
33 and 4.9287. If the applicant is requesting a waiver of any of  
34 the requirements of 6 MCAR S 4.9286, the applicant shall include  
35 a justification for the request.

36       G. A copy of the contingency plan required by 6 MCAR S



1 4.9288, including, if applicable, the specific information set  
2 forth in 6 MCAR S 4.9317 F.

3 H. A description of procedures, structures, or equipment  
4 used at the facility to:

- 5 1. prevent hazards in unloading operations, such as ramps  
6 or special forklifts;
- 7 2. prevent runoff from hazardous waste handling areas to  
8 other areas of the facility or environment, or to prevent  
9 flooding, such as berms, dikes, or trenches;
- 10 3. prevent contamination of water supplies;
- 11 4. mitigate effects of equipment failure and power  
12 outages; and
- 13 5. prevent undue exposure of personnel to hazardous  
14 waste, such as protective clothing.

15 I. A description of precautions to prevent accidental  
16 ignition or reaction of ignitable, reactive, or incompatible  
17 wastes as required to demonstrate compliance with 6 MCAR S  
18 4.9283 and documentation of the applicant's compliance with 6  
19 MCAR S 4.9283 C.

20 J. A description of the traffic patterns and traffic control  
21 at the facility, including a drawing showing traffic lanes,  
22 location of traffic control signals, turns across traffic lanes,  
23 and location of stacking lanes; estimated traffic volume at the  
24 facility; types of vehicles expected to use the facility; and a  
25 description of access road surfacing and load bearing capacity.

26 K. An outline of both introductory and continuing training  
27 programs to be conducted by the applicant that are designed in  
28 accordance with 6 MCAR S 4.9282 to prepare persons to operate or  
29 maintain the hazardous waste facility in a safe manner and a  
30 description of how training will be designed in accordance with  
31 6 MCAR S 4.9282 C. to meet actual job tasks.

32 L. A copy of the closure plan and, where applicable, the  
33 post-closure plan required by 6 MCAR SS 4.9298 and 4.9300,  
34 including, if applicable, the specific information set forth in  
35 6 MCAR SS 4.9315 I.; 4.9316 F.; 4.9317 G.; 4.9318 G.; 4.9319 H.;  
36 4.9320 G.; and 4.9321 H.

1 M. For existing disposal facilities, documentation that a  
2 notice has been placed in the deed or appropriate alternative  
3 instruments as required by 6 MCAR S 4.9303.

4 N. The most recent closure cost estimate for the facility  
5 prepared in accordance with 6 MCAR S 4.9305 and a copy of the  
6 financial assurance mechanism adopted in compliance with 6 MCAR  
7 S 4.9306.

8 O. If applicable, the most recent post-closure cost estimate  
9 for the facility prepared in accordance with 6 MCAR S 4.9307 and  
10 a copy of the financial assurance mechanism adopted in  
11 compliance with 6 MCAR S 4.9308.

12 P. If applicable, the most recent corrective action cost  
13 estimate for the facility prepared in accordance with 6 MCAR S  
14 4.9309 and a copy of the financial assurance mechanism adopted  
15 in compliance with 6 MCAR S 4.9310.

16 Q. If applicable, a copy of the insurance policy or other  
17 documentation showing compliance with the requirements of 6 MCAR  
18 S 4.9312. For a new facility, the application must contain  
19 documentation showing the amount of insurance that meets the  
20 specifications of 6 MCAR S 4.9312 A. and if applicable 6 MCAR S  
21 4.9312 B., that the applicant plans to have in effect before  
22 initial receipt of hazardous waste for treatment, storage, or  
23 disposal. If the applicant desires to request a variance from  
24 the insurance requirements under 6 MCAR S 4.9312 C., the  
25 applicant shall include all information required by 6 MCAR S  
26 4.9312 C. in support of this request.

27 R. A topographic map showing the facility and the area  
28 surrounding the facility for a distance of at least 1,000 feet,  
29 using a scale of either 2.5 centimeters equal to not more than  
30 61 meters or one inch equal to not more than 200 feet. The map  
31 must include contours having intervals sufficient to clearly  
32 show the pattern of surface water flow in the vicinity of and  
33 from each operational unit of the facility. The map must  
34 clearly show the following:

- 35 1. date the map was prepared;
- 36 2. map scale;

- 1 3. 100-year floodplain area;
  - 2 4. surface waters, including intermittent streams;
  - 3 5. wetlands;
  - 4 6. shorelands;
  - 5 7. zoning of surrounding lands and uses of surrounding
  - 6 lands, including residential, commercial, agricultural, and
  - 7 recreational;
  - 8 8. wind rose, including windspeed and direction;
  - 9 9. arrows indicating map directions;
  - 10 10. legal boundaries of the hazardous waste facility site;
  - 11 11. county, township, and municipal boundaries;
  - 12 12. township, range, and section numbers;
  - 13 13. boundaries of parks and wildlife refuges;
  - 14 14. location of fences, gates, and other access control
  - 15 measures;
  - 16 15. wells, both on-site and off-site;
  - 17 16. all structures and buildings, and roads on the
  - 18 hazardous waste facility site, including those used in
  - 19 treatment, storage, or disposal operations; runoff control
  - 20 systems; access and internal roads; storm, sanitary, and process
  - 21 sewerage systems; loading and unloading areas; and fire control
  - 22 systems;
  - 23 17. barriers for drainage or flood control; and
  - 24 18. location of operational units within the hazardous
  - 25 waste facility site, areas where hazardous waste is, or will be,
  - 26 treated, stored, or disposed of, including equipment cleanup
  - 27 areas.
- 28 S. A statement as to whether the hazardous waste facility is
- 29 located within a 100-year floodplain, an identification of the
- 30 source of the data used to make this determination, and copy of
- 31 the relevant Federal Insurance Administration flood map or other
- 32 map used to make the determination, and any calculations done to
- 33 make the determination. If the hazardous waste facility is
- 34 located within a 100-year floodplain, the applicant shall
- 35 furnish the following information:
- 36 1. any known special flooding factors, such as wave

1 action, which must be considered in designing, constructing,  
2 operating, or maintaining the facility to prevent washout from a  
3 100-year flood;

4 2. engineering analysis to indicate the various  
5 hydrodynamic and hydrostatic forces expected to result at the  
6 site as a result of a 100-year flood;

7 3. structural or other engineering studies showing the  
8 design of operational units, such as tanks or incinerators;

9 4. structural or other engineering studies showing the  
10 design of flood protection devices at the facility, such as  
11 floodwalls or dikes, and an explanation as to how these devices  
12 will prevent washout;

13 5. if flood protection devices are not proposed to be  
14 utilized at the facility, the applicant shall provide, in lieu  
15 of the information set forth in 2.-4., a detailed description of  
16 procedures which the applicant will follow to remove hazardous  
17 waste to safety before the facility is flooded, including:

18 a. the timing of the removal relative to flood levels,  
19 showing that removal can be completed before floodwaters reach  
20 the facility;

21 b. a description of the facility or facilities to  
22 which the hazardous waste will be moved and a demonstration that  
23 these facilities will be eligible to receive hazardous waste in  
24 accordance with these rules and 6 MCAR SS 4.9280-4.9481;

25 c. the planned procedures, equipment, and personnel to  
26 be used and the methods that will be implemented to ensure that  
27 these resources will be available when needed; and

28 d. a description of the potential for accidental  
29 discharges of hazardous waste during the movement of such waste;

30 6. if the permit application relates to an existing  
31 facility and the applicant is not in compliance with 6 MCAR S  
32 4.9285 A. at the time of the application, the applicant shall  
33 provide a plan showing how the facility will be brought into  
34 compliance with 6 MCAR S 4.9285 A. and a proposed schedule for  
35 the implementation of this plan.

36 T. Any additional geologic and other location information

1 required to demonstrate compliance with 6 MCAR S 4.9285 B.

2 U. Any additional information that the director determines  
3 is relevant to a decision on permit issuance, including but not  
4 limited to plans, specifications, and waste analyses that are  
5 necessary to determine whether the facility will meet all  
6 applicable Minnesota and federal statutes and rules.

7 6 MCAR S 4.4208 Part B information requirements for facilities  
8 that store containers of hazardous waste.

9 Except as otherwise provided in 6 MCAR S 4.9315 A., if the  
10 applicant proposes to store containers of hazardous waste, the  
11 applicant shall furnish the following information in addition to  
12 the information required by 6 MCAR S 4.4207:

13 A. A description of the proposed area where the containers  
14 will be stored demonstrating that the area complies with 6 MCAR  
15 S 4.9315 F. At a minimum, the description must include:

- 16 1. basic design parameters, dimensions, and construction  
17 materials;
- 18 2. the manner in which the design promotes drainage or  
19 prevents contact between hazardous waste containers and standing  
20 liquids;
- 21 3. the capacity of the containment system in terms of the  
22 number and volume of containers to be stored;
- 23 4. provisions for preventing or managing run-on; and
- 24 5. the manner in which accumulated liquids can be removed  
25 to prevent overflow and can be analyzed to determine proper  
26 management of the removed liquids.

27 B. Information on the type of containers to be used and  
28 waste types stored in each type of container, including  
29 information on size, capacity, construction material of  
30 containers, compatibility of waste with the container, and the  
31 number and volume of containers to be stored.

32 C. An operations manual that describes operational and  
33 maintenance procedures to be used at the facility to ensure  
34 proper management of hazardous waste containers.

35 D. For storage areas for containers holding wastes that do  
36 not contain free liquids, a demonstration of compliance with 6

1 MCAR S 4.9315 F.4., including:

2 1. test procedures and results or other documentation or  
3 information to show that the wastes do not contain free liquids,  
4 and

5 2. a description of how the storage area is designed or  
6 operated to drain and remove liquids or how contact between  
7 containers and standing liquids is prevented.

8 E. For any ignitable, reactive, or incompatible wastes,  
9 sketches, drawings, or data that demonstrate compliance with 6  
10 MCAR S 4.9315 G. and H., if applicable.

11 F. For incompatible wastes, a description of the procedures  
12 to be used to ensure compliance with 6 MCAR SS 4.9315 H. and  
13 4.9283.

14 6 MCAR S 4.4209 Part B information requirements for storage or  
15 treatment tanks.

16 Except as otherwise provided in 6 MCAR S 4.9316 A., if the  
17 applicant proposes to use tanks to store or treat hazardous  
18 waste, the applicant shall furnish the information designated in  
19 A. and B. in addition to the information required by 6 MCAR S  
20 4.4207:

21 A. A description of the design and operation procedures of  
22 the tank that demonstrate compliance with the requirements of 6  
23 MCAR S 4.9316 B., C., G., and H. This description must include:

24 1. references to design standards or other available  
25 information used, or to be used, in the design and construction  
26 of the tank;

27 2. a description of the design specifications, including  
28 identification of construction materials and lining materials  
29 and any pertinent characteristics of these materials, such as  
30 corrosion or erosion resistance;

31 3. a description of design specifications and operational  
32 procedures that demonstrate compliance with 6 MCAR S 4.9316 B.3.  
33 for underground tanks;

34 4. tank dimensions, capacity, and shell thickness;

35 5. a diagram of piping, instrumentation, and process flow;

36 6. a description of feed systems, safety cutoff and

1 bypass systems, and pressure controls, such as vents;

2 7. a description of waste types and volumes to be stored  
3 in each tank; and

4 8. a description of operational procedures that  
5 demonstrate compliance with the requirements of 6 MCAR SS 4.9283  
6 and 4.9316 G. and H. regarding the procedures for handling  
7 ignitable, reactive, or incompatible wastes.

8 B. A description of the system to be used to contain the  
9 tank and any spills or releases of hazardous waste from the  
10 tank, demonstrating compliance with 6 MCAR S 4.9316 E.,  
11 including at a minimum the following:

12 1. basic design parameters, dimensions, and construction  
13 materials;

14 2. the manner in which the design promotes drainage or  
15 prevents contact between the tank and standing liquids;

16 3. the capacity of the system in terms of number and  
17 volume of tanks to be held;

18 4. provisions for preventing or managing run-on; and

19 5. the manner in which accumulated liquids can be removed  
20 to prevent overflow and can be analyzed to determine proper  
21 management of the removed liquids.

22 6 MCAR S 4.4210 Part B information requirements for surface  
23 impoundments.

24 Except as otherwise provided in 6 MCAR S 4.9317 A., if the  
25 applicant proposes to store, treat, or dispose of hazardous  
26 waste in surface impoundment facilities, the applicant shall  
27 submit detailed plans and specifications accompanied by an  
28 engineering report which collectively includes the following  
29 information in addition to the information required by 6 MCAR S  
30 4.4207:

31 A. A list of the hazardous wastes placed or to be placed in  
32 each surface impoundment.

33 B. Geologic and hydrogeologic information necessary to  
34 demonstrate compliance with 6 MCAR S 4.9317 B.

35 C. Detailed plans and an engineering report that describes  
36 how the surface impoundment is or will be designed, constructed,

1 operated, and maintained to meet the requirements of 6 MCAR S  
2 4.9317 C. This submission must address the following items as  
3 specified in 6 MCAR S 4.9317 C.: the double liner system and  
4 leak detection, collection, and removal system; prevention of  
5 overtopping; and structural integrity of dikes.

6 D. A description of how each surface impoundment, including  
7 the double liner, leak detection, collection and removal, and  
8 cover systems and appurtenances for control of overtopping, will  
9 be inspected in order to meet the requirements of 6 MCAR S  
10 4.9317 E.1. and 2. This information must be included in the  
11 inspection plan submitted under 6 MCAR S 4.4207 E.

12 E. A certification by a registered professional engineer  
13 that attests to the structural integrity of each dike, as  
14 required under 6 MCAR S 4.9317 E.3. For new units, the owner or  
15 operator shall submit a statement by a qualified engineer that  
16 he or she will provide this certification upon completion of  
17 construction in accordance with the plans and specifications as  
18 required under 6 MCAR S 4.9317 E.3.

19 F. A certification by a registered professional engineer  
20 that attests that the uppermost liner and leak detection,  
21 collection, and removal system is intact and remains at design  
22 specifications, as required under 6 MCAR S 4.9317 E.4. For new  
23 units, the owner or operator shall submit a statement by a  
24 qualified engineer that he or she will provide this  
25 certification upon completion of construction in accordance with  
26 the plans and specifications as required under 6 MCAR S 4.9317  
27 E.4.

28 G. A description of the procedure to be used for removing a  
29 surface impoundment from service as required under 6 MCAR S  
30 4.9317 F.2. and 3. This information must be included in the  
31 contingency plan submitted under 6 MCAR S 4.4207 G.

32 H. A description of how hazardous waste residues and  
33 contaminated materials will be removed from the unit at closure,  
34 as required under 6 MCAR S 4.9317 G.1.a. For any wastes not to  
35 be removed from the unit upon closure, the owner or operator  
36 shall submit detailed plans and an engineering report to



1 demonstrate compliance with 6 MCAR S 4.9317 G.1.b. and 2. This  
2 information must be included in the closure plan and, where  
3 applicable, in the post-closure plan submitted under 6 MCAR S  
4 4.4207 L.

5 I. If ignitable or reactive wastes are to be placed in a  
6 surface impoundment, an explanation of compliance with 6 MCAR S  
7 4.9317 H.

8 J. If incompatible wastes, or incompatible wastes and  
9 materials will be placed in a surface impoundment, an  
10 explanation of compliance with 6 MCAR S 4.9317 I.

11 6 MCAR S 4.4211 Part B information requirements for waste piles.

12 Except as otherwise provided by 6 MCAR S 4.9318 A., if the  
13 applicant proposes to store or treat hazardous waste in waste  
14 piles, the applicant shall furnish the information required by  
15 A.-K. in addition to the information required by 6 MCAR S 4.4207:

16 A. A list of hazardous wastes placed or to be placed in each  
17 waste pile.

18 B. If an exemption is sought to 6 MCAR SS 4.9318 B.1. and 2.  
19 and C. and 4.9297 as provided by 6 MCAR S 4.9318 A., an  
20 explanation of compliance with 6 MCAR S 4.9318 A.1.-4.

21 C. Geologic and hydrogeologic information necessary to  
22 demonstrate compliance with 6 MCAR S 4.9318 B.

23 D. Detailed plans and an engineering report describing how  
24 the pile is or will be designed, constructed, operated, and  
25 maintained to meet the requirements of 6 MCAR S 4.9318 C. This  
26 submission must address the following items as specified in 6  
27 MCAR S 4.9318 C.:

28 1. the liner system, leachate collection and removal  
29 system, and if applicable, the leak detection, collection, and  
30 removal system;

31 2. control of run-on;

32 3. control of run-off;

33 4. management of collection and holding units associated  
34 with run-on and run-off control systems;

35 5. control of wind dispersal of particulate matter, if  
36 applicable; and

1 6. treatment and disposal of collected runoff and  
2 leachate.

3 E. If an exemption from 6 MCAR S 4.9297 K.5. is sought as  
4 provided by 6 MCAR S 4.9318 D., detailed plans and an  
5 engineering report that describes compliance with 6 MCAR S  
6 4.9318 D.1.

7 F. If an exemption from 6 MCAR S 4.9297 is sought as  
8 provided by 6 MCAR S 4.9318 E., detailed plans and an  
9 engineering report that describes compliance with 6 MCAR S  
10 4.9318 E.1.

11 G. A description of how each waste pile, including the liner  
12 system and appurtenances for control of run-on and run-off, will  
13 be inspected in order to meet the requirements of 6 MCAR S  
14 4.9318 F. This information must be included in the inspection  
15 plan submitted under 6 MCAR S 4.4207 E. If an exemption is  
16 sought to 6 MCAR S 4.9297 under 6 MCAR S 4.9318 E., describe in  
17 the inspection plan how the inspection requirements comply with  
18 6 MCAR S 4.9318 E.1.b.

19 H. If treatment is carried out on or in the pile, details of  
20 the process and equipment used, and the nature and quality of  
21 the residuals.

22 I. If ignitable or reactive wastes are to be placed in a  
23 waste pile, an explanation of compliance with the requirements  
24 of 6 MCAR S 4.9318 H.

25 J. If incompatible wastes, or incompatible wastes and  
26 materials will be placed in a waste pile, an explanation of  
27 compliance with 6 MCAR S 4.9318 I.

28 K. A description of how hazardous waste residues and  
29 contaminated materials will be removed from the waste pile at  
30 closure, as required under 6 MCAR S 4.9318 G.1. For any waste  
31 not to be removed from the waste pile upon closure, the owner or  
32 operator shall submit detailed plans and an engineering report  
33 describing compliance with 6 MCAR S 4.9320 G.1. and 2. This  
34 information must be included in the closure plan and, where  
35 applicable, the post-closure plan submitted under 6 MCAR S  
36 4.4207 L.

1 6 MCAR S 4.4212 Part B information requirements for land  
2 treatment.

3 Except as otherwise provided by 6 MCAR S 4.9319 A., if the  
4 applicant proposes to use land treatment to dispose of hazardous  
5 waste, the applicant shall furnish the information designated in  
6 A.-H. in addition to the information required by 6 MCAR S 4.4207:

7 A. A description of plans to conduct a treatment

8 demonstration as required under 6 MCAR S 4.9319 C. The  
9 description must include the following information:

10 1. the wastes for which the demonstration will be made  
11 and the potential hazardous constituents in the wastes;

12 2. the data sources to be used to make the demonstration,  
13 such as literature, laboratory data, field data, or operating  
14 data;

15 3. any specific laboratory or field test that will be  
16 conducted, including the type of test such as column leaching or  
17 degradation; materials and methods, including analytical  
18 procedures; expected time for completion; and characteristics of  
19 the unit that will be simulated in the demonstration, including  
20 treatment zone characteristics, dimensions, climatic conditions,  
21 and operating practices; and

22 4. statistical methods for interpreting results.

23 B. A description of a land treatment program as required  
24 under 6 MCAR S 4.9319 B. This information must be submitted  
25 with the plans for the treatment demonstration, and updated  
26 following the treatment demonstration. The land treatment  
27 program must address the following items:

28 1. the wastes to be land treated;

29 2. design measures and operating practices necessary to  
30 maximize treatment in accordance with 6 MCAR S 4.9319 D.1.

31 including waste application method and rate, measures to control  
32 soil pH, enhancement of microbial or chemical reactions, and  
33 control of moisture content;

34 3. provisions for unsaturated zone monitoring, including:

35 a. sampling equipment, procedures, and frequency;

36 b. procedures for selecting sampling locations;

- 1 c. analytical procedures;
  - 2 d. chain of custody control;
  - 3 e. procedures for establishing background values;
  - 4 f. statistical methods for interpreting results; and
  - 5 g. the justification for any hazardous constituents
- 6 recommended for selection as principal hazardous constituents,  
7 in accordance with the criteria for this selection in 6 MCAR S  
8 4.9319 F.1.;

9 4. a list of hazardous constituents and their  
10 concentrations that are reasonably expected to be in, or derived  
11 from, the wastes to be land treated based on waste analysis  
12 performed pursuant to 6 MCAR S 4.9284; and

13 5. the proposed dimensions of the treatment zone.

14 C. A description of how the unit is or will be designed,  
15 constructed, operated, and maintained in order to meet the  
16 requirements of 6 MCAR S 4.9319 D. This submission must address  
17 the following items:

- 18 1. control of run-on;
- 19 2. collection and control of run-off;
- 20 3. minimization of run-off of hazardous constituents from  
21 the treatment zone;
- 22 4. management of collection and holding facilities  
23 associated with run-on and run-off control systems;
- 24 5. treatment and disposal of run-off collected in the  
25 run-off control system;
- 26 6. control of wind dispersal; and
- 27 7. periodic inspection of the unit. This information  
28 must be included in the inspection plan submitted under 6 MCAR S  
29 4.4207 E.

30 D. If food chain crops might be grown in or on the treatment  
31 zone of the land treatment unit, a description of how the  
32 demonstrations required under 6 MCAR S 4.9319 E. will be  
33 conducted including:

- 34 1. characteristics of the food chain crop for which the  
35 demonstrations will be made;
- 36 2. characteristics of the waste, treatment zone, and

1 waste application method and rate to be used in the  
2 demonstrations;

3 3. procedures for crop growth, sample collection, sample  
4 analysis, and data evaluation;

5 4. characteristics of the comparison crop including the  
6 location and conditions under which it was or will be grown;

7 5. description of the soil core and soil pore liquid  
8 sampling and analysis procedures; and

9 6. statistical methods for interpreting results.

10 E. If food chain crops are to be grown after closure, a  
11 description of compliance with the requirements of 6 MCAR S  
12 4.9319 E.

13 F. A description of the vegetative cover to be applied to  
14 closed portions of the facility, and a plan for maintaining this  
15 cover during the post-closure care period as required under 6  
16 MCAR S 4.9319 H.1.h. and 3.b. This information must be included  
17 in the closure plan and, where applicable, in the post-closure  
18 care plan submitted under 6 MCAR S 4.4207 L.

19 G. If ignitable or reactive wastes will be placed in or on  
20 the treatment zone, an explanation of compliance with the  
21 requirements of 6 MCAR S 4.9319 I.

22 H. If incompatible wastes or incompatible wastes and  
23 materials will be placed in or on the same treatment zone, an  
24 explanation of compliance with 6 MCAR S 4.9319 J.

25 6 MCAR S 4.4213 Part B information requirements for landfills.

26 Except as otherwise provided by 6 MCAR S 4.9320 A., if the  
27 applicant proposes to dispose of hazardous waste in a landfill,  
28 the applicant shall furnish the information designated in A.-I.  
29 in addition to the information required by 6 MCAR S 4.4207:

30 A. A list of the hazardous wastes placed or to be placed in  
31 each landfill or landfill cell.

32 B. Geologic and hydrogeologic information necessary to  
33 demonstrate compliance with 6 MCAR S 4.9320 B.

34 C. Detailed plans and an engineering report describing how  
35 the landfill is or will be designed, constructed, operated, and  
36 maintained to comply with the requirements of 6 MCAR S 4.9320

1 C. This submission must address the following items as  
2 specified in 6 MCAR S 4.9320 C.:

- 3 1. the double liner system, leak detection, collection,  
4 and removal system, and leachate collection and removal system;
- 5 2. control of run-on;
- 6 3. control of run-off;
- 7 4. management of collection and holding facilities  
8 associated with run-on and run-off control systems;
- 9 5. control of wind dispersal of particulate matter, where  
10 applicable;
- 11 6. the phased development plan in accordance with the  
12 requirements of 6 MCAR S 4.9320 C.7.; and
- 13 7. treatment and disposal of collected run-off and  
14 leachate.

15 D. A description of how each landfill, including the liner  
16 and cover systems, will be inspected in order to meet the  
17 requirements of 6 MCAR S 4.9320 E. This information must be  
18 included in the inspection plan submitted under 6 MCAR S 4.4207  
19 E.

20 E. Detailed plans and an engineering report describing the  
21 final cover which will be applied to each landfill or landfill  
22 cell at closure in accordance with 6 MCAR S 4.9320 G.1. and a  
23 description of how each landfill will be maintained and  
24 monitored after closure in accordance with 6 MCAR S 4.9320 G.2.  
25 This information must be included in the closure and  
26 post-closure plans submitted under 6 MCAR S 4.4207 L.

27 F. If ignitable or reactive wastes will be landfilled, an  
28 explanation of compliance with the requirements of 6 MCAR S  
29 4.9320 H.

30 G. If incompatible wastes or incompatible wastes and  
31 materials will be landfilled, an explanation of compliance with  
32 6 MCAR S 4.9320 I.

33 H. If liquid waste or waste containing free liquids is to be  
34 landfilled, an explanation of compliance with the requirements  
35 of 6 MCAR S 4.9320 J.

36 I. If containers of hazardous waste are to be landfilled, an

1 explanation of compliance with the requirements of 6 MCAR S  
2 4.9320 K. or L., as applicable.

3 6 MCAR S 4.4214 Part B information and special procedural  
4 requirements for thermal treatment facilities.

5 Except as provided in 6 MCAR S 4.9321 A., if the applicant  
6 proposes to treat or dispose of hazardous waste by using thermal  
7 treatment, the applicant shall fulfill the requirements of A.,  
8 B., or C. as follows in addition to the information requirements  
9 of 6 MCAR S 4.4207, and the director shall fulfill the  
10 requirements of D. as follows:

11 A. If the applicant is seeking the exemption provided by 6  
12 MCAR S 4.9321 A.2. or 3. relating to ignitable, corrosive, or  
13 reactive wastes, the applicant shall submit documentation  
14 showing that the waste includes none or insignificant  
15 concentrations of the hazardous constituents listed in 6 MCAR S  
16 4.9137, and one of the following:

17 1. that the waste is listed as a hazardous waste in 6  
18 MCAR S 4.9134 only because it is ignitable according to Hazard  
19 Code I, because it is corrosive according to Hazard Code C, or  
20 because it is both ignitable and corrosive;

21 2. that the waste is listed as a hazardous waste in 6  
22 MCAR S 4.9134 only because it is reactive for characteristics  
23 other than those listed in 6 MCAR S 4.9132 E.1.d. and e., and  
24 will not be treated when other hazardous wastes are present in  
25 the combustion zone;

26 3. that the waste has been tested for the characteristics  
27 of hazardous waste set forth in 6 MCAR S 4.9132 and that its  
28 only hazardous characteristic is ignitability, corrosivity, or  
29 both; or

30 4. that the waste has been tested for the characteristics  
31 of hazardous waste set forth in 6 MCAR S 4.9132 and that its  
32 only hazardous characteristic is reactivity as described by 6  
33 MCAR S 4.9132 E.1.a., b., c., f., g., or h., and will not be  
34 treated when other hazardous wastes are present in the  
35 combustion zone.

36 B. The applicant shall submit results of a trial burn

1 conducted in accordance with 6 MCAR S 4.4221, including all the  
2 determinations required by 6 MCAR S 4.4221 F.

3 C. The applicant shall perform an analysis of each waste or  
4 mixture of waste to be treated by using the analytical  
5 techniques set forth in the Environmental Protection Agency  
6 document SW 846 as referenced in 6 MCAR S 4.9102, or by using  
7 techniques found by the director to be equivalent to them. The  
8 applicant shall submit all of the following information:

- 9 1. The results of each waste analysis performed,  
10 including:
  - 11 a. the heat value of the waste in the form and  
12 composition in which it will be burned;
  - 13 b. a description of the form and composition of the  
14 waste and, if applicable, viscosity of the waste;
  - 15 c. any hazardous organic constituents listed in 6 MCAR  
16 S 4.9137 that are reasonably expected to be found in the waste;
  - 17 d. all waste constituents listed in 6 MCAR S 4.9137  
18 for which no analysis was done and an explanation of why this  
19 analysis was not done;
  - 20 e. an approximate quantification of the hazardous  
21 constituents identified in the waste, within the precision  
22 specified by Environmental Protection Agency document SW 846;
  - 23 f. a quantification of those hazardous constituents in  
24 the waste that may be designated as principal organic hazardous  
25 constituents based on data submitted from other trial or  
26 operational burns which demonstrated compliance with the  
27 performance standards set forth in 6 MCAR S 4.9321 D.; and
  - 28 g. waste analysis data sufficient to allow the  
29 director to specify as permit principal organic hazardous  
30 constituents those constituents for which destruction and  
31 removal efficiencies will be required.
- 32 2. A detailed engineering description of the thermal  
33 treatment unit, including:
  - 34 a. the manufacturer's name and model number;
  - 35 b. the type of thermal treatment unit;
  - 36 c. the linear dimensions of the thermal treatment



1 unit, including the cross sectional area of the combustion  
2 chamber;

3 d. a description of the auxiliary fuel system,  
4 including type and feed rate;

5 e. the capacity of the prime mover;

6 f. a description of any automatic waste feed cutoff  
7 system;

8 g. nozzle and burner design;

9 h. construction materials; and

10 i. location and description of temperature, pressure,  
11 and flow indicating devices and control devices.

12 3. A detailed engineering description of air pollution  
13 control equipment and stack gas monitoring and pollution control  
14 monitoring systems, including:

15 a. manufacturer's name and model numbers;

16 b. physical dimensions; and

17 c. if applicable, specifications as to air flow,  
18 pressure drop, discharge, voltage, and water flow.

19 4. A description and comparison of the waste to be burned  
20 with waste for which data has been obtained from previous  
21 operational or trial burns, including the data listed in 1., and  
22 a comparison of the principal organic hazardous constituents  
23 found in the wastes being compared.

24 5. A description and comparison of the design and  
25 operating conditions of the proposed thermal treatment unit with  
26 the design and operating conditions of the thermal treatment  
27 unit used in the previous operational or trial burn. For the  
28 previous operational or trial burn, the applicant shall submit a  
29 description of the results of such previously conducted  
30 operational or trial burn, including:

31 a. sampling and analysis techniques used to calculate  
32 compliance with the performance standards set forth in 6 MCAR S  
33 4.9321 D.;

34 b. monitoring methods and results for temperatures,  
35 waste feed rates, carbon monoxide, and an appropriate indicator  
36 of combustion gas velocity, including a statement concerning the

1 precision and accuracy of this measurement;

2 c. identification of any hazardous combustion  
3 by-products detected; and

4 d. the certification and results required by 6 MCAR S  
5 4.4221 G.

6 6. A description of the operating procedures proposed by  
7 the applicant, in sufficient detail to allow the director to  
8 determine whether the proposed thermal treatment unit will meet  
9 the performance and operating standards of 6 MCAR S 4.9321 D.  
10 and F., including:

11 a. expected carbon monoxide level, oxygen, and carbon  
12 dioxide levels in the stack exhaust gas;

13 b. waste feed rate;

14 c. combustion zone temperature;

15 d. indication of combustion gas velocity;

16 e. stack gas volumes, flow rate, and temperature;

17 f. computed residence time for waste in the combustion  
18 zone;

19 g. expected hydrochloric acid removal efficiency;

20 h. expected fugitive emissions and control procedures;

21 and

22 i. proposed waste feed cutoff limits based on the  
23 identified significant operating parameters.

24 7. Estimated emissions, in tons per year, of particulates  
25 and sulfur dioxide.

26 8. Any other additional information that the director  
27 determines is relevant to a decision to permit issuance.

28 D. Review of Part B application for thermal treatment  
29 facilities.

30 If the applicant has proceeded under A. or B., the director  
31 shall review the Part B application for completeness in  
32 accordance with 6 MCAR S 4.4009.

33 If the applicant has proceeded under C., the director shall  
34 review the Part B application for completeness. The director  
35 shall find the application complete if the director finds:

36 1. that the applicant has submitted all the information

1 required by C.;

2 2. that the wastes compared under C. are substantially  
3 similar;

4 3. that the thermal treatment units compared under C. are  
5 substantially similar; and

6 4. that the data from other trial burns is adequate to  
7 enable the director to specify under 6 MCAR S 4.9321 F. the  
8 operating conditions that will ensure that the performance  
9 standards in 6 MCAR S 4.9321 D. will be met by the proposed  
10 thermal treatment unit.

11 6 MCAR S 4.4215 Additional Part B information requirements for  
12 surface impoundments, waste piles, land treatment units, and  
13 landfills.

14 A. Groundwater protection. The additional information  
15 designated in 1.-7. regarding protection of groundwater is  
16 required from owners or operators of hazardous waste surface  
17 impoundments, waste piles, land treatment units, and landfills,  
18 except as otherwise provided in 6 MCAR S 4.9297 A.2., and must  
19 be submitted with Part B of the permit application. The  
20 following information is in addition to the information  
21 requirements of 6 MCAR SS 4.4207, 4.4210, 4.4211, 4.4212, and  
22 4.4213:

23 1. A summary of the groundwater monitoring data obtained  
24 during the interim status period under 6 MCAR SS 4.9397 and  
25 4.9398, if applicable.

26 2. Identification of the uppermost aquifer and aquifers  
27 hydraulically interconnected beneath the facility property,  
28 including groundwater flow directions and rates, and the basis  
29 for the identification, such as the information being obtained  
30 from hydrogeologic investigations of the facility area.

31 3. On the topographic map required under 6 MCAR S 4.4207  
32 R., a delineation of the waste management area, the property  
33 boundary, the proposed "point of compliance" as defined under 6  
34 MCAR S 4.9297 H., the proposed location of groundwater  
35 monitoring wells as required under 6 MCAR S 4.9297 J. and, to  
36 the extent possible, the information required in 2.

1           4. A description of any plume of contamination that has  
2 entered the groundwater from a regulated unit at the time that  
3 the application is submitted that:

4           a. delineates the extent of the plume on the  
5 topographic map required under 6 MCAR S 4.4207 R.; and

6           b. identifies the concentration of each constituent  
7 listed in 6 MCAR S 4.9137 throughout the plume or identifies the  
8 maximum concentrations of each such constituent in the plume.

9 The director may require this information on additional  
10 constituents if waste managed at the facility has met the  
11 characteristic of toxicity as defined in 6 MCAR S 4.9132 F.

12           5. Detailed plans and an engineering report describing  
13 the proposed groundwater monitoring program to be implemented to  
14 meet the requirements of 6 MCAR S 4.9297 J.

15           6. Sufficient information, supporting data, and analyses  
16 to establish a detection monitoring program that meets the  
17 requirements of 6 MCAR S 4.9297 K., including:

18           a. a proposed list of monitoring parameters that  
19 complies with the requirements of 6 MCAR S 4.9297 K.1. or 5.,  
20 whichever is applicable;

21           b. a proposed groundwater monitoring system;

22           c. background values for each proposed monitoring  
23 parameter or constituent, or procedures to calculate such  
24 values; and

25           d. a description of proposed sampling, analysis, and  
26 statistical comparison procedures to be utilized in evaluating  
27 groundwater monitoring data.

28           7. Sufficient information, supporting data, and analyses  
29 to establish a compliance monitoring program that meets the  
30 requirements of 6 MCAR S 4.9297 L., including:

31           a. a description of the wastes previously handled at  
32 the facility, if applicable;

33           b. if the presence of hazardous constituents has been  
34 detected in the groundwater at the point of compliance at the  
35 time of permit application, a characterization of the  
36 contaminated groundwater including concentrations of hazardous

1 constituents;

2 c. a list of hazardous constituents for which  
3 compliance monitoring will be undertaken in accordance with 6  
4 MCAR S 4.9297 J. and L.;

5 d. proposed concentration limits for each hazardous  
6 constituent, based on the criteria set forth in 6 MCAR S 4.9297  
7 F., including a justification for establishing alternate  
8 concentration limits in accordance with 6 MCAR S 4.9297 G.;

9 e. detailed plans and an engineering report describing  
10 the proposed groundwater monitoring system, in accordance with  
11 the requirements of 6 MCAR S 4.9297 J.; and

12 f. a description of proposed sampling, analysis, and  
13 statistical comparison procedures to be utilized in evaluating  
14 groundwater monitoring data.

15 B. Corrective action program. The owner or operator of a  
16 hazardous waste surface impoundment, waste pile, land treatment  
17 unit, or landfill shall submit to the director with Part B of  
18 the permit application sufficient information, supporting data,  
19 and analyses to establish a corrective action program that meets  
20 the requirements of 6 MCAR S 4.9297 M. The submittal must  
21 demonstrate that corrective action is feasible if the  
22 groundwater protection standard is exceeded. To demonstrate  
23 compliance with 6 MCAR S 4.9297 M., the owner or operator shall  
24 address the following items:

25 1. a characterization of any contaminated groundwater,  
26 including concentrations of hazardous constituents;

27 2. the concentration limit for each hazardous constituent  
28 as set forth in 6 MCAR S 4.9297 F. and G.;

29 3. detailed plans and an engineering report describing  
30 the corrective action to be taken;

31 4. a description of how the groundwater monitoring  
32 program will assess the adequacy of the corrective action;

33 5. an estimate of the time which may be necessary to  
34 complete corrective action; and

35 6. an estimate of the cost for completing such corrective  
36 action.

1 6 MCAR S 4.4216 Interim status.

2 A. Qualifying for interim status. Except as provided in B.,  
3 during the period after the submission of Part A of a hazardous  
4 waste facility permit application to the Environmental  
5 Protection Agency or to the director and prior to a final  
6 determination by the agency on the permit application, the owner  
7 or operator of an existing hazardous waste facility shall be  
8 considered to be in compliance with the requirement to obtain a  
9 permit if the director finds that the Environmental Protection  
10 Agency has granted the owner or operator interim status or if  
11 the director finds:

12 1. that the owner or operator has submitted a complete  
13 Part A of the hazardous waste facility permit application to the  
14 Environmental Protection Agency or to the director; and

15 2. that the owner or operator is in compliance with 6  
16 MCAR SS 4.9380-4.9422.

17 B. Failure to obtain interim status from EPA.

18 Notwithstanding the provisions of A., an owner or operator of a  
19 hazardous waste facility who, prior to the effective date of 6  
20 MCAR SS 4.4201-4.4224, was required to apply for and obtain  
21 interim status from the Environmental Protection Agency but who  
22 failed to obtain this interim status is not eligible to obtain  
23 interim status from the agency for that facility.

24 C. Notification of failure to qualify for interim status.

25 If the director determines that an owner or operator of an  
26 existing hazardous waste facility does not qualify for interim  
27 status under A., the director shall notify the owner or operator  
28 in writing of the failure to qualify for interim status and the  
29 reason for the failure. The notification must also include a  
30 statement that the owner or operator is subject to agency  
31 remedies for violation of agency rules, including the  
32 requirement of 6 MCAR S 4.4203 to obtain a permit.

33 D. Prohibitions. During the interim status period, an owner  
34 or operator shall not:

35 1. treat, store, or dispose of a hazardous waste not  
36 specified in Part A of the application;

1           2. employ processes not specified in Part A of the permit  
2 application;

3           3. exceed the design capacities specified in Part A of  
4 the application; or

5           4. alter a hazardous waste facility in a manner that  
6 amounts to a reconstruction of the facility. For the purpose of  
7 this rule, reconstruction occurs when the capital investment in  
8 the modification of the facility exceeds 50 percent of the  
9 capital cost of a comparable new hazardous waste facility.

10       E. Changes during interim status. An owner or operator who  
11 has interim status may conduct the following activities as  
12 prescribed:

13           1. The owner or operator may treat, store, or dispose of  
14 hazardous wastes not previously specified in Part A of the  
15 application if the owner or operator submits a revised Part A of  
16 the permit application prior to the commencement of the  
17 treatment, storage, or disposal.

18           2. The owner or operator may increase the design capacity  
19 of the facility if, prior to the implementation of the increase,  
20 the owner or operator submits a revised Part A of the permit  
21 application and an explanation of the need for the change, and  
22 if the director approves the increase in writing. The director  
23 shall approve the change if the director finds that there is a  
24 lack of available treatment, storage, or disposal capacity at  
25 other permitted hazardous waste facilities.

26           3. The owner or operator may add new processes or change  
27 the processes for the treatment, storage, or disposal of  
28 hazardous waste if, prior to the implementation of the addition  
29 or change, the owner or operator submits a revised Part A of the  
30 permit application and an explanation of the need for the  
31 addition, and if the director approves the addition or change in  
32 writing. The director shall approve the addition or change if  
33 the director finds that:

34           a. the addition or change is necessary to prevent a  
35 threat to human health or the environment as a result of an  
36 emergency situation; or

1           b. the addition or change is necessary for the owner  
2 or operator to comply with federal, Minnesota, or local  
3 requirements, including the interim status standards set forth  
4 in 6 MCAR SS 4.9380-4.9422.

5           4. Changes in the ownership or operational control of a  
6 facility may be made if the new owner or operator submits a  
7 revised Part A of the permit application not later than 90 days  
8 prior to the scheduled change. When a transfer of ownership or  
9 operational control of a facility occurs, the former owner or  
10 operator shall comply with the requirements of 6 MCAR SS  
11 4.9405-4.9413 that relate to financial requirements, until the  
12 new owner or operator has provided to the director a  
13 demonstration of compliance with 6 MCAR SS 4.9405-4.9413. All  
14 other interim status duties must be transferred immediately upon  
15 the change of ownership or operational control of the facility.  
16 If the director finds that the new owner or operator has  
17 complied with 6 MCAR SS 4.9405-4.9413, the director shall notify  
18 the former owner or operator in writing that the required  
19 demonstration by the new owner or operator has been made.

20           F. Compliance with interim status standards. During the  
21 interim status period the owner or operator shall comply with  
22 the interim status standards set forth in 6 MCAR SS  
23 4.9380-4.9422.

24           G. Termination of interim status. Interim status terminates  
25 automatically when the agency has taken final administrative  
26 action on the permit application. The following constitute  
27 justification for the director to commence proceedings to  
28 terminate interim status:

29           1. the director finds that the applicant has failed to  
30 furnish a full and complete Part B of the permit application  
31 within the time allowed by 6 MCAR S 4.4204 B.1.; or

32           2. the director finds that the owner or operator is in  
33 violation of any of the requirements of 6 MCAR SS 4.9380-4.9422.

34           6 MCAR S 4.4217 Preliminary determination, draft permit, and  
35 public comments.

36           The provisions of 6 MCAR SS 4.4010 and 4.4011 are



1 applicable to the public notice of draft permits and preliminary  
2 determinations, the use of fact sheets concerning hazardous  
3 waste facilities, and public comments, except as specifically  
4 otherwise provided as follows:

5 A. The director shall prepare a fact sheet for each draft  
6 permit which relates to a hazardous waste facility that the  
7 director finds to be major based on a review of the potential  
8 impacts of the facility on the environment.

9 B. Notwithstanding the provisions of 6 MCAR S 4.4010 D., the  
10 public notice period concerning a complete permit application  
11 and the director's preliminary determination as to whether the  
12 permit should be issued or denied shall be 45 days.

13 C. In addition to the requirements of 6 MCAR S 4.4010, the  
14 director shall mail a copy of the public notice and, if a fact  
15 sheet is prepared, a copy of the fact sheet to the persons  
16 described in 1.-5. as follows. The director shall also mail a  
17 copy of the permit application and the draft permit to the  
18 applicant and to the persons described in 3., 4., and 5. as  
19 follows:

20 1. to the governing body of each county and city or  
21 township that has jurisdiction over the area where the facility  
22 is located or proposed to be located;

23 2. to each state agency that has authority under state  
24 law with respect to the construction or operation of the  
25 facility which is the subject of the permit application;

26 3. to all federal and state agencies that have  
27 jurisdiction over fish, shellfish, and wildlife resources in the  
28 area where the facility is located or proposed to be located;

29 4. to the state advisory council on historic  
30 preservation, to state historic preservation officers, and any  
31 other government official, including officials in other states,  
32 whom the director determines may have an interest in the permit  
33 application; and

34 5. to the Environmental Protection Agency and any other  
35 federal agency that has issued or is required to issue a permit  
36 in connection with the facility which is the subject of the

1 permit application.

2 D. In addition to the requirements of 6 MCAR S 4.4010 E.,  
3 the director shall publish notice of the permit application in a  
4 major daily or weekly local newspaper that has general  
5 circulation in the geographical area in which the proposed  
6 hazardous waste facility is located and shall broadcast this  
7 notice over at least one local radio station.

8 E. Prior to final agency action on a permit application, the  
9 director or the agency shall respond to comments received during  
10 the public comment period or during any public informational  
11 meeting or contested case hearing held on the matter. This  
12 response shall state what action, if any, the director or the  
13 agency will take as a result of the comments. Responses to  
14 comments must be available to the public.

15 6 MCAR S 4.4218 Public informational meetings and contested case  
16 hearings.

17 A. Requests. A request for a public informational meeting  
18 or a contested case hearing on the application must be made in  
19 writing during the public comment period provided in 6 MCAR S  
20 4.4217 B. and must contain the information specified in 6 MCAR S  
21 4.4011 C. The agency shall grant or deny a request for a  
22 contested hearing in accordance with 6 MCAR S 4.4013. If the  
23 request is for a public informational meeting or if a request  
24 for a contested case hearing is denied, the agency shall hold a  
25 public informational meeting.

26 B. Preparation of public notice. If a contested case  
27 hearing or public informational meeting is to be held, the  
28 director shall prepare a public notice in accordance with 6 MCAR  
29 S 4.4012 or 4.4013. The public notice must continue for at  
30 least 30 days before the public informational meeting or  
31 contested case hearing.

32 C. Mailing of public notice. The director shall comply with  
33 the requirements of 6 MCAR S 4.4012 D. or 4.4013 D., whichever  
34 is applicable, and shall also mail a copy of the public notice  
35 to the following:

36 1. to the governing body of each county and city or

1 township that has jurisdiction over the area where the facility  
2 is located or proposed to be located;

3 2. to each state agency that has authority under  
4 Minnesota laws with respect to the construction or operation of  
5 the facility which is the subject of the public informational  
6 meeting or contested case hearing;

7 3. to all federal and state agencies that have  
8 jurisdiction over fish, shellfish, and wildlife resources in the  
9 area where the facility is located or proposed to be located;

10 4. to the state advisory council on historic  
11 preservation, the state historic preservation officers, and any  
12 other government official, including officials in other states,  
13 whom the director determines may have an interest in the permit  
14 application;

15 5. to the Environmental Protection Agency and any other  
16 federal agency that has issued or is required to issue a permit  
17 in connection with the facility which is the subject of the  
18 public informational meeting or contested case hearing; and

19 6. to all persons who have registered their names on the  
20 mailing list established under 6 MCAR S 4.4020.

21 D. Distribution of public notice. The director shall comply  
22 with the requirements of 6 MCAR S 4.4012 D. or 4.4013 D.,  
23 whichever is applicable, and shall also publish notice of the  
24 public informational meeting or contested case hearing in a  
25 daily or weekly major newspaper that has general circulation in  
26 the geographical area in which the facility is located or  
27 proposed to be located and shall broadcast this notice over at  
28 least one local radio station.

29 6 MCAR S 4.4219 Final determination.

30 A. In general. Except as provided in B. or C., the agency  
31 shall issue all hazardous waste facility permits in accordance  
32 with 6 MCAR S 4.4014.

33 B. Draft permit for new hazardous waste thermal treatment  
34 facility. For a draft permit that concerns a new hazardous  
35 waste thermal treatment facility prepared under 6 MCAR S 4.4221,  
36 the agency shall issue a hazardous waste facility permit

1 authorizing construction and operation of the proposed facility,  
2 requiring the permittee to conduct trial burns, and requiring  
3 submission of the results of the trial burns if the agency finds  
4 that the proposed facility is likely to qualify for a permit  
5 authorizing the operation of the facility under appropriate  
6 operating conditions as required by 6 MCAR S 4.9321 F. and as  
7 necessary for the permittee to comply with the performance  
8 standards set forth in 6 MCAR S 4.9321 D. This permit is  
9 subject to modification of the operating conditions to reflect  
10 the results of the trial burn and to ensure compliance with the  
11 standards set forth in 6 MCAR S 4.9321.

12 C. Draft short-term demonstration or two-phase permit for  
13 land treatment facility. For a draft short-term demonstration  
14 or two-phase permit concerning a new hazardous waste land  
15 treatment facility prepared under 6 MCAR S 4.4222, the agency  
16 shall issue a hazardous waste facility permit authorizing the  
17 treatment demonstration and requiring submission of the results  
18 of the demonstration if the agency finds that the proposed  
19 facility is likely to qualify for a permit authorizing the  
20 operation of the facility under appropriate operating conditions  
21 as required by 6 MCAR S 4.9319 D. and as necessary for the  
22 permittee to comply with the groundwater protection standards of  
23 6 MCAR S 4.9297 and the performance standards set forth in 6  
24 MCAR S 4.9319. This two-phase permit is subject to modification  
25 of the operating conditions to reflect the results of the  
26 treatment demonstration and to ensure compliance with the  
27 standards set forth in 6 MCAR SS 4.9297 and 4.9319.

28 6 MCAR S 4.4220 Emergency permits.

29 A. Issuance. Notwithstanding any other provision of 6 MCAR  
30 SS 4.4201-4.4224 or 4.4001-4.4021, if the director finds that  
31 there is an imminent and substantial danger to human health or  
32 the environment, the director may issue a temporary emergency  
33 permit to the owner or operator of a facility to allow  
34 treatment, storage, or disposal of a hazardous waste which the  
35 owner or operator is not otherwise permitted to treat, store, or  
36 dispose. This permit is contingent upon the approval of the

1 agency.

2 B. Oral or written permission. The emergency permit must be  
3 issued in writing, except that emergency permission to treat,  
4 store, or dispose of the hazardous waste may be given orally if  
5 circumstances warrant. If oral permission is given, the  
6 director shall, within five days after the date of giving of  
7 permission, issue a written permit.

8 C. Duration. The emergency permit may not exceed 90 days in  
9 duration.

10 D. Specifications. The emergency permit must clearly  
11 specify the hazardous waste to be received and the manner and  
12 location of its treatment, storage, or disposal.

13 E. Termination. The emergency permit is subject to  
14 termination at any time if the director determines that  
15 termination is appropriate to protect human health or the  
16 environment.

17 F. Requirements. The emergency permit must incorporate, to  
18 the extent possible under the circumstances, all applicable  
19 requirements of 6 MCAR SS 4.4201-4.4224, 4.9281-4.9322, and  
20 4.9480-4.9481.

21 G. Notification to public. At the time the director issues  
22 an emergency permit the director shall also notify the public of  
23 the emergency issuance of the permit. This notification must  
24 include:

25 1. the address and telephone number of the main agency  
26 office and the applicable regional office and the name of a  
27 person who may be contacted for additional information;

28 2. the name and location of the permitted hazardous waste  
29 facility;

30 3. a brief description of the wastes involved;

31 4. a brief description of the action authorized and the  
32 reasons for authorizing it; and

33 5. the duration of the emergency permit.

34 H. Agency approval. The director shall present the permit  
35 to the agency for approval at its next meeting. If no final  
36 action is taken by the agency at this meeting, the permit

1 continues in effect until its expiration date or until the  
2 agency takes final action, whichever occurs first.

3 6 MCAR S 4.4221 Hazardous waste thermal treatment facility  
4 permits.

5 A. Phase one requirements. In the permit for a new  
6 hazardous waste thermal treatment facility, for the purpose of  
7 determining operational readiness following completion of  
8 physical construction, the director shall establish permit  
9 conditions, including but not limited to, allowable waste feeds  
10 and operating conditions. These permit conditions are effective  
11 for the minimum time required to bring the thermal treatment  
12 facility to a point of operational readiness sufficient to  
13 conduct a trial burn, not to exceed 720 hours operating time for  
14 treatment of hazardous waste. The director may extend the  
15 duration of this operational period once, for up to 720  
16 additional hours, at the request of the applicant when good  
17 cause is shown. The permit may be modified to reflect the  
18 extension according to 6 MCAR S 4.4224 D.8.

19 Applicants shall submit to the director a statement, with  
20 Part B of the permit application, that suggests the conditions  
21 necessary to operate in compliance with the performance  
22 standards of 6 MCAR S 4.9321 D. during this period. This  
23 statement must include restrictions on waste constituents, waste  
24 feed rates, and the operating parameters identified in 6 MCAR S  
25 4.9321 F.

26 The director shall review this statement and other relevant  
27 information submitted with Part B of the permit application, and  
28 shall specify requirements for this period that are sufficient  
29 to meet the performance standards of 6 MCAR S 4.9321 D.

30 B. Phase two requirements. In the permit for a new  
31 hazardous waste thermal treatment facility, for the purposes of  
32 determining the feasibility of compliance with the performance  
33 standards of 6 MCAR S 4.9321 D. and of determining the adequate  
34 operating conditions under 6 MCAR S 4.9321 F., the director  
35 shall establish permit conditions to be effective during the  
36 trial burn.

1 C. Trial burn plan. An applicant shall submit to the  
2 director a trial burn plan with Part B of the permit  
3 application. The trial burn plan must include the following  
4 information:

5 1. the results of an analysis of each waste or mixture of  
6 wastes to be burned, that uses the analytical techniques set  
7 forth in ~~Fest-Methods-for-the-Evaluation-of-Solid-Waste,~~  
8 ~~Physical/Chemical-Methods,-publication-number-SW-846,-1980,-of~~  
9 ~~the-Office-of-Solid-Waste,~~ the United States Environmental  
10 Protection Agency document SW-846 as referenced in 6 MCAR S  
11 4.9102 or that uses analytical techniques found by the director  
12 to be equivalent to them. This analysis must include:

13 a. the heat value of the waste in the form and  
14 composition in which it will be burned;

15 b. a description of the physical form of the waste  
16 and, if applicable, viscosity of the waste;

17 c. an identification of any hazardous organic  
18 constituents listed in 6 MCAR S 4.9137 that are reasonably  
19 expected to be found in the waste;

20 d. an identification of all waste constituents listed  
21 in 6 MCAR S 4.9137 for which no analysis was done and an  
22 explanation of why this analysis was not done; and

23 e. an approximate quantification of the hazardous  
24 constituents identified in the waste, within the precision  
25 specified by Environmental Protection Agency document SW 846;

26 2. a detailed engineering description of the thermal  
27 treatment unit for which the permit is sought, including:

28 a. manufacturer's name and model number;

29 b. type of thermal treatment unit;

30 c. linear dimensions of the thermal treatment unit,  
31 including the cross sectional area of the combustion chamber;

32 d. a description of the auxiliary fuel system,  
33 including type and feed rate;

34 e. the capacity of the prime mover;

35 f. a description of any automatic waste feed cutoff  
36 system;

- 1 g. nozzle and burner design;
- 2 h. construction materials; and
- 3 i. location and description of temperature, pressure,
- 4 and flow indicating devices and control devices;
- 5 3. a detailed engineering description of air pollution
- 6 control equipment and stack gas monitoring equipment and
- 7 pollution control monitoring systems, including:
  - 8 a. manufacturer's name and model numbers;
  - 9 b. physical dimensions; and
  - 10 c. where applicable, control specifications as to air
  - 11 flow, pressure drop, discharge, voltage requirements, and water
  - 12 flow;
- 13 4. a detailed description of sampling and monitoring
- 14 procedures, including sampling and monitoring locations, the
- 15 equipment to be used, frequency of sampling and monitoring, and
- 16 planned procedures for sample analysis;
- 17 5. a detailed test schedule for each waste for which the
- 18 trial burn is planned, including date, duration, quantity of
- 19 waste to be burned, and other factors relevant to the agency's
- 20 decision under E.;
- 21 6. a detailed test protocol, including, for each waste
- 22 identified, the ranges of temperatures, waste feed rate,
- 23 combustion gas velocity, use of auxiliary fuel, and any other
- 24 relevant parameters that will be varied to affect the
- 25 destruction and removal efficiency of the thermal treatment unit;
- 26 7. a description of, and planned operating conditions
- 27 for, emission control equipment that will be used;
- 28 8. procedures for rapidly stopping waste feed, for
- 29 shutting down the thermal treatment unit, and for controlling
- 30 emissions in the event of an equipment malfunction; and
- 31 9. other information as the director finds is reasonably
- 32 necessary to determine whether to approve the trial burn plan in
- 33 light of the purposes of B. and the criteria in E.
- 34 D. Review of trial burn plan. The director shall review the
- 35 trial burn plan for completeness. If the director finds that
- 36 the trial burn plan is incomplete or otherwise deficient, the



1 director shall promptly advise the owner or operator of the  
2 incompleteness or deficiency. The director shall suspend  
3 further processing of the trial burn plan until the owner or  
4 operator has supplied the necessary information or otherwise  
5 corrected the deficiency.

6 The director shall designate as trial principal organic  
7 hazardous constituents those constituents for which destruction  
8 and removal efficiencies must be calculated during the trial  
9 burn. The director's designations shall be based on the waste  
10 analysis data submitted by the owner or operator, the director's  
11 estimate of the difficulty of thermally treating the hazardous  
12 constituents to be burned, and the concentration or mass of  
13 hazardous constituents in the proposed waste feed. In addition,  
14 if the waste analysis indicates that the waste feed contains  
15 wastes that are listed in 6 MCAR S 4.9134, then in making  
16 principal organic hazardous constituents determinations the  
17 director shall consider the hazardous organic waste constituents  
18 identified in 6 MCAR S 4.9136 that formed the basis of this  
19 listing.

20 E. Approval of trial burn plan. The agency shall approve a  
21 trial burn plan if the agency finds that:

22 1. the trial burn is likely to determine whether the  
23 thermal treatment performance standards in 6 MCAR S 4.9321 D.  
24 can be met by the proposed thermal treatment facility;

25 2. the trial burn itself will not present an imminent  
26 hazard to human health or the environment;

27 3. the trial burn will aid the director in determining  
28 operating requirements to be specified under 6 MCAR S 4.9321 F. ;  
29 and

30 4. the information sought in 1. and 3. cannot be  
31 developed through other means.

32 F. Conduct of trial burn. The owner or operator shall  
33 conduct the trial burn in accordance with the trial burn plan  
34 approved by the agency. The owner or operator shall perform the  
35 following analyses or make the following determinations:

36 1. a quantitative analysis of the trial principal organic

1 hazardous constituents in the waste feed to the thermal  
2 treatment unit;

3 2. a quantitative analysis of the exhaust gas for the  
4 concentration and mass emissions of the trial principal organic  
5 hazardous constituents, oxygen, and hydrogen chloride;

6 3. a quantitative analysis of the scrubber water, if any,  
7 ash residues, and other residues, for the purpose of estimating  
8 the fate of the trial principal organic hazardous constituents;

9 4. a computation of destruction and removal efficiency,  
10 in accordance with the formula specified in 6 MCAR S 4.9321 D.1.;

11 5. if the hydrogen chloride emission rate exceeds 1.8  
12 kilograms of hydrogen chloride per hour (four pounds per hour),  
13 a computation of hydrogen chloride removal efficiency, in  
14 accordance with 6 MCAR S 4.9321 D.2.;

15 6. a computation of particulate emissions, in accordance  
16 with 6 MCAR S 4.9321 D.3.;

17 7. an identification of sources of fugitive emissions and  
18 the means of control thereof;

19 8. a measurement of average, maximum, and minimum  
20 temperatures of the thermal treatment zone and combustion gas  
21 velocity;

22 9. a continuous measurement of carbon monoxide, oxygen,  
23 and carbon dioxide in the exhaust gas; and

24 10. other analyses or determinations as the agency may  
25 specify as necessary to ensure that the trial burn will  
26 determine compliance with the performance standard in 6 MCAR S  
27 4.9321 D. and to establish the operating conditions required by  
28 6 MCAR S 4.9321 F. as necessary to meet this performance  
29 standard.

30 G. Submission of certification, results, and data. The  
31 owner or operator shall submit to the director a certification  
32 that the trial burn has been carried out in accordance with the  
33 approved trial burn plan and shall submit the results of all the  
34 analyses and determinations required by F. along with all  
35 underlying data of the results. The owner or operator shall  
36 make these submissions within 90 days after the completion of

1 the trial burn, or later if approved by the director upon a  
2 finding by the director that good cause exists for granting a  
3 time extension.

4 H. Authorized signature. All submissions to the director  
5 required by this rule must be signed in accordance with 6 MCAR S  
6 4.4006 and must contain the certification required by 6 MCAR S  
7 4.4205.

8 I. Phase three requirements. To allow a new hazardous waste  
9 thermal treatment facility to operate after completion of the  
10 trial burn and prior to final modification of the permit  
11 conditions to reflect the trial burn results, the director shall  
12 establish permit conditions, including but not limited to  
13 allowable waste feeds and operating conditions sufficient to  
14 meet the requirements of 6 MCAR S 4.9321 F. The director may  
15 prohibit the burning of hazardous wastes in the facility during  
16 this period. These permit conditions are effective for the  
17 minimum time required to complete sample analysis, data  
18 computation, and submission of the trial burn results by the  
19 applicant, and modification of the facility permit by the agency.

20 An applicant shall submit to the director a statement with  
21 Part B of the permit application that identifies the conditions  
22 necessary to operate in compliance with the performance  
23 standards of 6 MCAR S 4.9321 D. during this period. This  
24 statement must include restrictions on waste constituents, waste  
25 feed rates, and the operating parameters identified in 6 MCAR S  
26 4.9321 F.

27 The director shall review this statement and other relevant  
28 information submitted with part B of the permit application and  
29 shall specify requirements for this period most likely to meet  
30 the performance standards of 6 MCAR S 4.9321 D.

31 J. Phase four requirements. To allow a new hazardous waste  
32 thermal treatment facility to operate after the director reviews  
33 the results of the trial burn conducted under phase two, based  
34 on the results of the trial burn, the director shall establish  
35 operating requirements in the final permit according to 6 MCAR S  
36 4.9321. A permit modification, if necessary, must be completed

1 according to 6 MCAR S 4.4224 B. or D. and a permit revocation,  
2 if necessary, must be completed according to 6 MCAR S 4.4018 C.

3 K. Requirements for existing hazardous waste thermal  
4 treatment facilities. To determine the feasibility of  
5 compliance with the performance standards of 6 MCAR S 4.9321 D.  
6 and to determine adequate operating conditions under 6 MCAR S  
7 4.9321 F., the applicant for a permit for an existing hazardous  
8 waste thermal treatment facility may prepare and submit to the  
9 director a trial burn plan and perform a trial burn in  
10 accordance with C.-H. An applicant who submits trial burn plans  
11 and who receives approval before submission of a permit  
12 application shall complete the trial burn and submit the results  
13 specified in F. with Part B of the permit application. If  
14 completion of this process conflicts with the date set for  
15 submission of the Part B application, the applicant shall  
16 contact the director to establish a later date for the  
17 submission of the Part B application or trial burn results. If  
18 the applicant submits a trial burn plan with Part B of the  
19 permit application, the trial burn must be conducted and the  
20 results must be submitted within a time period to be specified  
21 by the director.

22 6 MCAR S 4.4222 Land treatment demonstration permits.

23 A. Letters of approval. A person who desires to conduct  
24 controlled laboratory demonstrations of hazardous waste land  
25 treatment for the purpose of collecting preliminary data shall  
26 request a letter of approval from the agency.

27 The agency shall issue a letter of approval if the  
28 demonstration will be conducted under supervised conditions in a  
29 closed system capable of providing adequate protection to human  
30 health and the environment, and if the data obtained will not be  
31 used as the only basis for the issuance of a facility permit.  
32 The letter of approval must specify the general conditions for  
33 conducting demonstrations, the duration of approval, and the  
34 specific waste types.

35 The letter of approval may only provide approval for  
36 controlled laboratory demonstrations of hazardous waste

1 treatment and does not provide exemptions from the hazardous  
2 waste management and disposal requirements of 6 MCAR SS 4.9100-  
3 4.9560. Materials resulting from the demonstration that meet  
4 the criteria of 6 MCAR SS 4.9128-4.9137 must be managed as  
5 hazardous waste.

6 B. Permit requirements. An owner or operator who desires to  
7 meet the treatment demonstration requirements of 6 MCAR S 4.9319  
8 C. and E. shall request from the agency a treatment  
9 demonstration permit. The permit may be issued either as a  
10 short-term permit covering only the demonstration, or as a  
11 two-phase facility permit covering the demonstration and the  
12 design, construction, operation, and maintenance of the land  
13 treatment unit.

14 No short-term permit may be issued unless the agency finds  
15 that a completed Part B application is submitted that provides  
16 sufficient information upon which to base demonstration  
17 conditions, and that sufficient evidence exists upon which to  
18 base demonstration requirements.

19 No two-phase facility permit may be issued unless the  
20 agency finds that a completed Part B application is submitted  
21 that provides sufficient information upon which to base  
22 demonstration and facility conditions, and that sufficient  
23 evidence is provided to indicate that the waste material can be  
24 successfully land treated.

25 C. Permit applications. A completed Part B application must  
26 be submitted to obtain a short-term demonstration permit unless  
27 the director has issued a written exemption from one or more of  
28 the data requirements.

29 D. Two-phase permits. If the agency issues a two-phase  
30 permit, the permit must establish, as requirements in the first  
31 phase of the facility permit, conditions for conducting the  
32 demonstration. These permit conditions must include design and  
33 operating parameters, including the duration of the tests or  
34 analyses and, in the case of field tests, the horizontal and  
35 vertical dimensions of the treatment zone, effect on food chain  
36 crops, monitoring procedures, post-demonstration cleanup

1 activities, and other conditions that the agency finds may be  
2 necessary under 6 MCAR S 4.9319 C. and E. The agency shall  
3 include conditions in the second phase of the facility permit to  
4 meet all 6 MCAR S 4.9319 requirements pertaining to unit design,  
5 construction, operation, and maintenance. The agency shall  
6 establish these conditions in the second phase of the permit  
7 based upon the information contained in the Part B application.

8 The first phase of the permit is effective upon the date of  
9 permit issuance.

10 The second phase of the permit is effective as provided in  
11 F.

12 E. Submission of certification, determinations, and data.

13 The owner or operator who has been issued a two-phase permit and  
14 who has completed the treatment demonstration shall submit to  
15 the director a certification, signed by a person authorized to  
16 sign a permit application or a report under 6 MCAR S 4.4006,  
17 that the demonstration has been carried out in accordance with  
18 the conditions specified in phase one of the permit for  
19 conducting these demonstrations. Within 90 days of completion  
20 of the demonstration the owner or operator shall also submit the  
21 data collected during the demonstration and a determination as  
22 to whether compliance with 6 MCAR S 4.9319 C. and E. was  
23 achieved.

24 F. Permit modification. If the agency determines that the  
25 results of the demonstration meet the requirements of 6 MCAR S  
26 4.9319 C. and E., the agency shall modify the second phase of  
27 the permit to incorporate any requirements necessary for  
28 operation of the facility in compliance with 6 MCAR S 4.9319,  
29 based upon the results of the demonstration.

30 If no modifications of the second phase of the permit are  
31 necessary, or if only minor modifications are necessary and have  
32 been made in accordance with 6 MCAR S 4.4224 D., the agency  
33 shall give notice of its final decision to the permit applicant  
34 and to each person who submitted written comments on the phased  
35 permit or who requested notice of final decision on the second  
36 phase of the permit. The second phase of the permit becomes

1 effective upon the date of notice of final decision.

2 If modifications under 6 MCAR S 4.4017 B. are necessary,  
3 the second phase of the permit becomes effective only after  
4 those modifications have been made.

5 All modifications must be conducted according to 6 MCAR S  
6 4.4224. The second phase of the permit does not go into effect  
7 until after the requirements of 6 MCAR S 4.4224 are met and the  
8 agency has given notice of final decision.

9 6 MCAR S 4.4223 Terms and conditions of hazardous waste facility  
10 permits.

11 A. Term of permit. A hazardous waste facility permit is  
12 effective for a fixed term not to exceed five years.

13 B. Additional general conditions. Each draft and final  
14 hazardous waste facility permit issued by the agency must  
15 contain all of the general conditions in 6 MCAR S 4.4015 C.  
16 except the condition in 6 MCAR S 4.4015 C.11. In addition, each  
17 permit must contain the following general conditions:

18 1. The permittee need not comply with the conditions of  
19 this permit to the extent and for the duration this  
20 noncompliance is authorized in an emergency permit in accordance  
21 with 6 MCAR S 4.4220.

22 2. The permittee shall maintain records from all  
23 groundwater monitoring wells and associated groundwater surface  
24 elevations for the active life of the facilities and, for  
25 disposal facilities, for the post-closure care period. The  
26 permittee shall also maintain an operating record in accordance  
27 with 6 MCAR S 4.9294 until closure of the facility.

28 3. The permittee shall not commence treatment, storage,  
29 or disposal of hazardous waste in a new hazardous waste facility  
30 or in a modified portion of an existing hazardous waste facility  
31 until:

32 a. the permittee has submitted to the director by  
33 certified mail or hand delivery a letter signed by the permittee  
34 and by a registered professional engineer stating that the  
35 facility has been constructed or modified in compliance with the  
36 conditions of the permit; and

1           b. the director has inspected the new or modified  
2 facility and has provided the permittee with a letter stating  
3 that, based on information available to the director, the  
4 facility appears to have been constructed in compliance with the  
5 conditions of the permit.

6           4. If the permittee discovers a release or discharge of  
7 hazardous waste which could be a danger to public drinking water  
8 supplies or threaten human health or the environment or  
9 discovers a fire or explosion at a hazardous waste facility  
10 which could threaten human health or the environment outside the  
11 facility, the permittee shall, within 24 hours of the discovery  
12 of the incident, orally notify the director of the incident and  
13 its description. Within 15 days after the incident the  
14 permittee shall submit a written report describing the  
15 incident. The oral and written descriptions of the incident  
16 shall include at a minimum:

17           a. the name, address, and telephone number of the  
18 owner or operator;

19           b. the name, address, and telephone number of the  
20 facility;

21           c. the date, time, and type of incident;

22           d. the name and quantity of materials involved;

23           e. the extent of injuries, if any;

24           f. an assessment of actual or potential hazards to the  
25 environment and human health outside the facility; and

26           g. the estimated quantity and disposition of recovered  
27 hazardous materials.

28           5. In addition to the reports required by 6 MCAR S  
29 4.4015, the permittee shall submit the following reports in  
30 accordance with 6 MCAR SS 4.9280-4.9322:

31           a. If the permittee discovers a significant  
32 discrepancy in a manifest, the permittee shall attempt to  
33 reconcile the discrepancy. If the permittee is unable to  
34 reconcile the discrepancy within ten days, the permittee shall  
35 submit to the director a letter report and a copy of the  
36 manifest in accordance with 6 MCAR S 4.9293 C.1.



1           b. If a shipment of hazardous waste is delivered to  
2 the permittee without the required manifest or shipping paper,  
3 the permittee shall attempt to reconcile the discrepancy. If  
4 the permittee is unable to reconcile the discrepancy, the  
5 permittee shall, prior to the acceptance of the waste, notify  
6 the director of the delivery of the waste and shall submit to  
7 the director a follow-up report within ten days of receipt of  
8 the waste, in accordance with 6 MCAR S 4.9296 C.

9           c. In accordance with 6 MCAR S 4.9296 B., the  
10 permittee shall submit an annual report concerning the  
11 activities at the facility during the previous calendar year.

12           d. If the permittee receives hazardous waste which the  
13 permittee is not authorized by the permit to manage, the  
14 permittee shall immediately notify the director of the receipt  
15 of the waste in accordance with 6 MCAR S 4.9293 C.3.

16           6. The permittee may allow an authorized representative  
17 to sign reports submitted in accordance with the requirements of  
18 this permit if:

19           a. the authorization is made in writing by persons  
20 identified in 6 MCAR S 4.4006 except that for a corporation the  
21 written authorization must be made by a principal executive  
22 officer of at least the level of vice-president;

23           b. the authorization specifies either an individual or  
24 a position having responsibility for the overall operation of  
25 the regulated facility or activity, such as the position of  
26 plant manager, superintendent, or a person of equivalent  
27 responsibility; and

28           c. the written authorization is submitted to the  
29 director.

30           If authorization is no longer accurate, a new authorization  
31 must be submitted to the director prior to or together with any  
32 reports or permit applications to be signed by an authorized  
33 representative.

34           C. Additional condition for surface impoundments. Each  
35 draft and final hazardous waste facility permit issued by the  
36 agency for a surface impoundment must contain the following

1 condition: The permittee shall not commence treatment, storage,  
2 or disposal of hazardous waste in a surface impoundment which  
3 has been repaired under 6 MCAR S 4.9317 F.4. until:

4 1. the permittee has submitted to the director by  
5 certified mail or hand delivery a letter signed by the permittee  
6 and by a registered professional engineer stating that the  
7 surface impoundment has been repaired in compliance with the  
8 conditions of the permit; and

9 2. the director has inspected the repaired surface  
10 impoundment and has provided the permittee with a letter stating  
11 that, based on information available to the director, the  
12 surface impoundment appears to have been repaired in compliance  
13 with the conditions of the permit.

14 6 MCAR S 4.4224 Modification of permits; revocation and  
15 reissuance of permits.

16 A. Scope. In addition to the provisions of 6 MCAR SS  
17 4.4017, 4.4018, and 4.4019, the provisions of B., C., D., and E.  
18 are applicable to the modification, revocation, and reissuance  
19 of hazardous waste facility permits.

20 B. Additional justification for modification of permits or  
21 revocation and reissuance of permits. In addition to the  
22 justifications listed in 6 MCAR S 4.4017, the following  
23 constitute justification for the director to commence  
24 proceedings to modify a permit or to revoke and reissue a permit:

25 1. the director discovers that modification of a closure  
26 plan or post-closure plan is required by 6 MCAR S 4.9298 D. or  
27 4.9300 C.;

28 2. the permittee files a request for extension of the 90-  
29 or 180-day periods set forth in 6 MCAR S 4.9299;

30 3. the director receives notification of expected closure  
31 under 6 MCAR S 4.9298;

32 4. the director finds that modification of the 30-year  
33 post-closure period is necessary as provided in 6 MCAR S 4.9301  
34 A.;

35 5. the director finds that continuation of security  
36 requirements is necessary as provided by 6 MCAR S 4.9301 B.;

1           6. the director finds that the permittee has made the  
2 demonstration required by 6 MCAR S 4.9301 C. such that a  
3 disturbance of the integrity of the containment system should be  
4 authorized;

5           7. the permittee files a request under 6 MCAR S 4.9312 C.  
6 for a variance from the required level of financial  
7 responsibility;

8           8. the director demonstrates under 6 MCAR S 4.9312 D.  
9 that an upward adjustment of the level of financial  
10 responsibility is required;

11           9. the director finds that the corrective action program  
12 specified in the permit under 6 MCAR S 4.9297 M. has not brought  
13 the regulated unit into compliance with the groundwater  
14 protection standard within a reasonable period of time;

15           10. to include a detection monitoring program that meets  
16 the requirements of 6 MCAR S 4.9297 K., when the owner or  
17 operator has been conducting a compliance monitoring program  
18 under 6 MCAR S 4.9297 L. or a corrective action program under 6  
19 MCAR S 4.9297 M., and the compliance period ends before the end  
20 of the post-closure care period for the unit;

21           11. a permit requires a compliance monitoring program  
22 under 6 MCAR S 4.9297 L., but monitoring data collected prior to  
23 permit issuance indicate that the facility is exceeding the  
24 groundwater protection standard;

25           12. to include conditions applicable to units at a  
26 facility that were not previously included in the facility's  
27 permit; or

28           13. a land treatment unit is not achieving complete  
29 treatment of hazardous constituents under its current permit  
30 conditions; or

31           14. to change the operating requirements set in the  
32 permit to reflect the results of the trial burn.

33           C. Additional justification to commence revocation without  
34 reissuance of permit. In addition to the justifications listed  
35 in 6 MCAR S 4.4018, a failure to submit an annual facility  
36 operator's fee within 180 days of the due date, as specified in

1 the agency's hazardous waste fee rules, constitutes  
2 justification for the director to commence proceedings to revoke  
3 a permit without reissuance.

4 D. Minor modifications of permits. In addition to the  
5 corrections or allowances listed in 6 MCAR S 4.4019 B. and C.,  
6 if the permittee consents, the director may modify a permit to  
7 make the corrections or allowances listed below without  
8 following the procedures in 6 MCAR SS ~~4.4010-4.4019~~  
9 4.4010-4.4013:

10 1. to change the list of facility emergency coordinators  
11 in the permit's contingency plan;

12 2. to change the list of equipment in the permit's  
13 contingency plan;

14 3. to change estimates of maximum inventory under 6 MCAR  
15 S 4.9298 C.2.;

16 4. to change the expected year of closure under 6 MCAR S  
17 4.9298 C.4.;

18 5. to change schedules for final closure under 6 MCAR S  
19 4.9298 C.4.;

20 6. to change the ranges of the operating requirements set  
21 in the permit to reflect the results of the trial burn provided  
22 that the change is minor;

23 7. to change the operating requirements set in the permit  
24 for conducting a trial burn provided that the change is minor;

25 8. to grant one extension of the time period for  
26 determining operational readiness of a thermal treatment unit  
27 following completion of construction, for up to 720 hours  
28 operating time for treatment of hazardous wastes;

29 9. to change the treatment program requirements for land  
30 treatment units under 6 MCAR S 4.9319 B. to improve treatment of  
31 hazardous constituents, provided that the change is minor;

32 10. to change any conditions specified in the permit for  
33 land treatment units to reflect the results of field tests or  
34 laboratory analyses used in making a treatment demonstration in  
35 accordance with 6 MCAR S 4.4222 provided that the change is  
36 minor; and

1 11. to allow a second treatment demonstration for land  
2 treatment to be conducted when the results of the first  
3 demonstration have not shown the conditions under which the  
4 waste or wastes can be treated completely as required by 6 MCAR  
5 S 4.9319 C. and E.3., provided the conditions for the second  
6 demonstration are substantially the same as the conditions for  
7 the first demonstration.

8 E. Consideration of facility siting. In making its final  
9 determination on a permit modification or permit revocation and  
10 reissuance, the agency shall not consider the suitability of the  
11 facility location unless new information indicates that a threat  
12 to human health or the environment exists which was unknown at  
13 the time the permit was issued.

14

15 Repealer. Pollution Control Agency rules 6 MCAR SS 4.9006 and  
16 4.9007 are repealed.