

STATE OF MINNESOTA
MINNESOTA POLLUTION CONTROL AGENCY

In the Matter of the Proposed
Amendments of Rules Governing
the Management, Storage, Treatment,
and Disposal of Hazardous Waste,
Minn. Rules Pts. 7001.0520, 7001.0560,
7001.0625, 7001.0640, 7045.0020,
7045.0135, 7045.0452, 7045.0460,
7045.0478, 7045.0484, 7045.0485,
7045.0486, 7045.0488, 7045.0490,
7045.0492, 7045.0502, 7045.0506,
7045.0518, 7045.0539, and 7045.0665

STATEMENT OF NEED
AND REASONABLENESS

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. These amendments to the state hazardous waste rules will incorporate four sets of amendments to the federal hazardous waste regulations promulgated by the U.S. Environmental Protection Agency (hereinafter "EPA"). The proposed amendments pertain to the following:

A. Permitting and technical standards for miscellaneous hazardous waste management units. The amendments provide permitting and technical standards for hazardous waste management technologies that are not covered by the existing hazardous waste rules.

B. The codification of additional corrective action and permit provisions related to hazardous waste management facilities.

C. The definition of hazardous waste. The amendments provide a technical correction to the existing definition of hazardous waste.

D. The listing of spent pickle liquor. The amendments provide a technical correction to the listing of spent pickle liquor already existing in the hazardous waste rules.

EPA's version of these amendments were promulgated and published in the Federal Register on December 10, 1987 (see Exhibit 1); December 1, 1987 (see Exhibit 2); June 5, 1987 (see Exhibit 3); and August 3, 1987 (see Exhibit 4), respectively. The federal amendments pertaining to miscellaneous units, the definition of hazardous waste, and the listing of spent pickle liquor were promulgated by EPA under the authority of the Resource Conservation and Recovery Act (RCRA). The federal amendments pertaining to codification were promulgated by EPA under the authority of the Hazardous and Solid Waste Amendments (HSWA) of 1984.

These state 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 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 North, St. Paul, Minnesota 55155.

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

Minn. Stat. ch. 14 (1986) requires an agency to make an affirmative presentation of facts establishing the need for and reasonableness of the rules or amendments proposed. 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.

A. Need for Consistency with Federal Regulations.

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 to 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.

Minnesota received final authorization from EPA for its hazardous waste program pursuant to RCRA 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. Federal regulations promulgated under RCRA are not in effect in Minnesota until the state rules are amended to incorporate the federal changes.

The authorization Minnesota received on February 11, 1985, did not extend to those federal requirements promulgated by EPA pursuant to HSWA. Federal amendments promulgated under HSWA are in effect in Minnesota and are enforced by EPA until Minnesota modifies their program to adopt the HSWA amendments. Once a state modifies its program to adopt HSWA amendments, the state must apply for and receive authorization specifically under HSWA in order to enforce the HSWA provisions in lieu of EPA as part of the authorized state program. 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 it is important to maintain as much consistency as possible between Minnesota's rules and 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.

B. Need for Rules Protective of Human Health and the Environment.

The proposed amendments to the Minnesota hazardous waste rules are needed for the protection of human health and the environment. As more scientific evidence and technological factors become available pertaining to the management of hazardous waste, the Agency needs to respond by establishing hazardous waste management requirements that adequately protect human health and the environment.

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. The Agency proposes to incorporate the federal amendments promulgated by EPA. A complete discussion of the reasonableness of the federal amendments is presented in Exhibits 1 to 4 listed in Part VII of this document, which are hereby incorporated by reference. The reasonableness of each of the proposed amendments to the state hazardous waste rules is discussed below.

A. Minn. Rules Pt. 7001.0520 (Permit Requirements).

Minn. Rules pt. 7001.0520, subp. 1 is entitled "Permit Required" and defines the hazardous waste management activities which require a permit from the Agency. The management activities requiring a permit are specified in items A to D of subpart 1. The Agency is amending subpart 1 to add a concluding paragraph to require owners or operators of surface impoundments, landfills, land treatment units, and waste piles that received wastes after July 26, 1982, or certified closure according to interim status standards after January 26, 1983, to have a post-closure permit unless they demonstrate

that the closure meets the closure requirements currently specified in the rules. The effect of the amendment is to subject hazardous waste management units regulated under interim status standards to the same ground water monitoring, unsaturated zone monitoring, and corrective action requirements that are applicable to new permitted units. This amendment is reasonable because it ensures that the same and appropriate level of post-closure care will be given to all hazardous waste management units by providing a more environmentally protective mechanism for addressing ground water protection at closed facilities than would be obtained through interim status closure and post-closure requirements. The amendment corresponds to the federal amendment to 40 CFR § 270.1(c).

The Agency is also amending Minn. Rules pt. 7001.0520 to add two new subparts, subparts 5 and 6.

Subpart 5 is being added to provide the procedure for owners or operators, who closed their surface impoundments, land treatment units, and waste piles according to interim status standards, to demonstrate that their closed units meet the applicable closure by removal or decontamination requirements specified in the rules. The procedure for demonstrating that the applicable closure by removal or decontamination requirements have been met are described in items A and B of proposed subpart 5. The amendment is reasonable because it describes for the regulated community the actions necessary for making the applicable demonstration. Also, the procedure itself is reasonable because it will provide the Agency with the information necessary for determining whether the demonstration meets the applicable closure by removal or decontamination requirements. The amendment is equivalent to 40 CFR § 270.1(c)(5).

Subpart 6 is being added to provide the procedure by which the Agency will determine whether an owner's or operator's closure demonstration, as described above under the discussion of proposed subpart 5, meets the applicable closure by removal or decontamination requirements specified in the rules. The procedure is outlined in items A to C of proposed subpart 6. Item A allows the public 30-days to submit comments to the Agency regarding the demonstration information submitted by an owner or operator. Item B requires the Agency to hold a public meeting regarding the closure equivalency, if the Agency believes a meeting will clarify the situation. Item C establishes the time frames for both the Agency to make a closure equivalency determination and the owner or operator to submit additional information. The amendment is reasonable because it outlines for both the regulated community and the Agency the process that will be followed by the Agency in making a closure equivalency determination. The determination process itself is reasonable because it provides the owner or operator with a fair determination process which allows for the submittal of additional information and public input. The amendment is equivalent to 40 CFR § 270.1(c)(6).

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

Minn. Rules pt. 7001.0560 sets out the general information to be contained in Part B of a hazardous waste permit application. The required information is specified in items A to U of Minn. Rules pt. 7001.0560.

Item E requires that Part B of a permit application must contain a copy of the general inspection schedule required by the rules as well as additional inspection information specific to the type of hazardous waste management unit seeking a permit. Minn. Rules pt. 7045.0539 entitled "Miscellaneous Units" is being added to the hazardous waste rules as a result

of these amendments, as discussed in section S, specifically for the purpose of providing technical standards for owners and operators of facilities that treat, store, or dispose of hazardous waste in miscellaneous units. Proposed Minn. Rules pt. 7045.0539, subp. 3 sets out the inspection requirements specific to miscellaneous units. Therefore, item E of Minn. Rules pt. 7001.0560 is being amended to require the inspection information specified in Minn. Rules pt. 7045.0539, subp. 3 to be contained in Part B of a permit application for a miscellaneous unit. In this manner, miscellaneous units will be regulated the same as hazardous waste management units currently regulated. The amendment is reasonable because it addresses the addition of Proposed Minn. Rules pt. 7045.0539 which sets forth the technical standards applicable to miscellaneous units. The amendment is equivalent to 40 CFR § 270.14(b)(5). The reasonableness of adding the Minn. Rules pt. 7045.0539 miscellaneous unit standards to the rules is discussed in section S.

Item L requires that Part B of a permit application must contain a copy of the closure plan and, where applicable, the post-closure plan including additional closure and post-closure information specific to the type of hazardous waste management unit seeking a permit. As discussed above under the amendment to item E, a new part is being added to the hazardous waste rules as a result of these amendments for the purpose of providing technical standards for miscellaneous hazardous waste management units. The miscellaneous unit standards are set out in proposed Minn. Rules pt. 7045.0539. Proposed Minn. Rules pt. 7045.0539, subps. 2 and 4 set forth the closure and post-closure requirements specific to miscellaneous units. Therefore, item L of Minn. Rules pt. 7001.0560 is being amended to require the closure and post-closure information specified in Minn. Rules pt. 7045.0539, subps. 2 and 4 to be contained in Part B of a permit application for a

miscellaneous unit. In this manner, miscellaneous units will be regulated the same as hazardous waste management units currently regulated. The amendment is reasonable because it will ensure that Part B of permit applications for miscellaneous units will contain the applicable closure and post-closure information necessary to approve or deny a permit. The amendment is equivalent to 40 CFR § 270.14(b)(13).

C. Minn. Rules Pt. 7001.0625 (Part B Information Requirements for Miscellaneous Units).

The Agency is proposing to add a new part to the hazardous waste rules, Minn. Rules pt. 7001.0625 entitled "Part B Information Requirements for Miscellaneous Units." As discussed in section S, Minn. Rules pt. 7045.0539 is being added to the rules to set forth the technical standards for operating a miscellaneous unit. However, in order to operate a miscellaneous unit, the owner or operator must first obtain a permit from the Agency. In order to consider issuing a permit for a miscellaneous unit, the Agency must receive the relevant design, location, and operating information for the miscellaneous unit. All currently regulated hazardous waste management units are required to submit similar information to the Agency. Minn. Rules pts. 7001.0570, 7001.0580, 7001.0590, 7001.0600, 7001.0610, 7001.0620, and 7001.0630 set forth the Part B information requirements for containers, tanks, surface impoundments, waste piles, land treatment, landfills, and thermal treatment units, respectively.

Proposed Minn. Rules pt. 7001.0625 sets forth the Part B information requirements for miscellaneous units. The information required is specified in items A to E. The information required includes: (1) a detailed description of the physical characteristics of the unit including the materials of construction and dimensions of the unit; (2) detailed plans and

engineering reports describing how the unit will be located, designed, constructed, operated, maintained, monitored, inspected, and closed; (3) post-closure plans, if the unit is a disposal unit; (4) detailed hydrologic, geologic, and meteorologic assessments and land-use maps of the region surrounding the site; (5) information relative to the exposure of humans or environmental receptors to hazardous waste or constituents; (6) if the unit is for treatment, a report on the effectiveness of the treatment; and (7) any additional data necessary to evaluate compliance of the unit with the performance standards specified in the rules.

The information requirements proposed in Minn. Rules pt. 7001.0625 are reasonable because the required information will allow the Agency to assess whether the design, location, operation, and maintenance of the unit will be such that human health and the environment will be appropriately protected. The amendment is equivalent to 40 CFR § 270.23.

D. Minn. Rules Pt. 7001.0640 (Additional Part B Information Requirements for Surface Impoundments, Waste Piles, Land Treatment Units, and Landfills).

Minn. Rules pt. 7001.0640, subp. 1 sets out additional groundwater protection information to be submitted in Part B of a permit application by owners or operators of surface impoundments, waste piles, land treatment units, and landfills. Subpart 1 is amended to add item H. Proposed item H requires additional groundwater protection information to be submitted in Part B of a permit application for each solid waste management unit at a facility for which a permit is being sought. Proposed item H requires an owner or operator to provide the following information for each solid waste management unit: (1) designate the location of the unit on the topographic map currently required by the rules; (2) designate the type of unit; (3) provide the

dimensions, a structural description, and any available drawings; (4) specify when the unit was operated; (5) specify the wastes that have been managed at the unit; (6) provide information pertaining to any hazardous waste releases from the unit; and (7) conduct and provide results of sampling and analysis of groundwater, land surface and subsurface strata, surface water, or air where necessary to complete a facility assessment.

The Agency believes that the analysis of existing data for solid waste management units is often necessary as part of making a preliminary assessment of releases from solid waste management units before a permit is issued, and that it should have a mechanism to require the owner or operator to provide the necessary data. The information requirements proposed in item H regarding solid waste management units are reasonable because the information will allow the Agency to determine the existence or the likelihood that there is or has been a release of hazardous waste into the environment at the facility. The required information on solid waste management units will enhance the Agency's ability to make these determinations. The amendment is equivalent to 40 CFR § 270.14(c) and (d).

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

Minn. Rules pt. 7045.0020, subp. 49 provides a definition for the word "landfill". The Agency is amending subp. 49 to revise the existing definition of "landfill" in order to address the addition of a definition for "miscellaneous unit" which is discussed below. Existing subp. 49 defines a landfill as a disposal facility or part of a facility where hazardous waste is placed in or on land which is not a land treatment facility, a surface impoundment, or an injection well. Therefore, a landfill is a catchall category for all disposal facilities that do not meet the definition of a land treatment facility, a surface impoundment, or an injection well. However, as

discussed below, the proposed definition of "miscellaneous unit" makes miscellaneous units the new catchall category and requires a revision to the definition of "landfill". Therefore, the Agency is amending subp. 49 to limit the definition of "landfill" to a discrete category of specific types of units. Since the proposed definition for "miscellaneous unit" changes the meaning of "landfill," it is reasonable to revise the definition of "landfill" to reflect this change. The amendment is equivalent to 40 CFR § 260.10.

As stated above, the Agency is proposing to add a definition to the hazardous waste rules for "miscellaneous unit." The new definition is proposed as subp. 58a. "Miscellaneous unit" is being defined as a hazardous waste treatment, storage, or disposal unit that is not a container, tank, surface impoundment, pile, land treatment unit, landfill, incinerator, boiler, industrial furnace, underground injection well, or unit eligible for a research, development, and demonstration permit, which are all hazardous waste management units for which technical standards currently exist in the rules. Providing the definition is reasonable because it assists individuals in understanding and interpreting the rules. The amendment is equivalent to 40 CFR § 260.10.

F. Minn. Rules Pt. 7045.0135 (Lists of Hazardous Waste).

Minn. Rules pt. 7045.0135 is entitled "Lists of Hazardous Wastes." The Agency is amending subparts 3 and 4 of this rule.

Subpart 3 provides a listing of hazardous wastes from specific sources. Item H of subpart 3 provides a listing of hazardous wastes from the iron and steel industry. Specifically, item H, subitem (2) currently lists spent pickle liquor generated by steel finishing operations of plants that produce iron and steel as a hazardous waste. In the August 3, 1987, Federal Register (52 FR 28697-28698) (see Exhibit 4), the EPA amended the federal

regulations to correct the language of the listing of spent pickle liquor from steel finishing operations in order to reflect the original intent. The federal amendment clarifies that the scope for the listing of spent pickle liquor from steel finishing operations applies to all plants in the iron and steel industry and not just to the plants that actually produce the iron and steel. The Agency is amending item H, subitem (2) to incorporate the federal technical correction to the listing of spent pickle liquor. The Agency believes it is reasonable to provide the amendment in order to provide for the original intent of the listing of spent pickle liquor. The technical correction provides equivalency with 40 CFR § 261.32.

Subpart 4 lists materials which are hazardous wastes when they are discarded or intended to be discarded. In the June 5, 1987, Federal Register (52 FR 21306-21307) (see Exhibit 3), the EPA amended the federal regulations to correct the language of the listing of materials which are hazardous wastes when they are discarded or intended to be discarded. In effect, the federal technical correction changed the definition of hazardous wastes, but provided for the original intent of the definition. The federal amendment clarified that the materials listed are also hazardous when they are otherwise applied to the land in lieu of their original intended use or when they are contained in products that are applied to the land in lieu of their original intended use. The Agency is amending subpart 4 to incorporate the federal technical correction. The amendment is reasonable because it will indicate more clearly that hazardous wastes are always subject to regulation prior to being used in a manner that constitutes disposal. This was the original intent of the requirements. The amendment is equivalent to 40 CFR § 261.33.

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

Minn. Rules pt. 7045.0452 sets out the general operating standards for all hazardous waste facilities. The Agency is amending subpart 5 of this part.

Subpart 5 sets forth the general inspection requirements for all hazardous waste facilities. By referencing the inspection requirements specific to each type of hazardous waste management unit, Item C of subpart 5 provides for the terms and frequencies of inspections to be specified in the inspection schedule for each type of hazardous waste management unit. The Agency is amending subpart 5, item C to include the reference for the inspection requirements for miscellaneous units. As discussed in section S, the Agency is proposing to establish operating standards for a new type of hazardous waste management unit, the miscellaneous unit. The proposed miscellaneous unit operating standards include inspection requirements. Therefore, providing the reference to the miscellaneous unit inspection requirements is reasonable because it will provide for the terms and frequencies of inspections for miscellaneous units to be specified in the inspection schedule in the same manner as all other hazardous waste management units. The amendment is equivalent to 40 CFR § 264.15(b)(4).

H. Minn. Rules Pt. 7045.0460 (Location Standards).

Minn. Rules pt. 7045.0460 establishes the location standards for hazardous waste facilities. The Agency is amending subpart 1 of this part.

Subpart 1 provides the location standards for facilities located in a 100-year floodplain. Specifically, subpart 1 requires that a facility located in a 100-year floodplain must be designed, constructed, operated, and maintained to prevent washout of any hazardous waste unless the owner or operator can demonstrate that the conditions in items A or B are met. The

condition specified in item B pertains to surface impoundments, waste piles, land treatment units, and landfills and requires that the owner or operator demonstrate that no adverse effects on human health or the environment will result if washout occurs. The Agency is amending item B of subpart 1 to allow the condition to apply to miscellaneous units as well. Since miscellaneous units are a newly regulated hazardous waste management unit as discussed in section S, it is reasonable to apply the applicable requirements of the existing hazardous waste rules to these units. The amendment is equivalent to 40 CFR § 264.18(b)(1)(ii).

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

Minn. Rules pt. 7045.0478, subp. 3 sets forth the information that must be recorded and maintained in the operating record by the facility owner or operator. The required information is specified in items A to L of subpart 3. The Agency is amending item H to require the owner or operator to record and maintain information in the operating record pertaining to corrective action activities, if required, at the facility. The amendment is reasonable because it will provide both the Agency and the owner or operator with the information necessary to determine whether corrective action activities at the facility have taken place and the adequacy of the corrective action.

The Agency is also amending item H of subpart 3 to provide a reference to the miscellaneous unit standards specified in Minn. Rules pt. 7045.0539, subp. 3. Since miscellaneous units are a newly regulated hazardous waste management unit as discussed in section S, it is reasonable to apply the applicable requirements of the existing hazardous waste rules to these units. The amendment is equivalent to 40 CFR § 264.73(b)(6).

J. Minn. Rules Pt. 7045.0484 (Groundwater Protection).

Minn. Rules pt. 7045.0484 sets forth the groundwater protection requirements for hazardous waste facilities. The Agency is amending subpart 14 of this part.

Subpart 14 establishes the corrective action program activities to be performed by a facility owner or operator. The required corrective action program activities are specified in items A to H of subpart 14. Item E currently requires the owner or operator to remove or treat hazardous constituents that exceed concentration limits in groundwater that has passed the compliance point. The Agency is amending item E to add subitems (1) and (2). Proposed subitem (1) requires the owner or operator to remove or treat hazardous constituents that exceed concentration limits in groundwater between the compliance point and the downgradient property boundary. Proposed subitem (2) requires the owner or operator to remove or treat hazardous constituents that exceed concentration limits in groundwater beyond the facility boundary, unless the owner or operator is denied access to adjacent lands despite the owner or operator's best efforts. The amendments are reasonable because the requirements will ensure that human health and the environment are protected from the adverse effects of hazardous waste releases from hazardous waste management units. The amendments are equivalent to 40 CFR § 264.100(e)(1) and (2).

K. Minn. Rules Pt. 7045.0485 (Corrective Action for Solid and Hazardous Waste Management Units).

Minn. Rules pt. 7045.0485 sets forth the corrective action requirements for solid and hazardous waste management units. The Agency is amending Minn. Rules pt. 7045.0485 to add a new subpart, subpart 3. Proposed subpart 3 requires an owner or operator to conduct corrective actions beyond

the facility property boundary, where necessary, unless the owner or operator is denied access to adjacent lands despite the owner or operator's best efforts. The Agency believes this requirement is reasonable because it will protect human health and the environment from the adverse effects of releases of hazardous constituents from solid and hazardous waste management units. Subpart 3 also requires the owner or operator to provide financial responsibility assurances for the corrective action. This requirement is reasonable because it will ensure that the owner or operator has the funds necessary to provide the required corrective action. The amendments are equivalent to 40 CFR § 264.101(c).

L. Minn. Rules Pt. 7045.0486 (Closure).

Minn. Rules pt. 7045.0486 sets forth the requirements for closing a hazardous waste facility. The closure requirements are specified in subparts 1 to 6 of Minn. Rules pt. 7045.0486. The Agency is amending subparts 2 and 3 of this part.

Subpart 2 establishes the closure performance standard. The closure performance standard requires the owner or operator to close the facility in a manner minimizing the need for further maintenance. This requires compliance with the closure requirements, which are referenced in subpart 2, specific to the type of facility being closed. Subpart 2 is being amended to provide the reference for the closure standards specific to miscellaneous units. Since miscellaneous units are a newly regulated hazardous waste management unit as discussed in section S, it is reasonable to apply the applicable requirements of the existing hazardous waste rules to these units. The amendment is equivalent to 40 CFR § 264.111(c).

Subpart 3 requires a facility owner or operator to submit a closure plan with their permit application. Subpart 3 also requires the contents of the closure plan to be consistent with the closure requirements, which are referenced in subpart 3, specific to the type of facility. Subpart 3 is being amended to add two references to the closure standards for miscellaneous units. This amendment is reasonable for the same reason provided above for the amendment to subpart 2. The amendment is equivalent to 40 CFR § 264.112(a)(2).

M. Minn. Rules Pt. 7045.0488 (Closure Activities).

Minn. Rules pt. 7045.0488 sets forth specific activities to be conducted by a facility owner or operator during closure. These closure activities are set out in subparts 1 to 4 of this part. The Agency is amending subpart 3 of this part.

Subpart 3 requires the owner or operator to properly dispose of or decontaminate all contaminated equipment, structures, and soils, unless otherwise specified in the standards, which are referenced in subpart 3, specific to the type of facility being closed. Subpart 3 is amended to provide the reference for the miscellaneous unit standards provided in the rules. The amendment is reasonable for the same reason provided in section L for the amendments to Minn. Rules pt. 7045.0486. The amendment is equivalent to 40 CFR § 264.114.

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

Minn. Rules pt. 7045.0490 sets forth the post-closure requirements for hazardous waste facilities. Subpart 3 of this part establishes the post-closure plan and sets forth the information to be included in the post-closure plan. The required information is specified in items A and B of subpart 3. The Agency is amending subpart 3, items A and B to reflect the

addition of standards for miscellaneous units as discussed in section S. The amendments are reasonable for the same reason provided in section L for the amendments to Minn. Rules pt. 7045.0486. The amendments are equivalent to 40 CFR §§ 264.118(b)(1) and 264.118(b)(2)(i) and (ii).

O. Minn. Rules Pt. 7045.0492 (Post-closure Care and Use of Property).

Subpart 1 of Minn. Rules pt. 7045.0492 sets forth the post-closure care requirements for hazardous waste facilities. The post-closure care requirements are specified in items A to D of subpart 1. Item A describes the monitoring, reporting, and maintenance requirements during the post-closure period of a facility. The Agency is amending item A to include the references to the monitoring, reporting, and maintenance requirements for miscellaneous units. The amendments are reasonable for the same reason provided in section L for the amendments to Minn. Rules pt. 7045.0486. The amendments are equivalent to 40 CFR § 264.117(a)(1)(i) and (ii).

P. Minn. Rules Pt. 7045.0502 (Cost Estimate for Facility Closure).

Subpart 1 of Minn. Rules pt. 7045.0502 requires the owner or operator of a hazardous waste facility to have an estimate of the cost of closing the facility in accordance with the closure requirements, which are referenced in subpart 1, specific to the type of facility. The Agency is amending subpart 1 to provide the reference to the closure requirements for miscellaneous units. The amendment is reasonable for the same reason provided in section L for the amendments to Minn. Rules pt. 7045.0486. The amendment is equivalent to 40 CFR § 264.142(a).

Q. Minn. Rules Pt. 7045.0506 (Cost Estimate for Post-closure Care).

Subpart 1 of Minn. Rules pt. 7045.0506 requires the owner or operator of a hazardous waste facility to have an estimate of the annual cost of providing post-closure care for the facility in accordance with the post-closure requirements, which are referenced in subpart 1, specific to the type of facility. The Agency is amending subpart 1 to provide the reference to the post-closure requirements for miscellaneous units. The amendment is reasonable for the same reason provided in section L for the amendments to Minn. Rules pt. 7045.0486. The amendment is equivalent to 40 CFR § 264.144(a).

R. Minn. Rules Pt. 7045.0518 (Liability Requirements).

Minn. Rules pt. 7045.0518 sets forth the liability requirements for hazardous waste facilities. Subpart 2 of this part sets forth the coverage required for nonsudden accidental occurrences at a hazardous waste facility. The Agency is amending subpart 2 to require owners or operators of miscellaneous units to provide coverage for nonsudden accidental occurrences at their facilities. The amendment is reasonable for the same reason provided in section L for the amendments to Minn. Rules pt. 7045.0486. The amendment is equivalent to 40 CFR § 264.147(b).

S. Minn. Rules Pt. 7045.0539 (Miscellaneous Units).

The state hazardous waste rules currently contain permitting and operating standards for specific types of hazardous waste treatment, storage, and disposal units, including containers, tanks, surface impoundments, waste piles, land treatment units, landfills, thermal treatment units, and research, development, and demonstration facilities. However, some hazardous waste management technologies are not covered by the existing hazardous waste management rules. Technologies not currently covered include: open

burning/open detonation of explosive wastes; certain chemical, physical, and biological treatment units; and certain thermal treatment technologies. Therefore, owners and operators of hazardous waste management units utilizing these technologies cannot obtain the permit necessary to operate them.

In order to issue permits to operate hazardous waste management units utilizing technologies that are not currently covered by the existing hazardous waste regulations, the EPA amended the federal regulations on December 1, 1987, to provide technical operating standards applicable to owners and operators of new and existing hazardous waste management units not covered under the existing regulations (52 FR 45788-45799)(see Exhibit 1).

The Agency is proposing to add a new part to Minnesota's hazardous waste rules to incorporate the federal miscellaneous unit standards. The proposed miscellaneous unit technical operating standards are set out in Minn. Rules pt. 7045.0539. Specifically, the amendments are set forth in subparts 1 to 4 of Minn. Rules pt. 7045.0539.

Proposed subpart 1 defines the scope of the requirements of this part by specifying that the requirements set forth in Minn. Rules pt. 7045.0539 apply to owners and operators of miscellaneous units. Providing the scope of the requirements is reasonable because it will assist the regulated community in locating and understanding the applicable requirements in the rules. The amendment is equivalent to 40 CFR § 264.600.

Proposed subpart 2 sets forth the environmental performance standard for miscellaneous units. The environmental performance standard requires that a miscellaneous unit must be located, designed, constructed, operated, maintained, and closed in a manner that protects human health and the environment. The permit must contain the terms necessary to maintain the

performance standard. Items A to C of subpart 2 define the steps necessary to protect human health and the environment.

Specifically, item A of subpart 2 requires the prevention of releases affecting the groundwater or subsurface environment, considering: (1) the volume and characteristics of the waste in the unit, including the potential for migration from the unit; (2) the hydrologic and geologic characteristics of the unit and the surrounding area; (3) the existing quality of groundwater; (4) the quantity and direction of groundwater flow; (5) the proximity to and withdrawal rates of current and potential groundwater users; (6) the land use patterns in the area; (7) the potential for migration of hazardous constituents into subsurface structures and the root zone of food chain crops and other vegetation; (8) the health risks caused by human exposure to hazardous constituents; and (9) the potential damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to hazardous constituents.

Item B of subpart 2 requires the prevention of releases affecting surface water, wetlands, or the soil surface, considering: (1) the volume and characteristics of the waste in the unit; (2) the effectiveness of containment and collection systems in preventing migration; (3) the hydrologic and topographic characteristics of the unit and surrounding area; (4) the precipitation patterns in the region; (5) the quantity, quality, and direction of groundwater flow; (6) the proximity of the unit to surface waters; (7) the uses of nearby surface waters and any water quality standards established for those waters; (8) the quality of surface waters and surface soils; (9) the land use patterns in the area; (10) the potential health risks caused by human exposure to hazardous constituents; and (11) the potential for damage to

domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to hazardous constituents.

Item C of subpart 2 requires the prevention of releases affecting the air, considering: (1) the volume and characteristics of the waste in the unit, including the potential for the emission of gases, aerosols, and particulates; (2) the effectiveness of systems and structures to prevent emissions of hazardous constituents to the air; (3) the operating characteristics of the unit; (4) the atmospheric, meteorologic, and topographic characteristics of the unit and the surrounding area; (5) the existing quality of the air; (6) the potential for health risks caused by human exposure to hazardous constituents; and (7) the potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to hazardous constituents.

The requirements proposed in subpart 2 are reasonable because they will ensure that human health and the environment are appropriately protected from the adverse effects of hazardous waste and hazardous constituents migrating from a miscellaneous unit. The requirements also provide the regulated community with a thorough understanding of what is expected of them in operating a miscellaneous unit. The amendments are equivalent to 40 CFR § 264.601.

Proposed subpart 3 of Minn. Rules pt. 7045.0539 sets forth the monitoring, analysis, inspection, response, reporting, and corrective action requirements for miscellaneous units. The amendments are reasonable because the information provided by monitoring, analysis, inspections, and reporting will allow the Agency and the permittee to assess whether human health and the environment are being appropriately protected from the adverse effects of the operation of the facility. The response and corrective action requirements

will also ensure that human health and the environment will be appropriately protected. In this manner, miscellaneous units will be regulated the same as the other hazardous waste management units currently regulated in the hazardous waste rules. The amendments are equivalent to 40 CFR § 264.602.

Proposed subpart 4 sets forth the post-closure care requirements for miscellaneous units. The requirements are consistent with the post-closure care requirements specified in the rules for other types of hazardous waste management units. The amendment is reasonable because it will ensure that human health and the environment are protected from the adverse effects of hazardous wastes and constituents located at a miscellaneous unit after the unit is closed. The amendment is equivalent to 40 CFR § 264.603.

T. Minn. Rules Pt. 7045.0665 (Use Constituting Disposal).

Minn. Rules pt. 7045.0665 sets forth the requirements for hazardous wastes used in a manner that constitutes disposal. The Agency is proposing to amend subpart 1 of this part.

Subpart 1 of Minn. Rules pt. 7045.0665 defines the scope of this part and specifically defines "use constituting disposal." Subpart 1 is amended to clarify the existing definition of "use constituting disposal" and to delete redundancies in the existing language. The amendment is reasonable because it clarifies the existing language provided in this requirement and, therefore, the requirement is easier to understand. The amendment is equivalent to 40 CFR § 266.20(a)(2).

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 amendments on small business. However, the goal 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 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.

The amendments pertaining to miscellaneous units, the definition of hazardous waste, and the listing of spent pickle liquor are based on federal regulations promulgated under RCRA. While these more stringent amendments are not yet in effect in Minnesota, the amendments must eventually be incorporated into the state rules and must be equivalent to the federal level of regulation. The amendments pertaining to codification are based on federal regulations promulgated under HSWA. These more stringent HSWA amendments are currently in effect in Minnesota. Therefore, incorporation of these federal requirements into the state rules will not impose any additional requirements on small businesses that would not be imposed under the federal program.

Therefore, the Agency 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 that 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, 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 facilities. However, the amendments are based on federal regulations promulgated under RCRA and HSWA. Therefore, incorporation of these provisions into the state rules will not impose any additional requirements on the owners and operators of hazardous waste facilities than would be imposed if Minnesota's rules were not equivalent.

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. 52, No. 237, Pages 46946-46965, December 10, 1987.
2	<u>Federal Register</u> , Vol. 52, No. 230, Pages 45788-45799, December 1, 1987.
3	<u>Federal Register</u> , Vol. 52, No. 108, Pages 21306-21307, June 5, 1987.
4	<u>Federal Register</u> , Vol. 52, No. 148, Pages 28697-28698, August 3, 1987.

DATE: December 6, 1988

for Barbara Lindsey Sims
Gerald L. Willet
Commissioner