

STATE OF MINNESOTA
MINNESOTA POLLUTION CONTROL AGENCY

STATEMENT OF NEED
AND REASONABLENESS

In the Matter of the Proposed
Amendments of Rules Governing
the Management, Storage,
Treatment, and Disposal of
Hazardous Waste, Minn. Rules Pts.
7001.0560, 7001.0580, 7001.0650,
7045.0020, 7045.0075, 7045.0120,
7045.0219, 7045.0292, 7045.0452,
7045.0478, 7045.0490, 7045.0498,
7045.0528, 7045.0556, 7045.0564,
7045.0584, 7045.0600, 7045.0608,
7045.0628, and 7045.0629

I. INTRODUCTION

The subject of this proceeding is the amendment of the rules of the Minnesota Pollution Control Agency (hereinafter "Agency") governing the management, treatment, storage, and disposal of hazardous waste. The amendments will incorporate provisions promulgated by the U.S. Environmental Protection Agency (hereinafter "EPA") under authority of the Resource Conservation and Recovery Act (hereinafter "RCRA") and provisions of the Hazardous and Solid Waste Amendments of 1984 (hereinafter "HSWA").

The EPA promulgated regulations governing hazardous waste treatment, storage, and accumulation tanks in the July 14, 1986 Federal Register (51 FR 25422-25486). The July 14, 1986 federal regulations are hereinafter referred to as the tank regulations. The proposed amendments to Minnesota's hazardous waste rules incorporate the regulations resulting from the July 14, 1986 publication.

These rule amendments are proposed pursuant to the Agency's authority under Minn. Stat. § 116.07, subd. 4 (1986).

This Statement of Need and Reasonableness is divided into seven parts. Following this introduction, Part II contains the Agency's explanation of the need for the proposed amendments. Part III discusses the reasonableness of the

proposed amendments. Part IV documents how the Agency has considered the methods of reducing the impact of the proposed amendments on small businesses as required by Minn. Stat. § 14.115 (1986). Part V documents the economic factors the Agency considered in drafting the amendments as required by Minn. Stat. § 116.07, subd. 6 (1986). Part VI sets forth the Agency's conclusion regarding the amendments. Part VII contains a list of the exhibits relied on by the Agency to support the proposed amendments. The exhibits are available for review at the Agency's offices at 520 Lafayette Road, St. Paul, Minnesota 55155.

II. NEED FOR THE PROPOSED AMENDMENTS TO THE HAZARDOUS WASTE RULES

Minn. Stat. ch. 14 (1986) requires an agency proposing to adopt or amend a rule to make an affirmative presentation of facts establishing the need for and reasonableness of the proposed rule or amendments. In general terms, this means that an agency must set forth the reasons for its proposal, and the reasons must not be arbitrary or capricious. However, to the extent that need and reasonableness are separate, need has come to mean that a problem exists which requires administrative attention and reasonableness means that the solution proposed by an agency is appropriate.

Need is a broad test that does not easily lend itself to evaluation of each proposed revision. In the broad sense, the need for amendments to the Agency's rules governing the management, treatment, storage, and disposal of hazardous waste has two bases: 1) the need for consistency with the federal hazardous waste regulations, and 2) the need for rules which provide protection of human health and the environment without unduly restricting normal commerce.

In 1976, Congress adopted RCRA to regulate the management of hazardous waste. 42 U.S.C. §§ 6901 et seq. In adopting RCRA, Congress provided for

eventual State control of the hazardous waste program and set up the mechanism for the EPA to grant authority to states to operate the program. In states that receive authorization, the State environmental agency administers the State program in lieu of the federal program. To receive and maintain authorization, the State program must be "equivalent" to the federal program and consistent with federal or State programs applicable in other states. EPA has defined equivalent to mean that the state requirements are at least as stringent as federal requirements. In terms of consistency, EPA's goal is to achieve an integrated national program which requires that final State programs do not conflict with each other or with the federal program.

Pursuant to RCRA, EPA granted Agency final authorization for its hazardous waste program, effective February 11, 1985. See 50 FR 3756 (January 28, 1985). A state with final authorization administers its hazardous waste program in lieu of the EPA program for those regulations which were promulgated pursuant to RCRA as adopted in 1976 and as amended in 1980.

However, the authorization did not extend to those federal requirements promulgated by the EPA pursuant to HSWA. A state must obtain authorization specifically under HSWA. Before the Agency can apply for authorization under HSWA, any rule amendments intended to maintain equivalency to the federal program must be in effect in Minnesota. The existing federal regulations establish specific time frames for the adoption of State rules intended to maintain equivalency to the federal rules.

Although a state program may be more stringent than the federal requirements and states are not required to adopt less stringent federal standards, the Agency believes that, as a general matter, it is desirable to maintain consistency with the federal program. Much of the hazardous waste generated in

Minnesota must be sent to other states for treatment or disposal because Minnesota has no commercial disposal facilities and only very limited commercial treatment facilities. This means that many generators must be knowledgeable about requirements of both the State and federal hazardous waste programs. The need to comply with multiple sets of rules makes compliance difficult. Therefore, to the extent it can be accomplished without posing a threat to human health and the environment, amendment of Minnesota's hazardous waste rules to incorporate EPA's amendments is desirable. Where, however, the Agency believes a more stringent requirement is needed to adequately protect public health and welfare given the available scientific evidence and technological factors, the Agency has proposed a more stringent standard. The reasonableness of these more stringent requirements is demonstrated below.

III. REASONABLENESS OF THE PROPOSED AMENDMENTS TO THE HAZARDOUS WASTE RULES

The Agency is required by Minn. Stat. ch. 14 (1986) to make an affirmative presentation of facts establishing the reasonableness of the proposed rules or amendments. Reasonableness is the opposite of arbitrariness and capriciousness. It means that there is a rational basis for the Agency's action. The reasonableness of each of the proposed amendments is discussed below.

A. Minn. Rules Pt. 7001.0560 (General Information Requirements for Part B of Application).

Existing Minn. Rules pt. 7001.0560 establishes the requirements for information a hazardous waste permit applicant must submit in its Part B permit application. The Agency proposes to make two sets of changes to Minn. Rules pt. 7001.0560, one to Item E and one to Item L of the rule.

1. Proposed changes to Item E. Among other information, existing Minn. Rules pt. 7001.0560, Item E specifically requires the permit applicant to

submit information set forth in existing Minn. Rules pt. 7045.0528, subp. 4 (inspections). However, as described in greater detail in section M of this Statement, the Agency is proposing to renumber the inspection provisions of Minn. Rules pt. 7045.0528, subp. 4 to Minn. Rules pt. 7045.0528, subp. 7 and also is proposing to add additional inspection requirements under Minn. Rules pt. 7045.0528, subps. 5. The Agency therefore proposes to amend Minn. Rules pt. 7001.0560, Item E to correctly correspond to the inspection requirements which will be set forth in Minn. Rules pt. 7045.0528 if the proposed amendments to that part are adopted. Thus, the proposed amendments to Minn. Rules pt. 7001.0560, Item E delete the existing reference to Minn. Rules pt. 7045.0528, subpart 4 and add references to Minn. Rules pt. 7045.0528, subps. 5 and 7. These changes correspond to changes made in 40 Code of Federal Regulations (C.F.R.) § 270.14. The changes are reasonable because they reflect the amendments that are proposed for the inspection requirements of Minn. Rules pt. 7045.0528.

2. Proposed changes to Item L. Among other information, existing Minn. Rules pt. 7001.0560, Item L requires the permit applicant to submit information set forth in existing Minn. Rules pt. 7045.0528, subp. 6 (closure). However, as described in greater detail in section M of this Statement, the Agency is proposing to renumber the closure requirements of Minn. Rules pt. 7045.0528, subp. 6 to Minn. Rules pt. 7045.0528, subp. 9. In addition, the Agency is proposing to amend these requirements to also require post-closure information for tanks. (The existing rule already requires post-closure information for some facilities, but not for tanks.) The Agency therefore proposes to amend Minn. Rules pt. 7001.0560, Item L to correctly correspond to the closure and post-closure requirements which will be set forth in Minn. Rules pt. 7045.0528,

subp. 9 if the proposed amendments to that rule are adopted by the Agency. Thus, the proposed amendments to Minn. Rules pt. 7001.0560, Item L delete references to Minn. Rules pt. 7045.0528, subp. 6 and add references to Minn. Rules pt. 7045.0528, subp. 9. These changes correspond to 40 C.F.R. § 270.14. The changes are reasonable because they reflect the changes that are proposed for the closure requirements of Minn. Rules pt. 7045.0528.

B. Minn. Rules Pt. 7001.0580 (Part B Information Requirements for Storage or Treatment Tanks).

Existing Minn. Rules pt. 7001.0580 sets forth the specific information that a person applying for a hazardous waste permit for tanks must submit to the Agency. The Agency is proposing to amend Minn. Rules pt. 7001.0580 by deleting existing provisions A and B and by adding new provisions A through J. The proposed amendments directly correspond to the federal requirements for Part B applications specified in 40 C.F.R. § 270.16. The amendments are needed to ensure that the Agency receives sufficient information to allow it to evaluate whether the permit applicant will be able to comply with the permitted tank standards of Minn. Rules pt. 7045.0528. Each of the amendments are briefly described below.

1. Items A to G, I and J. The information in Items A to G, I and J correspond to the technical requirements of proposed amendments to Minn. Rules pt. 7045.0528. Specifically, the proposed amendments to Items A to G, I and J require the applicant to submit information demonstrating that it will comply with the requirements of Minn. Rules pt. 7045.0528. Items A to G of the proposed amendments require design and installation information for the tank system, as well as an assessment of the structural integrity and suitability of the tank for handling hazardous waste. Item I of the proposed amendments

requires a description of the controls and practices to prevent spills and overflows. Item J requires information regarding compliance with standards for ignitable, reactive, or incompatible wastes. It is reasonable for the Agency to require the permit applicant to submit this information as part of its application since, without that information, the Agency cannot adequately evaluate the permit application.

2. Item H. Item H refers to two other amendments which the Agency proposes, Minn. Rules pt. 7045.0075, subps. 6 and 7 (petition procedures.) These other amendments set forth a procedure through which a person may petition the Agency for exemption from the secondary containment tank standards. To obtain this exemption, the petitioner will have to demonstrate that an alternate design or management practice is suitable or that there exists no risk to the environment from a potential release from the tank. (Subparts 6 and 7 are discussed in greater detail in section E of this Statement.) The Agency proposes to amend Item H of proposed Minn. Rules pt. 7001.0580 to refer to these petition procedures. This cross-reference is reasonable to ensure that the Agency receives information relevant to the drafting of a permit which may allow for tank design and management practices other than the secondary containment requirements established by the hazardous waste rules.

C. Minn. Rules Pt. 7001.0650 (Interim Status).

Existing Minn. Rules pt. 7001.0650, subp. 4 establishes prohibitions for the owner or operator of an interim status facility. Item D of subpart 4 prohibits persons from altering "a hazardous waste facility in a manner that amounts to reconstruction of the facility."

Proposed amendments to Minn. Rules pt. 7045.0628 require interim status facilities to be upgraded within specific time frames to meet the secondary containment requirements. These upgrades are not intended to result in the loss of interim status and are intended to proceed even before a permit is issued. However, without a clarification to Minn. Rules pt. 7001.0560, a person might believe that an upgrade required by Minn. Rules pt. 7045.0628 constitutes a "reconstruction of a facility" as is prohibited by existing Minn. Rules pt. 7001.0650. To avoid confusion on this subject, the Agency proposes to amend Minn. Rules pt. 7001.0650 by adding a sentence that explains that, when an owner or operator changes an interim status tank facility for the sole purpose of complying with the secondary containment requirements set forth in Minn. Rules pt. 7045.0628, subs. 4 and 5, the tank changes do not amount to reconstruction of the facility. This provision is a reasonable clarifying amendment and corresponds to 40 C.F.R. § 270.72.

D. Minn. Rules Pt. 7045.0020 (Definitions).

The Agency is proposing to amend Minn. Rules pt. 7045.0020 to add 15 definitions of terms used throughout the proposed amendments. The definitions that have been added include, aboveground tank, ancillary equipment, component, corrosion expert, existing tank system or existing component, inground tank, installation inspector, leak detection system, new tank system or new tank component, onground tank, sump, tank system, underground tank, unfit-for-use tank system, and zone of engineering control. All of the defined terms are taken verbatim from 40 C.F.R. § 260.10 of the federal regulations. It is reasonable to provide the same definitions as the federal regulations since the

proposed state rules are based on the federal regulations and are intended to be equivalent to those regulations.

E. Minn. Rules Pt. 7045.0075 (Petitions).

Existing Minn. Rules pt. 7045.0075, subps. 1 through 5 establish requirements for persons who wish to petition the Agency or the Agency Commissioner for alternatives to compliance with specific aspects of the rules. The Agency proposes to add two new subparts, 6 and 7, to establish petitioning procedures for obtaining exceptions to the secondary containment requirements for tank systems. The amendments correspond to the provisions of 40 C.F.R. §§ 264.193(g) for permitted facilities and 265.193(g) for interim status facilities.

The federal regulations allow a person to "obtain a variance" from the secondary containment requirements for tank systems. Specifically, the federal regulations provide two options for obtaining variances from the secondary containment requirements of 40 C.F.R. §§ 264.193 and 265.193. A person may demonstrate that an alternate design or operating practice will provide an equivalent level of protection of human health and the environment, or a person may demonstrate that, in the event of a release, no substantial present or potential hazard will be posed to human health and the environment. The federal regulations identify the EPA Regional Administrator as the person who will decide whether a variance should be granted.

Upon authorization of the State program, this authority can be delegated to either the Agency Commissioner or the Agency. The proposed amendments to Minn. Rules pt. 7045.0075, subps. 6 and 7 would establish the procedural mechanism through which the State can exercise this authority. Under the proposed

amendments, the Agency Commissioner would have the the authority to grant petitions for alternative design or operating practices and the Agency itself would have the authority to grant petitions based on demonstrations of no substantial hazard. (The proposed amendments use the word "petition" instead of variance for consistency with other provisions of Minn. Rules pt. 7045.0075 and to distinguish the petition procedure from the variance procedure set forth in Minn. Rules pt. 7045.0060.)

Under the existing State rules, subparts 1 through 5 of Minn. Rules pt. 7045.0075 address various other types of petitions. The authority for granting these other petitions is also divided between the Agency Commissioner and the Agency. In those cases where the decision to approve or disapprove the petition is based on a technical evaluation of specific criteria, the Agency Commissioner has been identified as the deciding authority. Where a petition requires an evaluation of a broad range of issues and Agency policy, the rules currently specify the Agency as the deciding authority. The petition requirements set forth in proposed subpart 6 address the question of whether an alternate design or operating practice will work as well as the design or practices specified in the proposed rules. Because this is a technical decision, it is reasonable to specify the Agency Commissioner as the deciding authority. Petitions to be submitted under proposed subpart 7, which will be based on a showing of no substantial hazard, will be more complex and will require qualitative determinations and policy decisions. It is therefore reasonable and consistent with the current application of the petition rule to specify the Agency as the deciding authority for such issues.

Subpart 6 of the proposed amendments establishes the requirements for petitions for alternate design or operating practices to be used in lieu of the

secondary containment requirements proposed to be established in Minn. Rules pts. 7045.0528, subp. 4 and 7045.0628, subp. 4. Those subparts will require secondary containment for all permitted tank facilities and also for all interim status facilities and tanks used by generators to accumulate hazardous waste. It is reasonable to provide owners and operators the option of petitioning for alternative design or operating practices for all of these tank systems in order to accommodate equally effective existing technologies and also in recognition that secondary containment mechanisms may yet be developed to provide an acceptable level of protection.

The substantive requirements described in proposed Minn. Rules pt. 7045.0075, subp. 6, Item A are the same as those provided in the federal regulations. Item A of subpart 6 establishes the factors the Agency Commissioner must consider in evaluating the petition to determine if the proposal will provide equivalent protection. The factors to be considered relate to the waste to be contained in the tank system, the design and operating practices of the tank system, the hydrogeologic setting of the tank system, and any factors that would affect the extent of possible contamination of surface and ground water. These factors affect the effectiveness of an alternate design or operating practices and as such represent a reasonable level of information on which the Agency Commissioner will base a decision.

Item B of proposed subpart 6 establishes the requirements that are to be followed for the submittal of a petition for alternate design and operating practices for a permitted facility. The substantive requirements are the same as those provided in the federal regulations. It is reasonable to establish the submittal requirements so that petitioners will know the necessary steps and the timetable for their submittal. Providing such information in the rule ensures

an acceptable level of information and adequate time to review and evaluate the petition. Petitions submitted for permitted facilities are further subject to requirements for issuance or modification of the facility permit.

Item C of proposed subpart 6 establishes the requirements that are to be followed for submittal of a petition for alternate design and operating practices for interim status facilities and tanks used by generators to accumulate hazardous waste. As discussed above, the proposed amendments reasonably establish the needed information and procedure for submitting a petition. However, because interim status facilities and generators' accumulation tanks are not subject to the public notification requirements that are applicable for permitted facilities, the proposed rules establish a public notification process to be followed for such petitions. The proposed public notification process is similar to the requirements for permitted facilities and involves public notification through newspapers, the establishment of a comment period, the option of a public informational meeting, and the establishment of time frames for specific activities. These provide a reasonable opportunity for public involvement and generally correspond to the federal requirements for public notification. However, the proposed amendments do not specify a maximum time period for the Agency Commissioner to decide whether to grant or deny a petition. The federal regulations require that the EPA Regional Administrator reach a decision within 90 days of receipt of the petition demonstration. During this 90-day period, the demonstration must be reviewed, a notice published and 30-day comment period provided, if necessary, a hearing scheduled with a 30-day advance notice, public input reviewed, and a final decision rendered. The Agency believes that this time period is insufficient given the

number of activities needing to be completed within the specified time. Thus, the proposed amendments provide for all components of the public notification process, but do not specify a time period during which they must be conducted. This provides a reasonable level of flexibility without diminishing the effect or intent of the public notification requirements.

Items D and E establish the requirements that must be met by the owner or operator of a tank system that has received approval for alternate design or operating practices in the event of a release of hazardous waste from the tank. These requirements reference the tank standards addressing spills and also require the removal or decontamination of contaminated soil. Item D specifies the requirements for responses to releases that have not migrated beyond the zone of engineering control and item E specifies the acceptable response for releases that have migrated beyond the zone of engineering control. These requirements are the same as the federal requirements, require compliance with the applicable tank standards of Minn. Rules pts. 7045.0528 or 7045.0628, and address the protection of surface water and ground water from contamination. As such, these requirements represent a reasonable level of responsiveness to releases from tanks.

Subpart 7 of the proposed amendments to this part establish the requirements for petitions for demonstrations that show no substantial present or potential hazard to human health and the environment will result if the requirements of Minn. Rules pts. 7045.0528, subp. 4 and 7045.0628, subp. 4 are not met. It is reasonable to provide tank owners and operators with the option of demonstrating that, under specific circumstances, no hazard will result from a release from a tank without secondary containment. Such a showing may conceivably be made for very small tanks, or tanks that do not contain liquid waste. However, the

factors to be considered in granting such a petition will include technical as well as policy decisions. Therefore, it is reasonable to specify in the rules that such decisions be made by the Agency. The factors to be considered and the procedure for submitting a petition are the same as the federal regulations and are discussed above as they relate to subpart 6.

F. Minn. Rules Pt. 7045.0120 (Exempt Wastes).

Minn. Rules pt. 7045.0120 provides exemptions to the hazardous waste rules for specific types of wastes under specific circumstances. The proposed amendments add an exemption under item Q for certain secondary materials. The proposed rules exempt secondary materials that are reclaimed and returned to the original processes in which they were generated if they are only stored in tanks, reclamation does not involve controlled flame combustion, the materials are not held in tanks for more than one year, and the reclaimed material is not used as fuel or in a manner constituting disposal. All the conditions on the exempted wastes are the same as the federal requirements of 40 C.F.R. § 261.4.

It is reasonable to provide this exclusion for wastes subject to such closed loop recycling because under the specified conditions, such wastes are never actually handled as hazardous wastes but are always part of a reclamation process. The concerns usually associated with improper hazardous waste management are not relevant to the specified closed loop recycling systems and therefore the provisions of the hazardous waste rules are not reasonably applicable.

A complete discussion of the reasons for EPA's exclusion is provided on pages 25441 to 25443 of Exhibit 1 and is incorporated here as the basis of the reasonableness of the proposed amendment to Minn. Rules pt. 7045.0120.

G. Minn. Rules Pt. 7045.0219 (Special Requirements for Small Quantity Generators of Hazardous Waste).

Existing Minn. Rules pt. 7045.0219 establishes the requirements for small quantity generators of hazardous waste. Under the federal program, a small quantity generator is a generator of between 100 and 1,000 kilograms of hazardous waste a month. However, existing Minn. Rules pt. 7045.0219 regulates any generator of less than 1,000 kilograms per month as a small quantity generator and does not provide an exception for generators of less than 100 kilograms of hazardous waste.

The Agency proposes to amend Minn. Rules pt. 7045.0219, subp. 5, item A, subitem 7. That subitem currently references Minn. Rules pts. 7045.0626 and 7045.0628 as the management requirements for small quantity generators who accumulate hazardous waste in containers or tanks. To provide equivalency with the federal regulations, the Agency is proposing to amend Minn. Rules pt. 7045.0628 to establish a more stringent level of regulation for tanks. The proposed amendments to Minn. Rules pt. 7045.0628 correspond to the federal regulations which apply to interim status tank facilities and full-scale generators who accumulate wastes in tanks. See 40 C.F.R §§ 265.190 - 265.200. These federal regulations do not apply to small quantity generators. Because the Agency does not intend to require Minnesota small quantity generators to comply with these more restrictive requirements, the Agency proposes to delete the reference to Minn. Rules pt. 7045.0628 currently contained in subitem 7 of Minn. Rules pt. 7045.0219, subp. 5, item A.

The federal regulations do, however, contain a less restrictive set of requirements for small quantity generators who accumulate wastes in tanks. See 40 C.F.R § 265.201. The Agency is proposing to add a new part, Minn. Rules pt.

7045.0629 to incorporate these federal regulations. With one exception, the new part also incorporates the existing requirements in Minn. Rules pt. 7045.0628 (which currently do apply to small quantity generators). The substantive provisions of proposed new part Minn. Rules pt. 7045.0629 are discussed in section T of this Statement. Assuming the amendments to Minn. Rules pt. 7045.0629 are adopted, it is reasonable for the Agency to amend Minn. Rules pt. 7045.0219 to reference that rule.

H. Minn. Rules Pt. 7045.0292 (Accumulation of Hazardous Waste).

Subpart 1, Item B of existing Minn. Rules pt. 7045.0292 requires full-scale generators accumulating waste without a permit during a 90-day accumulation period to comply with certain requirements. The Agency proposes a number of amendments to this rule.

First, existing Minn. Rules pt. 7045.0292, subpart 1, Item B exempts generators from the requirements of Minn. Rules pt. 7045.0628, subpart 3. The Agency proposes to replace the reference to "subpart 3" with a reference to "subpart 12." This is because the Agency is proposing to revise Minn. Rules pt. 7045.0628 and these revisions include the renumbering of subpart 3 as subpart 12. Thus, the proposed deletion of subpart 3 and addition of subpart 12 is a numbering revision only.

Existing Minn. Rules pt. 7045.0292, subpart 1, Item B refers to Minn. Rules pt. 7045.0628. The Agency is proposing to amend Minn. Rules pt. 7045.0628 to add new interim status tank standards. (See discussion under section S, below.) Thus, if the proposed amendments to Minn. Rules pt. 7045.0628 are adopted by the Agency, a full-scale generator will have to meet these new requirements pursuant to Minn. Rules pt. 7045.0292. Requiring a full-scale generator to meet

these new standards is consistent with the federal regulations, which already require full-scale generators to meet those standards. See 40 C.F.R. § 262.34.

However, the federal regulations do not require full-scale generators to comply with certain closure requirements set forth in subpart 9 of proposed Minn. Rules pt. 7045.0628. The Agency also intends to exempt full-scale generators from these requirements. Accordingly, the Agency proposes to amend Minn. Rules pt. 7045.0292 to make it clear that full-scale generators are excepted from the requirements of Minn. Rules pt. 7045.0628, subpart 9, Item C.

I. Minn. Rules Pt. 7045.0452 (General Facility Standards).

Existing Minn. Rules pt. 7045.0452 establishes the general facility standards for all permitted hazardous waste facilities. Subpart 5 establishes general inspection requirements. The proposed amendments to Minn. Rules pt. 7045.0452, subp. 5 will add two additional references to new inspection requirements being imposed by the proposed amendments to Minn. Rules pt. 7045.0528, subps. 5 and 7. The additional inspection requirements relate to the inspection of tank systems that have secondary containment as well as tank systems that have not been upgraded to include secondary containment. It is reasonable to amend Minn. Rules pt. 7045.0452 to reference the correct rule citations for inspection requirements so that owners and operators are informed of what is required of them. These amendments correspond to 40 C.F.R. § 264.15.

J. Minn. Rules Pt. 7045.0478 (Operating Record).

Existing Minn. Rules pt. 7045.0478 establishes the requirements for maintaining information in the facility operating record. The proposed amendments to Minn. Rules pt. 7045.0528 will add a number of new monitoring and

testing activities. The proposed amendments to Minn. Rules pt. 7045.0478, subp. 3 add necessary cross-references to those added requirements. It is reasonable to provide accurate cross-references to ensure that operating records contain the information the rules require an owner or operator to prepare. These changes correspond to 40 C.F.R. § 264.73.

K. Minn. Rules Pt. 7045.0490 (Post-closure).

Minn. Rules pt. 7045.0490 establishes the requirements for post-closure care of permitted hazardous waste facilities. The proposed amendment to subpart 1 of this part will add the requirement that tank systems that are required to close as a landfill must comply with the post-closure care requirements. This proposed amendment corresponds to 40 C.F.R. § 264.110.

Proposed Minn. Rules pt. 7045.0528, subp. 9 requires the owners or operators of tank systems to close the facility as a landfill if all contaminated material cannot be completely removed at closure. It is reasonable to require post-closure care of such a facility to ensure that adequate measures are taken to prevent the release of wastes after closure. For further discussion of the requirements set forth in proposed Minn. Rules pt. 7045.0528, subp. 9, see discussion under section M of this Statement.

L. Minn. Rules Pt. 7045.0498 (Financial Requirements).

Minn. Rules pt. 7045.0498 establishes the requirements for facility owners or operators to provide financial assurance for acceptable closure and post-closure care of the facility. The proposed amendment to Minn. Rules pt. 7045.0498, subp. 1 adds a requirement that owners and operators of tank systems that must be closed as landfills must provide financial assurance for

post-closure care. Minn. Rules pt. 7045.0528, subp. 9 requires that tank systems be closed as landfills if contaminated soil at the facility cannot be removed or decontaminated at closure. In order to ensure that funds will be available to maintain proper post-closure care, it is reasonable to require that the owners or operators of tank systems that must be closed as landfills meet the financial assurance requirements applicable to landfills. This requirement corresponds to the federal requirement for financial assurance in 40 C.F.R. § 264.140. For further discussion of the requirements set forth in proposed Minn. Rules pt. 7045.0528, subp. 9, see discussion under section M of this Statement.

M. Minn. Rules Pt. 7045.0528 (Tanks).

Minn. Rules pt. 7045.0528 establishes the requirements for permitted tank facilities. Except as will be noted, the proposed amendments generally correspond to the federal regulations in 40 C.F.R. §§ 264.190 to 264.199. The current State rules, which corresponded to the previous federal regulations, have been largely deleted from this part.

Subpart 1 establishes the scope of the proposed tank standards. The proposed amendments regulate the same universe of tanks as the current State rules. This universe includes all permitted tank systems used to treat or store hazardous waste. However, two exceptions from the secondary containment requirements are provided in the proposed amendments. Both of these exceptions directly correspond to 40 C.F.R. § 264.190 (a) and (b). The secondary containment exception provided in subpart 1, item A applies to tanks that do not contain free liquids and are inside a building with an impermeable floor. All other requirements of this part will remain applicable to these tank systems,

including testing, inspections, and initial design standards. This exception is reasonable because of the low potential for releases to the environment from such a tank system, and the fact that the building itself will function as a secondary containment system.

The secondary containment exception provided in subpart 1, item B applies to tanks and sumps that are already part of a secondary containment system. It is reasonable to provide this exception to avoid the redundancy and unnecessary burden of requiring secondary containment of structures that only function as secondary containment systems. EPA provides a more extensive discussion of this exception on page 25441 of Exhibit 1.

Subpart 2 establishes criteria for assessment of an existing tank system's integrity. The proposed amendments recognize the fact that they will apply to an existing universe of regulated tanks and that a number of existing tanks will not immediately meet the design standards or secondary containment requirements. Subpart 2 requires that an existing tank that does not have secondary containment be assessed to determine that it is not leaking or unfit for use. This assessment must be reviewed and certified by an independent, qualified, registered, professional engineer and must provide a determination that the existing tank is adequately designed and in acceptable condition to contain the waste. The assessment must consider a number of factors relative to the design and condition of the tank, including actual testing. In addition to the minimum requirements of the federal regulations, certain aspects of the testing requirements of the proposed amendments are more stringent and exceed the corresponding federal requirements of 40 C.F.R. § 264.191.

The federal regulations require that the assessment for nonenterable underground tanks must include a specific type of leak test. For all other types of tanks, the assessment may include a leak test or may be any other suitable integrity examination. The federal requirement for a leak test for nonenterable underground tanks is reasonable because of the concern that the underground portion of such tanks, which is most subject to corrosion, cannot be visually inspected. However, the Agency believes that the same concern exists for any portion of a tank that cannot be visually inspected. Therefore, it is reasonable to extend the requirement for a leak test to also apply to inground and onground tanks that cannot be entered. Inground and onground tanks are tanks which have the bottom or sides covered by the ground. Definitions of inground and onground tanks are provided in Minn. Rules pt. 7045.0020.

The federal regulations provided 12 months from the effective date of the rules for the owners and operators of existing tanks to conduct this assessment. Because the effective date of the rules was six months after the publication of the rules, owners and operators actually had 18 months to conduct the assessment. Tanks which are subject to the HSWA portions of the federal regulations must be assessed by January 12, 1988. All underground tanks that cannot be entered for inspection are subject to the HSWA schedule for assessment. However, tanks which are not subject to HSWA are not required to conduct this assessment until the deadline established by State rule. These would be inground and onground tanks that cannot be entered for inspection. The proposed amendments specify that the assessment must be conducted as required under the federal regulations for those tanks that are subject to the federal time frames (HSWA tanks). The proposed amendments require that all other tanks must be assessed within 18 months of the effective date of the State rule. This

corresponds to the time period that was provided under the federal program and is a reasonable time to conduct the required assessment. Owners and operators have been aware that an assessment will eventually be required since the federal regulations were published on July 14, 1986 and have therefore had reasonable time to respond to the requirement.

Subpart 3 establishes requirements for the design and installation of new tank systems or components. This subpart requires that an assessment be conducted for all new tank systems that will attest to the design and operation of the facility so that no releases will occur. All the requirements of this subpart directly correspond to the equivalent federal requirements of 40 C.F.R. § 264.192. These requirements are reasonable to ensure that tanks are correctly designed and installed and that corrosion protection systems are provided as necessary.

Corrosion protection is not currently required by the State rules although it is provided as an option for tanks that cannot be entered for inspection. However, a functioning corrosion protection system will provide a high level of protection to tanks that would be otherwise subject to corrosion and eventual failure and is reasonable to ensure the continued fitness of a tank system. Because an extensive technology exists for the application of corrosion protection, no specific procedure is specified in the proposed amendments. The type and degree of corrosion protection needed must be determined on a case-by-case basis. This will provide a reasonable level of flexibility in determining the most suitable system.

Subpart 4 establishes the requirements for the containment and detection of releases. The State rules for permitted tanks have always required that a liner

or containment system be provided. The proposed amendments establish much more extensive criteria for the design of secondary containment systems, including the requirement for interstitial monitoring. Interstitial monitoring to detect releases from the tank into the secondary containment systems is not currently required in the State rules. It is a reasonable requirement to ensure that leaks will be detected and the necessary repairs made. Without a system to detect leaks into the secondary containment system, the failure of a primary tank could go undetected and the secondary containment system would then indefinitely function as the primary tank.

The proposed amendments specify three types of secondary containment and establish criteria for the design and construction of each type. The rules provide a fourth option for secondary containment which would be an equivalent device as approved by the Agency Commissioner through the petition process established in proposed Minn. Rules pt. 7045.0075, subp. 6. The proposed technical requirements set out in proposed Subpart 4 directly correspond to 40 C.F.R. § 264.193 and have not been altered or expanded in the proposed amendments.

Certain aspects of the schedule for the phase-in period for the installation of secondary containment for existing tanks has been made more stringent in the proposed amendments than in the corresponding federal regulations. 40 C.F.R. § 264.193 (a) establishes specific time frames for providing secondary containment. The proposed amendments provide the same time frame as the federal regulations for new tank systems and tank systems that contain dioxin wastes. These schedules provide a reasonable balance between the need for secondary containment and the recognition that the owners or operators of existing tank systems need time to accomplish the requirements being newly imposed by the proposed amendments.

However, for existing tank systems or tank systems that contain a waste that at a future time becomes regulated as a hazardous waste, the Agency proposes more restrictive requirements. See Subpart 4, item A, subitems 2, 3 and 4. With regard to existing tanks, the proposed amendments provide an accelerated schedule for compliance with the secondary containment requirements. The federal regulations base the phase-in period on the age of the tank and require that secondary containment be provided by the time the tank is 15 years old, or within two years if the age of the tank already exceeds 15 years. The Agency believes that this is a cumbersome mechanism for phasing-in the secondary containment requirements and does not provide a reasonably rapid response to the need for secondary containment to address the concern regarding releases. Permitted tanks in Minnesota are currently required to have secondary containment so that, in most cases, the proposed amendments will actually only require that tanks be upgraded to meet the more extensive criteria and include interstitial monitoring.

The Agency believes that a maximum of five years is a reasonable time period for phasing-in the requirements to upgrade the existing secondary containment system. Five years corresponds to the term of a hazardous waste facility permit. Tank systems that have been recently permitted will be allowed to continue to operate until the permit is reissued to include the upgrading necessary to meet the new tank standards. Owners and operators of tank systems that have been permitted for several years will have the option of upgrading the system at the time the permit is reissued or doing the necessary upgrading after five years and requesting the permit be modified to reflect those changes.

For existing tanks that treat or store a material that becomes a hazardous waste in the future, the Agency proposes that the owner or operator shall have

two years from the date the material becomes a hazardous waste to install secondary containment. See Subpart 4, item A, subitem 4. This is more restrictive than the parallel federal provision which allows two years or up to the time the tank is 15 years of age, whichever is later. For the same reasons stated above, the Agency believes this would establish too long a time frame for installation of secondary containment. Further, the Agency believes that two years after the material becomes a hazardous waste is an adequate period of time since additional time to prepare for the installation of secondary containment is provided by the rulemaking procedure through which the material would become a hazardous waste. Thus, owners and operators of these tanks would have more than two years -- and the opportunity to influence the rulemaking procedure -- thus, allowing them reasonable time to prepare to install secondary containment.

Subpart 5 establishes leak testing requirements for tank systems that do not have secondary containment. These requirements generally correspond to the requirements in 40 C.F.R. § 264.193 (i), although two aspects of the proposed amendments are more stringent. Item A of subpart 5 requires annual leak testing that meets the requirements for initial tank testing in subpart 2, item A, for nonenterable underground, inground, or onground tanks. The requirement to conduct leak testing on inground and onground tanks is not part of the federal requirements. However, as previously discussed for subpart 2 of this part, the Agency believes this is a reasonable extension of the proposed amendments to address the concern regarding surfaces of the tank that cannot be visually inspected. The proposed requirements for enterable tanks are the same as the federal requirements and consist of two options for determining tank suitability. The owner or operator may either conduct an actual leak test or

may develop a schedule and procedure for assessing the condition of the tank. It is reasonable to provide for alternatives to the annual leak test to accommodate different types of tanks and varying conditions. Not all tanks will present the same level of concern. In some cases, annual leak testing will not be justified and in other cases, more frequent testing may be necessary. The proposed amendments provide a number of factors to be considered by the tank owner or operator in developing the type of alternate assessment and the schedule for conducting such assessments.

Item C of subpart 5 requires that all tanks be tested to evaluate tank wall thinning. The State rules currently require that a minimum tank wall thickness be maintained. The Agency continues to believe that this is a reasonable requirement to avoid catastrophic tank failure. The existing rules do not, however, include an requirements for evaluating the wall thickness. Since tank walls could be thinned to the point that they would not adequately support the pressure of the tank system and since a leak test might not reveal this weakness, the Agency proposes to add a requirement that a thinning evaluation be performed in conjunction with the leak test or alternate tank evaluation. The proposed rules do not establish a specific schedule and procedure for tank wall thinning testing. As discussed above, it is reasonable to allow such decisions to be reached through consideration of a number of factors that will vary for each tank system.

The requirements of items D to F directly correspond to the federal requirements of 40 C.F.R. § 264.193(i)(3) to (5). Item D requires that ancillary equipment also be tested annually for leaks. This is reasonable because ancillary piping, pumps, and valves are frequently the source of spills and releases to the environment. The concern associated with such equipment is

further discussed on page 25429 of Exhibit 1. EPA states that releases from ancillary equipment is a significant cause of releases from aboveground tank systems. It is therefore reasonable to require that this component of the tank system be tested on a regular basis.

Item E requires that the owner or operator maintain a file recording the results of all the assessments required under items A to D. This is reasonable in order to determine compliance with the requirement to conduct the tests and to verify that the tank system actually met the standards and passed the leak test.

For tanks which are assessed and found to be leaking or unfit-for-use, Item F references subpart 8, which requires the owner or operator to take certain actions to remedy the situation. This is a reasonable consequence of a determination that the tank system does not meet the established tank standards.

Subpart 6 establishes the general operating requirements for permitted tank systems. These requirements directly correspond to 40 C.F.R. § 264.194. The proposed amendments specify basic operational procedures to prevent releases from the tank system. These include the requirement to consider the type of waste being placed in the tank as it relates to the possible failure of the tank system and the management of the tank to prevent spills and overflows resulting from tank operation. It is reasonable to include these requirements to provide a standard for the operation of the tank as well as the standards for the design and installation of the tank. The proposed rule also states that the requirements applicable to leaking or unfit-for-use tanks are also applicable for leaks or spills resulting from the operation of the tank. This is a reasonable reference to the applicable standards for responding to releases.

Subpart 7 establishes the inspection requirements for tank systems. These requirements directly correspond to the federal inspection requirements of 40 C.F.R. § 264.195. The proposed rules provide different schedules for different inspection activities. Item A does not specify a frequency for the inspection of overflow controls, instead, the owner or operator is required to establish a schedule. It is reasonable to allow this degree of flexibility for this aspect of the inspection program to enable owners and operators to adopt a procedure to accurately meet the site specific needs. The State rules currently require that overflow controls be inspected once each operating day. However, the Agency proposes to amend this frequency in recognition of the fact that it may be appropriate to increase or decrease the inspection frequency depending on the type of system and the potential for releases from the overflow system. A frequent inspection schedule is appropriate for tanks that are routinely emptied or filled. However, in many cases, there is very little filling activity and little or no risk of overflow. In such cases, there is very little potential for overflow or adverse consequences of a failure in the overflow control system.

Item B requires daily inspection of the visible portions of the tank system and the area surrounding the tank system and also daily inspection of monitoring equipment. This is a reasonable requirement because it reflects the magnitude of the concern associated with a major release from the tank system.

Item C addresses the frequency of inspection required for cathodic protection systems. The time frames in the proposed rules are based on the recommendations of the National Association of Corrosion Engineers. This recommendation is further discussed on page 25453 of Exhibit 1. These are

reasonable inspection requirements because they are based on a consensus of a number of experts on the subject of corrosion protection and will not represent a burden to the regulated community.

Subpart 8 establishes the requirements for responding to leaks or spills and also for disposing of tanks that must no longer be used. Unfit-for-use tanks may either be leaking or may have been determined to be corroded or damaged to the extent that failure is expected. With one exception, these requirements directly correspond to the federal requirements of 40 C.F.R. § 264.196.

Item A specifies that the owner or operator of a leaking or unfit-for-use tank must immediately stop the flow of waste into the tank and inspect to determine the cause of the release. 40 C.F.R. § 264.196 also requires that a tank "be removed from service immediately." When this phrase was proposed in a draft rule, the Agency received comments stating that it implied that leaking or unfit-for-use tanks had to be physically removed, even to the extent of digging up underground tanks. Because this was not the Agency's intent and because the proposed rule language adequately serves the intended purpose of stopping the use of the tank, this phrase was deleted from the proposed rules. The proposed language requires the owner or operator to discontinue use of the tank and is reasonable to reduce the impact of a release or expected release from the tank. The Agency believes that the proposed language is equivalent to the federal rule.

Item B specifies that released wastes must be removed within 24 hours or, if that is not possible, at the earliest practicable time. It is reasonable to provide an alternative to the 24-hour time period to allow some flexibility for different types of tank systems. More time may be reasonable if the leak is stopped and the waste is acceptably contained.

Item C requires the owner or operator to conduct a visual inspection of the release and to take the necessary steps to prevent further migration of the leak and to remove and properly dispose of contaminated material. These are reasonable responses to a release of hazardous waste to ensure that the adverse effects of the release are minimized.

Item D requires that the Agency Commissioner be notified of releases and that a report be submitted within 30 days describing the effect of the release. One exception to the report requirement is provided for releases less than or equal to one pound that are immediately contained and cleaned up. While it is reasonable to require that the Agency Commissioner be fully informed of significant releases from a hazardous waste facility, it is not necessary to provide a full report on minor releases that will not have any consequences on human health or the environment. This requirement is slightly different than the federal rule, which exempts persons responsible for minor spills from both the requirement to report the spill and to file a full report describing the spill. The Agency believes it is reasonable to exempt minor spills from the full reporting requirements, but believes that useful information is provided by a report of the spill event. Moreover, Minn. Stat. § 115.061 already requires reports of spill events which may affect waters of the State, regardless of the size of the spill. Accordingly, the Agency believes it is not very burdensome and is reasonable to require that all spills, regardless of size, be reported.

Item E establishes the conditions for closing, repairing, or providing secondary containment for leaking or unfit-for-use tanks. The proposed rules allow leaking or unfit-for-use tanks to be either repaired or closed. The requirements for repairing the tank vary depending on the source of the leak. If the leak was the result of a spill that did not damage the tank system, there

may be very little to repair and it is reasonable to allow such tank systems to be returned to service without further certification. However, if the release resulted from a part of the tank system that was not provided with secondary containment, and that part cannot be visually inspected for future leaks, then secondary containment must be provided before the tank can be returned to service. It is reasonable to require secondary containment for repaired tank system components that cannot be visually inspected because of the risk of a reoccurrence. Also, it will be relatively easy to install secondary containment while the tank is empty and undergoing repairs so that the burden associated with the installation of secondary containment will be minimized.

The proposed rules allow a tank to be returned to service without installing secondary containment if the source of the leak is an aboveground component that can be visually inspected. Because the proposed rules also require that the repaired aboveground component be certified as capable of handling hazardous wastes, the Agency believes that it is reasonable to allow the tank to be put back in service after a leak has occurred. The required certification, in conjunction with the requirement to inspect such components daily, will provide adequate assurance that the risk of further releases is minimized.

The proposed rule further requires that the certification of tank system capabilities be submitted to the Agency Commissioner before returning the tank system to use. This is more stringent than the corresponding federal requirement that only requires the submittal of the certification within seven days of returning the tank system to use. During the initial drafting of the proposed rules, the Agency received comments suggesting that the Agency reserve the option of inspecting and verifying any repairs. By requiring the

certification prior to returning the tank to use, the Agency can respond to concerns more readily and correct any problems with less disruption and expense for the owner or operator. It is therefore reasonable to allow this more stringent requirement in the proposed rules.

Subpart 9 establishes the requirements for closure and post-closure care of tank facilities. These requirements directly correspond to 40 C.F.R. § 264.197 and no more stringent requirements are included in the proposed rules. The proposed rules require that all contaminated material at a tank facility be either removed or decontaminated. This is a reasonable requirement because tanks are not permitted for use as disposal facilities, only for the treatment or storage of hazardous wastes. Because there is no intention of allowing tank facilities to be closed with wastes remaining, it is reasonable to specify this in the rules.

However, both the EPA and the Agency recognizes the fact that in some circumstances it will not be possible to totally remove or decontaminate all material at a tank facility. In such cases, the facility is reasonably regulated as a landfill and the proposed rules require compliance with all the requirements for closure, post-closure care, and financial assurance applicable to a landfill.

Item C requires the owner or operator of a tank system that does not have secondary containment to provide information relative to the possibility that the tank system will have to be closed as a landfill. It is reasonable to require such advance planning because of the risk of extensive contamination that could result from failure of a tank system without secondary containment. The proposed rules require a closure plan for closing the facility and removing or decontaminating the wastes and also contingent plans for closure and

post-closure care if the facility must be closed as a landfill. The required cost estimates must address the cost of complying with the most expensive possibility for closure. This is reasonable to ensure that sufficient funds will be available to close the facility as a landfill if necessary.

Subpart 10 establishes the requirements for ignitable or reactive wastes. This subpart remains essentially the same as the current State rules and directly corresponds to the requirements of 40 C.F.R. § 264.198. The proposed rules only provide clarification of already existing requirements. The proposed rules change the term "dissolution" to "dissolved" and specify exactly which buffer zone requirements of the National Fire Protection Association are applicable. It is reasonable to provide these clarifications because there has apparently been some confusion regarding their meaning as originally phrased.

Subpart 11 establishes the requirements for tanks that may contain incompatible wastes. This subpart is only proposed to be amended to change the prohibition on placing waste in "an unwashed" tank to a prohibition on placing waste in a tank "system that has not been decontaminated." This change provides further assurance that a tank system will not contain residues of an incompatible waste. Washing of a tank may not remove all waste residues, so it is reasonable to require whatever measures may be necessary to ensure that incompatible wastes are not mixed.

The Agency proposes to repeal subpart 9 of the existing rules. This subpart addresses the management of dioxin wastes in tanks and requires additional management for dioxin wastes beyond the requirements for other types of hazardous wastes. However, the appropriate requirements for dioxin wastes are incorporated throughout the more stringent proposed rules so that the separate provisions will no longer be necessary to address the hazards presented by dioxin wastes.

N. Minn. Rules Pt. 7045.0556 (General Facility Standards).

Minn. Rules pt. 7045.0556 establishes the general facility standards for all interim status hazardous waste facilities. The proposed amendment to subpart 5 corresponds to the requirement of 40 C.F.R. § 265.15 and relates to the general inspection requirements. The proposed amendment adds two references to the new inspection requirements being imposed by the proposed amendments to Minn. Rules pt. 7045.0628, subps. 5 and 7. The additional inspection requirements relate to the inspection of interim status tank systems that have secondary containment as well as tank systems that have not been upgraded to include secondary containment. It is reasonable to amend this rule to provide the correct cross-references to inspection requirements so that the regulated community is informed of what is required of them.

O. Minn. Rules Pt. 7045.0564 (Waste Analysis Requirements).

Minn. Rules pt. 7045.0564 establishes the requirements for waste analyses applicable to the owners and operators of interim status hazardous waste facilities. The proposed amendment to subpart 2, item F changes a cross-reference to the interim status tank standards. The waste analysis requirements of the interim status tank standards were previously contained in subpart 3 but have been moved to subpart 12 in the proposed amendments. It is reasonable to make this change to provide the correct cross-reference to the waste analysis requirements. This proposed amendment corresponds to 40 C.F.R. § 265.13.

P. Minn. Rules Pt. 7045.0584 (Operating Record).

Minn. Rules pt. 7045.0584 establishes the requirements for maintaining information in the operating record of the interim status facility. The

proposed amendments to Minn. Rules pt. 7045.0628 add a number of new monitoring and testing activities. The proposed amendments to Minn. Rules pt. 7045.0584, subp. 3, items E and H provide the necessary cross-references to these additional requirements. It is reasonable to provide this information so that the regulated community will know what information is required in the operating record. This proposed amendment corresponds to 40 C.F.R § 265.73.

Q. Minn. Rules Pt. 7045.0600 (Post-closure).

Minn. Rules pt. 7045.0600 establishes the requirements for post-closure care of interim status hazardous waste facilities. The proposed amendment to subpart 1 of this part will add the requirement that tank systems that are required to close as a landfill must comply with the post-closure care requirements. This proposed amendment corresponds to 40 C.F.R. § 265.110.

Proposed Minn. Rules pt. 7045.0628, subp. 9 requires the owners or operators of interim status tank systems to close the facility as a landfill if all contaminated material cannot be completely removed at closure. It is reasonable to require post-closure care of such a facility to ensure that adequate measures are taken to prevent the release of wastes after closure.

R. Minn. Rules Pt. 7045.0608 (Financial Requirements).

Minn. Rules pt. 7045.0608 establishes the requirements for interim status facility owners and operators to provide financial assurance for acceptable closure and post-closure care of the facility. The proposed amendment to Minn. Rules pt. 7045.0608, subp. 1 adds a requirement that owners and operators of tank systems that must be closed as landfills must provide financial assurance for post-closure care. Proposed Minn. Rules pt. 7045.0628, subp. 9 requires

that tank systems be closed as landfills if contaminated soil at the facility cannot be removed or decontaminated at closure. In order to ensure that funds will be available to maintain proper post-closure care, it is reasonable to require that the owners or operators of tank systems that must be closed as landfills meet the financial assurance requirements applicable to landfills. This requirement corresponds to the federal requirement for financial assurance in 40 C.F.R. § 265.140.

S. Minn. Rules Pt. 7045.0628 (Tanks - Interim Status).

Minn. Rules pt. 7045.0628 establishes the requirements for tank facilities that are not permitted and are regulated under interim status. This part is also referenced under Minn. Rules pt. 7045.0292 as the applicable standards for generators who accumulate hazardous waste in tanks. The Agency does not propose to change the applicability section of the proposed rules. However, two exceptions to the secondary containment requirements are being proposed in subpart 1. These are the same exceptions provided in 40 C.F.R. § 265.190 which also correspond to the provisions of Minn. Rules pt. 7045.0528, subp. 1. A discussion of the reasonableness of these provisions is provided in section M of this Statement.

Subpart 2 establishes the requirement for the assessment of an existing tank system to determine whether it can adequately contain hazardous wastes. This part directly corresponds to 40 C.F.R. § 265.191. A discussion of the provisions of this part is provided in section M of this Statement.

Subpart 3 establishes the requirements for the design and installation of new tank systems or tank system components. This subpart corresponds to 40 C.F.R. § 265.192. A discussion of the reasonableness of these requirements is provided in section M of this Statement.

Subpart 4 establishes the requirements for the design and installation of secondary containment systems. The requirements of this subpart, with certain exceptions, correspond to 40 C.F.R. § 265.193. The reasonableness of the proposed rule, and the differences between the proposed rule and the federal regulations are discussed in section M of this Statement.

Subpart 5 establishes the testing requirements for tank systems that do not have secondary containment. The requirements of this part generally correspond to 40 C.F.R. § 265.193. A discussion of the more stringent aspects of this subpart and the reasonableness of the proposed requirements is provided in section M of this Statement.

Subpart 6 establishes the requirements for the operation of tank systems. These requirements correspond to the requirements of 40 C.F.R. § 265.194. The reasonableness of these requirements is discussed in section M of this Statement.

Subpart 7 establishes the inspection requirements for owners and operators of tank systems. These requirements correspond to the requirements of 40 C.F.R. § 265.195. The reasonableness of these requirements is discussed in section M of this Statement.

Subpart 8 establishes the requirements for responding to leaks or spills and for the disposition of unfit-for-use tanks. The reasonableness of these requirements and the differences between the proposed rules and the federal regulations are discussed in section M of this Statement.

Subpart 9 establishes the requirements for the closure and post-closure care of the tank systems. The requirements of this part correspond to 40 C.F.R. § 265.197. The reasonableness of the requirements of this subpart are discussed in section M of this Statement.

Subpart 10 establishes the requirements for the management of ignitable and reactive wastes in tank systems. These requirements correspond to the requirements of 40 C.F.R. § 265.198 and are essentially the same as the existing State rules. A discussion of the reasonableness of the minor changes is provided in section M of this Statement.

Subpart 11 establishes the requirements for the management of incompatible wastes in tanks. Only one minor change has been made to this subpart to correspond to 40 C.F.R. § 265.199. A discussion of this change is provided in section M of this Statement.

Subpart 12 establishes the requirements for waste analysis and trial tests to be conducted when different wastes are to be managed in a tank system. These requirements directly correspond to the requirements of 40 C.F.R. § 265.200 and are essentially the same as part 7045.0628, subpart 3 of the existing State rules. However, these requirements have been rephrased to be the same as the federal regulations. These requirements do not have an equivalent counterpart in Minn. Rules pt. 7045.0528. It is reasonable to require waste analysis and trial tests for interim status tank systems because such facilities have not been subjected to the Agency's review through the permit process and the information required under Minn. Rules Ch. 7001 has not been provided to the Agency. Additional regulation to ensure that wastes are not mixed is reasonable because of the potential that such mixing could result in a reaction which would damage the tank system.

The requirements of this subpart only apply to interim status tank facilities and not to generators who accumulate waste in tanks. Generators are not subject to this requirement because they are unlikely to be receiving the wide range of waste that could be received at an interim status facility

treating or storing wastes from off site. EPA provides further justification for this provision on page 25458 of Exhibit 1.

T. Minn. Rules Pt. 7045.0629 (Requirements for Small Quantity Generators that Accumulate Hazardous Waste in Tanks).

Minn. Rules pt. 7045.0629 establishes the requirements for small quantity generators who accumulate hazardous waste in tanks. Minn. Rules pt. 7045.0219 defines small quantity generators as generators of less than 1,000 kilograms of hazardous waste per month. Small quantity generators are allowed to accumulate hazardous waste for more than the 90 days provided in Minn. Rules pt. 7045.0292 for full scale generators. A small quantity generator may accumulate up to 3,000 kilograms of hazardous waste for 180 days. If the waste must be shipped to a facility that is more than 200 miles away, the accumulation period is extended to 270 days. Generators of less than 100 kilograms of hazardous waste per month are allowed to accumulate waste indefinitely until 1,000 kilograms are accumulated, at which time the other small quantity generator time frames become applicable.

The requirements of this part correspond to the federal requirements in 40 C.F.R. § 265.201 and are essentially the same as the existing State rules applicable to small quantity generators who accumulate hazardous waste in tanks. However, there is one difference from the existing rules and this relates to the requirement to conduct waste analyses and trial tests when a different waste is placed in the tank. Small quantity generators are currently required to comply with all requirements of existing Minn. Rules pt. 7045.0628. However, full scale generators, who are currently also required to comply with existing Minn. Rules pt. 7045.0628, are excepted from the waste analysis and trial test

requirements. When Minn. Rules pt. 7045.0219 was amended on April 27, 1987, the requirement to conduct waste analyses was inadvertently included in the rule cross-references. However, the Agency believes it is not reasonable to require compliance with this provision of the tank rules and is at this time correcting the previous error. All other aspects of the requirements for small quantity generators remain unchanged from the current level of regulation.

IV. SMALL BUSINESS CONSIDERATIONS IN RULEMAKING

Minn. Stat. § 14.115, subd. 2 (1986) requires the Agency, when proposing amendments to existing rules which may affect small businesses, to consider the impact of the rule amendment on small business. The objective of Minn. Stat. Ch. 116 (1986) is to protect the public health and welfare and the environment from the adverse effects which will result when hazardous waste is mismanaged. Application of less stringent standards to the hazardous wastes generated or managed by small businesses would be contrary to the Agency's mandate since small businesses' hazardous wastes can cause the same environmental harm as that of larger businesses.

The volume of hazardous waste generated by a business is not directly proportional to the size of the business. Many large businesses generate very small quantities of hazardous waste and conversely, a small business may generate a very large volume of hazardous waste. Therefore, it is not fair or reasonable to impose regulations based on the size of the business because this may have little relation to the potential for mismanagement or the extent of the adverse effects on human health and the environment if the waste is mismanaged.

Those aspects of the amendments that are based on federal regulations promulgated under HSWA are already in effect in Minnesota. Incorporation of

these provisions into the State rules will not impose any additional requirements on small businesses that are not currently being imposed by the federal regulations in effect in Minnesota and elsewhere in the nation.

The portions of the amendments that are based on federal regulations promulgated under RCRA, while not yet in effect in Minnesota, must eventually be incorporated into the State rules and must be equivalent to the federal level of regulation. Again, incorporation of these requirements into the State rules will not impose any additional requirements on small businesses that would not be imposed under the federal program.

The portions of the amendments that exceed the level of regulation in the federal program are the only areas where there is the option of minimizing the impact on small businesses. The amendments provide additional regulation in three areas; the phase-in period for secondary containment, the requirement to conduct leak testing for nonenterable inground and onground tanks, and the requirement to conduct periodic tests to determine that a minimum tank wall thickness is maintained. These requirements are applicable to permitted and interim status tank facilities and also to full-scale generators of hazardous waste. Agency staff are not aware of any permitted or interim status tank facilities owned or operated by a small business. However, some small businesses may be generators of hazardous waste. The State rules recognize two classes of generators, full-scale and small quantity generators. The amendments provide a lower level of regulation for small quantity generators. Specifically, small quantity generators who accumulate waste in tanks are not subject to any of the newly imposed federal requirements. The current level of regulation is being maintained. Small businesses that are small quantity generators that accumulate waste in tanks will not be affected by the

amendments. Small businesses that are full-scale hazardous waste generators that accumulate waste in tanks will be affected by the three more stringent areas of regulation mentioned above. However, Agency staff believes that these additional regulations are justifiable and do not present an unreasonable burden to small businesses that may be subject to these requirements.

V. CONSIDERATION OF ECONOMIC FACTORS

In exercising its powers, the Agency is required by Minn. Stat. § 116.07, subd. 6 (1986) to give due consideration to economic factors. The statute provides:

In exercising all its powers the Pollution Control Agency shall give due consideration to the establishment, maintenance, operation, and expansion of business, commerce, trade, industry, traffic, and other economic factors and other material matters affecting the feasibility and practicability of any proposed action, including, but not limited to, the burden on a municipality of any tax which may result therefrom, and shall take or provide for such action as may be reasonable, feasible, and practical under the circumstances.

In proposing the requirements of these amendments governing hazardous waste tanks, the Agency has given due consideration to available information as to any economic impacts the proposed amendments would have. The amendments will have some economic impacts for owners and operators of hazardous waste tank systems. The amendments will impact the owners and operators of hazardous waste tank systems by requiring upgrading of existing tank systems and more extensive monitoring of the tank system during operation. The amendments are based partially on federal regulations promulgated under HSWA which are already in effect in Minnesota and also on federal regulations promulgated under RCRA. Incorporation of these provisions into the State rules will not impose any additional requirements on the owners and operators of hazardous waste that are

not currently being imposed by the federal regulations in effect in Minnesota or that would be imposed if Minnesota's rules were not equivalent.

Three requirements of the proposed amendments will exceed the level of regulation of the federal program. These additional requirements will have an economic impact on the affected members of the regulated community. However, this impact is not believed to be significant and will be discussed in more detail in 1) to 3) below.

1) Phase-in Period. The federal regulations require the installation of secondary containment for existing tanks by the time the tank is 15 years old. Because the State rules have always required secondary containment for permitted tank systems, the phase-in period will only be applicable to interim status facilities and full-scale generators who accumulate waste in tanks. The amendments also require the installation of secondary containment by the time a tank is 15 years old, but further specify a maximum time of five years from the effective date of the rules before secondary containment must be installed. The effect of this difference will be to accelerate the response time for interim status facilities and generator's accumulation tanks that are less than ten years old. Although the installation of secondary containment is inevitable under the federal program, it is required sooner under the proposed amendments and therefore will result in a more immediate expenditure for owners and operators of interim status facilities or generators with accumulation tanks that are less than ten years old.

2) Leak Testing for Inground and Onground Tanks. The federal regulations require leak testing for underground tanks that cannot be entered for inspection. For all other types of tanks, the federal regulations provide the

option of either conducting leak testing or some other method of determining the fitness of the tank to contain hazardous waste.

The amendments extend the requirement for leak testing to also include nonenterable inground or onground tanks. Although the cost of leak testing will vary depending on a number of factors such as travel distance, size of the tank, and ease of access, a leak test can be conducted for approximately \$500.00. The amendments require a leak test be conducted within 18 months of the effective date of the rules and annually thereafter until secondary containment is installed. This would represent a maximum of four leak tests amounting to \$2,000.00 for the affected tank owner or operator.

3) Tank Wall Thinning Testing. The amendments require testing to evaluate tank wall thinning for tanks that have not had secondary containment installed. For permitted facilities the frequency of these tests will be determined in the permit. For interim status tanks and tanks used by generators to accumulate hazardous wastes, the amendments specify that the initial test must be conducted within 18 months of the effective date of the rules and every two years thereafter.

Testing to determine tank wall thinning is usually conducted by use of ultrasonic evaluation of the tank walls. The cost of ultrasonic testing will vary depending on the size and construction material of the tank and the travel distance to conduct the test. Ultrasonic testing will cost from \$30.00 to \$40.00 per hour.

The Agency believes that the additional expense that will be incurred as a result of the adoption of more stringent State requirements are justified by the

additional environmental protection these requirements will ensure. In no case will the additional State requirements result in immediate expenditure or represent a burdensome expense to the affected owners and operators of hazardous waste tanks.

VI. CONCLUSION

The Agency has, in this document and its exhibits, made its presentation of facts establishing the need for and reasonableness of the proposed amendments to Minnesota's hazardous waste rules. This document constitutes the Agency's Statement of Need and Reasonableness for the proposed amendments to the hazardous waste rules.

VII. LIST OF EXHIBITS

The Agency is relying on the following documents to support these amendments.

<u>Agency Ex. No.</u>	<u>Title</u>
1	<u>Federal Register</u> , Vol. 51, No. 134, Pages 25422-25486, July 14, 1986.
2	<u>Federal Register</u> , Vol. 50, No. 123, Pages 26444-26504, June 26, 1985.
3	<u>Federal Register</u> , Vol. 51, No. 158, Pages 29430-29431, August 15, 1986.

Date:

October 16, 1987

for Barbara Sunday-Sera
Thomas J. Kalfowski
Commissioner