

STATE OF MINNESOTA

MINNESOTA POLLUTION

COUNTY OF RAMSEY

CONTROL AGENCY

In the Matter of the Proposed
Amendments of Rules Governing
the Regulations of Hazardous
Waste Which is Reused or Recycled,
Minn. Rules Pts. 7045.0020,
7045.0075, 7045.0120, 7045.0125,
7045.0135, 7045.0142, 7045.0214,
7045.0219, 7045.0450, 7045.0542,
7045.0552, 7045.0640, 7045.0665,
7045.0675, 7045.0685, and 7001.0520

STATEMENT OF NEED
AND REASONABLENESS

I. INTRODUCTION

The subject of this proceeding is the revision of the rules of the Minnesota Pollution Control Agency (hereinafter "Agency") governing the management of hazardous waste which is reused or recycled. These rules are proposed for amendment pursuant to the Agency's authority under Minn. Stat. § 116.07, subd. 4 (1984). The amendments provide specific management requirements for generators, transporters, and facilities involved with the management of hazardous waste which is recycled or reused.

This Statement of Need and Reasonableness is divided into several parts. Part II contains the Agency's explanation of the need for the proposed amendments. Part III contains an explanation of the reasonableness of the proposed amendments. Pursuant to the requirements of Minn. Stat § 14.115 (1984), part IV documents how the Agency has considered the methods of reducing the impact of the proposed amendments on small businesses. Part VI 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 1935 West County Road B2, Roseville, Minnesota 55113.

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

Minn. Stat. ch. 14 (1984) 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 an evaluation of each proposed revision. In this broad sense, the need for amendments to the Agency's rules governing the classification of waste as hazardous and the rules governing the management of hazardous waste which is reused or recycled has two bases: the need for consistency with the federal hazardous waste regulations; and the need for the rules which provide an acceptable level of protection for human health and the environment while at the same time encouraging recycling activities.

A. Need for Consistency with Federal Regulations.

In 1976, Congress adopted the Resource Conservation and Recovery Act (hereinafter "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 U.S. Environmental Protection Agency (hereinafter "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.

Minnesota received final authorization for its hazardous waste program from EPA effective February 11, 1985. See 50 Fed. Reg. 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 1980.¹ When new more stringent federal requirements are promulgated by EPA, the state is required to enact equivalent requirements within specified time frames. However, until they are adopted as state requirements, the new federal requirements do not take effect in an authorized state. States are not required to adopt new federal amendments which are less stringent than state requirements. However, they are urged to consider adopting those amendments to maintain consistency among state and federal programs.

Although a state program may be more stringent than the federal program and

¹The final authorization received by Minnesota does not include authority to implement EPA regulations adopted pursuant to the 1984 Hazardous and Solid Waste Amendments (Pub. L. 98-616). Authorization must be obtained specifically under those amendments.

authorized states are not required to adopt less stringent federal standards, the Agency believes that 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 even though Minnesota has received authorization for its hazardous waste program, many Minnesota generators must be knowledgeable about requirements of both the State and federal hazardous waste programs. The need to comply with two or more different sets of standards makes compliance with any set of standards more difficult. Therefore, to the extent it can be accomplished without harming human health or welfare, or the environment, it is preferable to incorporate amendments to EPA's hazardous waste regulations into the Agency's hazardous waste rules.

EPA has adopted amendments to 40 C.F.R. Parts 260, 261, 264, 265 and 266 regarding the definition of solid waste and the level of regulation applicable to hazardous waste which is recycled.² 50 Fed. Reg. 614 (January 4, 1985) (Exhibit 2). The need for those amendments is discussed in Exhibit 2, and that discussion is hereby incorporated by reference into this document.

²The federal definition of "solid waste" is different than the State definition. At the federal level, hazardous waste is a class of solid waste. In Minnesota, solid waste and hazardous waste are totally different classifications of waste. Although the federal regulations as published on January 4, 1985 refer to a change in the definition of solid waste, from Minnesota's standpoint they are a change in the regulation of hazardous waste which is recycled.

The proposed amendments to the Agency's rules incorporate those changes to the federal hazardous waste requirements which are more stringent than the Agency's existing rules and incorporates other changes to the federal rules to the extent that the changes are appropriate in Minnesota. These proposed amendments are needed in order to maintain equivalency with the new more restrictive federal regulations and to promote consistency between federal regulations and Agency rules.

B. Need for Encouraging Recycling Activities in a Manner Consistent with Protection of Human Health and the Environment.

The proposed amendments regarding use of hazardous waste as a feedstock and reclamation of characteristic hazardous waste by-products and sludges are more restrictive than those of the federal regulations but less restrictive than current Agency rules. These proposed amendments are needed in order to promote recycling activities while still providing a level of regulation which is necessary to 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 (1984) 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. 7045.0020.

The Agency is proposing to amend Minn. Rules, pt. 7045.0020 to add or amend

several definitions which are important to the proposed amendments. The Agency is also proposing to repeal the definition of "petroleum derived waste oil." With one exception, the definitions which are proposed to be added are all terms which have been added to the federal regulations. It is reasonable to define these terms in the rules in order to maintain consistency with the federal program. Because these terms are all used elsewhere in the proposed amendments, it is reasonable to define them so that the regulated community can understand the requirements of the proposed rule amendments. All of the proposed new definitions are consistent with the federal regulations. Each proposed additional definition and its corresponding federal reference is listed below.

<u>Subpart</u>	<u>Term</u>	<u>40 C.F.R. Section</u>
6a	"boiler"	260.10
6c	"by-product"	261.1(c)(3)
38a	"industrial furnace"	260.10
73a	"reclamation"	261.1(c)(4)
73b	"recycle"	261.1(c)(7)
73c	"reuse"	261.1(c)(5)
79a	"scrap metal"	261.1(c)(6)
84a	"speculative accumulation"	261.1(c)(8)
84b	"spent material"	261.1(c)(1)

The Agency is also proposing to add a definition of "used oil." The proposed definition is the same as the definition used in RCRA, 42 U.S.C. § 6903 (36).

It is reasonable to define this term in accordance with the statutory definition in order to maintain consistency with the federal program. At the same time, the Agency is proposing to repeal Minn. Rules pt. 7045.0020, subp. 69, which defines "petroleum derived waste oil," for the reason that the new definition of "used oil" is intended to replace it. It is reasonable to repeal this rule because the replacement of it with the new definition promotes consistency between the Agency program and the federal program.

The Agency is proposing to amend four definitions within Minn. Rules pt. 7045.0020: 1) "designated facility" (subp. 15); 2) "discarded" (subp. 18); 3) "hazardous waste incinerator" (subp. 35); and 4) "other waste material" (subp. 63). The purpose of the amendments to these definitions is to make the definitions consistent with their use in the management requirements set forth elsewhere in the proposed rule amendments and also to conform the rules to the requirements of the federal program. It is reasonable to amend these terms so that the regulated community can understand what facilities and wastes are subject to applicable management requirements.

B. Minn. Rules, Pt. 7045.0075 (Petitions).

Minn. Rules, pt. 7045.0075, subp. 3 describes the procedure for petitioning the Agency to reduce certain management requirements for some hazardous wastes which are accumulated speculatively or reclaimed prior to use. It also sets forth the standards and criteria to be applied in determining whether a petition should be granted. These petitioning procedures are consistent with those contained in 40 C.F.R. §§ 260.30 and 260.31.

Minn. Rules pt. 7045.0075, subp. 3, item A allows a person to petition the

Agency for a reduction in the regulation of hazardous waste which is speculatively accumulated, as defined in Minn. Rules pt. 7045.0020, without sufficient amounts being recycled. In accordance with the definitions of "speculative accumulation," this means that a person who fails to recycle 75 percent of the waste accumulated over the period of a calendar year may petition under this rule. The rules would normally require a recycler of hazardous waste who does not recycle 75 percent of the accumulated waste over the period of a year to be fully regulated under the appropriate parts of ch. 7045. However, in certain situations there may be valid reasons why persons are unable to recycle sufficient amounts of waste and, therefore, it may not be appropriate or necessary to impose full regulation on that person. Therefore, it is reasonable to have a provision which allows for a petition to reduce the regulatory requirements.

Item A specifically provides that if a petition is granted, the reduction in regulation is valid only for the following year. It is reasonable to limit the time period for the reduction in regulation because MPCA staff is provided additional opportunity to review the recycling activity and make sure that the generator continues to meet the criteria.

The amendments set forth the criteria to be used by the Agency in evaluating the petition. Item A provides that the petitioner must demonstrate that sufficient amounts (i.e. 75 percent) will be recycled or transferred for recycling the next year. Items A(1) through A(5) set forth the following criteria which are to be used in evaluating the information provided by the petitioner: the manner in which the waste is to be recycled; where it will be

recycled; whether the expected disposition will be affected by past practice, market factors, the nature of the waste or contractual arrangements for recycling; the reason that the waste has been accumulated without recycling 75 percent of the waste accumulated at the beginning of the year; the quantity already accumulated at the time of the petition and any additional volume expected to be accumulated before the waste is recycled; and the extent to which the waste is handled to minimize loss. The director may require additional information which may be needed to evaluate the petition. These criteria are reasonable because they are related to the ability of the Agency to ensure that accumulated hazardous waste will be managed in a manner which is protective of human health and the environment even if the person responsible for its management is allowed to be subject to reduced regulatory requirements.

Minn. Rules, pt. 7045.0125, subp. 3, item B, allows a person to petition the Agency for a reduction in regulation for hazardous waste used as a feedstock, within the original primary process in which it was generated if the reclamation is an essential part of the production process. It is reasonable in some instances to allow a reduction in regulation of hazardous waste in closed-loop recycling because it encourages recycling thus reducing the environmental risk which would result from disposal of the waste. The Agency must base its decision on reduction in regulation on the following standards and criteria:

1. How economically viable the production process would be if it used virgin materials rather than the reclaimed hazardous waste. It is reasonable to apply this criterion because the more significant the cost saving, the more the situation is like one single production process.

2. The prevalence of the practice on an industry-wide basis. It is reasonable to use this criterion because the more wide-spread the practice, the more likely it is to be considered a production process.

3. The extent to which handling of the material before it is reclaimed is designed to minimize loss of material. Materials utilized in production processes should be stored in a way to minimize loss. It is reasonable to apply this criterion because the more precautions that are taken to protect the material prior to reclamation, the more the situation is like a production process.

4. The time periods between generation of the material and its reclamation, and between reclamation and reuse in the original process. It is reasonable to apply this criterion because the shorter the elapsed time between generation, reclamation, and reuse, the more likely the entire operation is to be viewed as a single process.

5. The location of the reclamation process in relation to the production process. It is reasonable to apply this criterion because the closer the reclamation operation is physically to the production process, the more likely the situation is to be considered closed-loop recycling.

6. Whether the reclaimed material is used for its original purpose when it is returned to the original primary production process, and whether it is returned to the process in substantially its original form. It is reasonable to apply this criterion because operations are most like a closed-loop operation when the reclaimed material is returned to the original process in substantially its original form for its original purpose.

7. Any additional information the Agency may need for a complete evaluation of the petition. This additional criterion is necessary and reasonable because on a case-by-case basis other unforeseen factors may be appropriate to consider in making a decision on the petition.

Minn. Rules pt. 7045.0125, subp. 3, item C allows a person to petition the Agency for a reduction in regulation for hazardous wastes which have been reclaimed but must be reclaimed further before recovery is completed. It is reasonable in some instances to allow a reduction in regulation for hazardous wastes which have been reclaimed but need further recycling because such a reduction encourages recycling and reduces the need for disposal of the waste. The Agency must evaluate the petition based on the following criteria:

1. The degree of processing that the material has undergone and the degree of further processing required before it is usable. It is reasonable to apply this criterion because the more substantial the first processing step, the more the waste may be considered a marketable commodity.

2. The value of the hazardous waste after it has been reclaimed. It is reasonable to apply this criterion because the more valuable the reclaimed material, the less one would consider it a waste.

3. The degree to which the initially reclaimed material is like an analogous raw material. It is reasonable to apply this criterion because if the reclaimed material can be substituted for a raw material in a process, it is more like a commodity than a waste.

4. The extent to which an end market for the reclaimed hazardous waste is guaranteed. It is reasonable to apply this criterion because a guaranteed

market indicates that the material is more like a commodity than a waste.

5. The extent to which the reclaimed hazardous waste is handled to minimize loss. It is reasonable to apply this criterion because the more the reclaimed hazardous waste is handled like a raw material by protecting from loss or deterioration, the more likely that the material reclaimed from the waste could be granted some reduction in regulation.

6. Any additional information the director may reasonably request which may be required to evaluate the petition. This is a reasonable provision since the circumstances of each petition will be different and additional information may be needed.

Pt. 7045.0075, subp. 4 allows a person to petition the Agency Director to determine that certain enclosed devices using controlled flame combustion (i.e., an "incinerator" or "industrial furnace" as defined in Minn. Rules pt. 7045.0020) as boilers, although they do not otherwise meet the definition of "boiler," if efficient heat recovery equipment is added to an existing unit.

The reason for allowing this petition arises from the fact that the definition of "boiler" focuses on physical indicia of their legitimate use for energy recovery. The definition relies upon the concepts of integral design, combustion efficiency, and energy recovery. This reflects the fact that boilers are designed and operated to convert fuel into more usable energy. This is most efficiently done when energy recovery devices, such as water vessels, are physically in contact with (integrally connected to) the combustion chamber in which the fuel is burned. Consequently, the definition of "boiler" provides that "the unit's combustion chamber and primary energy recovery sections must be

of integral design." Minn. Rules pt. 7045.0020, subp. 6a.A.(2). A great majority of boilers can be unambiguously identified from this characteristic; however, there are a few units which could legitimately function as boilers without having this characteristic. Therefore, it is reasonable to allow the Director to make a case-by-case determination that such units are boilers. The proposed rule is consistent with the federal regulations 40 C.F.R. § 260.32. The Agency must evaluate the petition based on the following criteria:

1. The extent to which the unit has provisions for recovering thermal energy in the form of steam, heated fluids, or heated gases.

2. The extent to which the combustion chamber and energy recovery equipment are of integral design.

3. The efficiency of energy recovery, calculated in terms of the recovered energy compared with the thermal value of the fuel.

4. The extent to which the exported energy is utilized.

5. The extent to which the device is in common and customary use as a "boiler" functioning to produce steam, heated liquid, or heated gases.

6. Any additional information the director may reasonably request which may be required to evaluate the petition.

These criteria are reasonable because they are relevant to the objective of evaluating whether or not the device under consideration will efficiently serve the intended purpose of a boiler.

C. Minn. Rules, Pt. 7045.0120 (Exempt Wastes).

Minn. Rules pt. 7045.0120, items M, O, and P are amended to make it consistent with the language of the federal rules.

Item M is amended to replace the term "petroleum-derived waste oil" with the term "used oil" and to delete words which have become redundant under the new definition of "recycle." It is reasonable to conform the rule to the new definitions in the Agency's proposed amendments.

Item O is amended to delete scrap metal as an "exempt waste." Scrap metal is now specifically referred to in the proposed new subp. 4 of Minn. Rules pt. 7045.0125, which regulates the management of waste by use, reuse, recycling, and reclamation. It is reasonable to delete the reference to scrap metal in pt. 7045.0120 since the subject will now be covered elsewhere. The scrap metal exemption is replaced by an exemption for pulping liquors reclaimed in the pulping process by a paper mill. This black liquor exemption is the same as that in 40 C.F.R. § 261.4 (a)(6), and is reasonable because recovery of black liquor is a very common practice in the paper industry, and in fact, some pulp making processes would not be economically viable without recovery of the black liquor. (Black liquor is the spent chemicals, usually corrosive, which are recovered from the wood chip digester.) Because this operation appears to occur on a nearly continuous basis for all black liquor generated, the exemption is reasonable.

Minn. Rules, pt. 7045.0120, item P exempts spent sulfuric acid used to produce virgin sulfuric acid. The use of spent sulfuric acid as a feedstock in the production of virgin sulfuric acid is a well-established recycling operation which accounts for about 9 percent of all sulfuric acid produced annually in the United States. This is a reasonable exemption since the spent sulfuric acid is used like a raw material. This exemption is the same as that in 40 C.F.R. § 261.4 (a)(7).

D. Minn. Rules, pt. 7045.0125 (Management of Waste by Use, Reuse, Recycling, and Reclamation).

Minn. Rules pt. 7045.0125 sets forth the requirements for the management of hazardous waste which is recycled.

Minn. Rules pt. 7045.0125, subp. 1 is amended to indicate that the part does not apply to use constituting disposal, precious metals recovery from hazardous waste, and spent lead-acid batteries. This is reasonable since each of these concerns is addressed in a separate part setting forth specific requirements.

Minn. Rules pt. 7045.0125, subp. 2 is repealed. This subpart made certain management requirements applicable to specific hazardous wastes which were to be beneficially used, reused, recycled, or reclaimed. The repeal of this subpart is necessary and reasonable since the provisions included are less stringent than the federal requirements for recycling hazardous waste.

Minn. Rules pt. 7045.0125, subp. 4 states that the management of specific hazardous wastes, namely industrial ethyl alcohol that is reclaimed, used batteries or battery cells returned to a battery manufacturer for regeneration, and scrap metal are not subject to regulation under the generator, transporter and facility standards of ch. 7045. These exemptions from regulation are the same as those contained in 40 C.F.R. § 261.6 (a)(3). These exemptions are reasonable as a general matter because these wastes can be handled as a product or commodity with commercial value, and it is desirable to encourage the recycling of these wastes instead of disposal. The reasonableness of each exemption is discussed below.

The exemption of reclaimed industrial ethyl alcohol from regulation under

the hazardous waste rules is reasonable because it is strictly regulated by the Federal Bureau of Alcohol, Tobacco, and Firearms from point of generation to the point of redistillation.

Exemption of used batteries or battery cells which are returned to a battery manufacturer for regeneration is reasonable since a battery is a commercial product being recycled, and thus waste management is not actually involved. Also, since the batteries are being returned intact for regeneration, the risk to public health and the environment posed by them is minimal.

Scrap metal is exempted at this time because EPA believes further evaluation of the hazard of various kinds of scrap metal is necessary, and expects to propose some regulatory scheme at a later date. Therefore, this exemption is temporary. It is reasonable for the Agency to assume a consistent approach to avoid confusion since it is likely that there will be consideration of several different regulatory approaches at the federal level.

Minn. Rules, pt. 7045.0125, subp. 5 sets forth requirements for management of hazardous waste used as a feedstock. A hazardous waste may be regulated under this subpart if it meets the criteria set forth in item A:

1. It is used or reused as an ingredient in an industrial process to make a product, provided the hazardous waste is not reclaimed prior to use or reuse.
2. It is used or reused as an effective substitute for a commercial product.
3. The waste is returned to the original process from which it is generated without first being reclaimed. The hazardous waste must be returned

as a substitute for raw material feedstock, and the process must use raw materials as principal feedstocks.

The criteria for evaluating use as a feedstock are the same as those contained in 40 C.F.R. § 261.2 (e)(1). This is reasonable in order to promote consistency with the federal program.

The management and transportation requirements for use of a hazardous waste as a feedstock are set forth in items B through D. They are somewhat different from the requirements in the federal regulations. Under the federal regulations, such activities are exempt from regulation under the hazardous waste program. Under current State rules, such activities are subject to various levels of regulation based on the waste type (characteristic versus listed or sludge). Under the proposed amendments, such activities will be subject to reduced regulation. Such a reduction in regulation is reasonable since it encourages use as a feedstock and such use presents a minimal risk if done properly. It is desirable to encourage using the waste as a feedstock because this reduces the amount of hazardous waste to be disposed. However, to ensure the hazardous waste is properly managed, it is reasonable to require some level of regulation.

Minn. Rules pt. 7045.0125, subp. 5, item B sets forth the requirements for the generators of hazardous waste which is used as a feedstock. The rules require evaluation of the waste to determine whether or not it is a hazardous waste, inclusion of its management in the generator's waste management plan, and the disclosure of the waste to the Agency. In addition, a generator must comply with Minn. Rules, pt. 7045.0296, subp. 5, which the Agency is proposing to amend

to require the generator include in the annual report a report of the recycling activity over the previous year and provide evidence that a continuing market exist for the waste.

These management requirements applicable to the generator of the wastes which are used as a feedstock are reasonable since they provide some assurance that the wastes are being soundly managed. These requirements are more stringent than the federal rules because the Agency believes it is reasonable to place some management requirements on the waste without requiring the administrative burden of additional requirements such as hazardous waste manifests.

Minn. Rules pt. 7045.0125, subp. 5, item B also requires that within 45 days of shipment the generator must send the Agency Director a copy of the shipping papers confirming that the hazardous waste was delivered to the designated facility as indicated in the management plan; and the generator must keep records showing the amount of the waste stored at the beginning of the calendar year, the amount of waste generated during the calendar year, the amount of the waste used as a feedstock during the calendar year, and the amount of the waste remaining at the end of the calendar year. These provisions are reasonable because they will provide for documentation and record keeping of the management of the waste without imposing the burden of using hazardous waste manifests. Also, such records are necessary in order to document that the hazardous waste has not been accumulated speculatively. Speculative accumulation of hazardous waste is subject to full regulation. As such, it is reasonable to require such record keeping to enable the Agency to assure itself that wastes are not

accumulated speculatively.

Minn. Rules pt. 7045.0125, subp. 5, item C provides that the transporters of hazardous wastes which are used as a feedstock, must comply with all applicable State and federal requirements for transporting hazardous materials. This is consistent with the federal requirements. It is reasonable to require the transporter to comply with the State and federal rules since the hazardous waste can still pose an environmental threat if it is transported off-site.

Minn. Rules pt. 7045.0125, subp. 5, item D sets forth the requirements for owners or operators of facilities which manage the waste used as a feedstock. The facility receiving the waste to be used as a feedstock must provide the Director with written evidence to document that the waste is being used as a feedstock as provided in the management plan. The owner or operator of the facility must also keep records showing the wastes stored at the beginning of the calendar year, the amount received during the calendar year, the amount of the hazardous wastes used as a feedstock, and the amount of the hazardous wastes remaining at the end of the calendar year. These are reasonable requirements of the facility owner or operator because a facility permit is not required to receive the wastes and the owner or operator is not required to sign a hazardous waste manifest. However, it does require submission of documentation to the director that the waste was appropriately managed.

Minn. Rules pt. 7045.0125, subp. 6 sets forth the requirements for reclamation of specific hazardous wastes. Minn. Rules pt. 7045.0125, subp. 6, item A sets forth the requirements for a by-product or sludge which is hazardous only because it exhibits a hazardous characteristic and which is reclaimed.

Reclamation is defined as the "processing or regeneration of a waste to recover a usable product." (Minn. Rules pt. 7045.0020, subp. 73a, as proposed.) Under the federal regulation, 40 C.F.R. § 261.2 (c)(3), the reclamation of characteristic by-products and sludges is exempt from regulation under the hazardous waste program. However, under 40 C.F.R. § 261.2 (f), persons who claim they are exempt from regulation for recycling activities must maintain documentation as evidence of qualifying for such an exemption. The federal regulation does not require submission of the documentation to EPA; however, EPA could obtain access to it through its inspection and enforcement program. Under current State rules, all recycling activities are subject to some level of regulation. The Agency has chosen to continue to regulate such recycling activities rather than exempting them but to require submission of documentation of recycling activities. Under the proposed amendments, such activities are subject to reduced requirements. This is reasonable in order to encourage the selection of recycling of a material with commercial value over disposal. However, the documentation required by federal regulations must be submitted to the Director for review and approval through the disclosure/annual report process. Such submittal and review would allow the Agency to assure itself that the hazardous waste is being properly managed. Therefore, it is reasonable to require record keeping and submittal of information to ensure ongoing proper management of the hazardous waste. Generators of such waste are required to evaluate the waste and submit a disclosure and management plan to the director. In addition, within 45 days of shipment the generator must provide the Director documentation that the waste was delivered to the facility

designated in the management plan. The generator must also keep records showing the volume of wastes stored at the beginning of the calendar year, the amount of wastes generated during the calendar year, the amount of the wastes reclaimed during the calendar year, and the amount of the wastes remaining at the end of the calendar year. These requirements of the generator are reasonable since they provide a degree of assurance that the wastes are being managed as described in the management plan and that the environment is being protected.

Item A(2) of the rule provides that the transporters of hazardous waste must comply with the applicable requirements of Minn. Stat. § 221.033 and 49 C.F.R. Parts 171 to 179. These requirements are reasonable since the waste should be transported as a hazardous material in order to protect the public and the environment during transportation from the generator to the recycling facility.

Item A(3) provides owners or operators of facilities receiving a hazardous characteristic by-product or sludge are required to provide evidence to the Director of the equipment and the capability to reclaim the waste prior to receiving such a hazardous waste. This is reasonable in order to ensure that the wastes are being managed properly. In addition, the owner or operator must keep records showing the volume of wastes stored at the beginning of the year, the volume of such hazardous waste received during the year, the amount of such hazardous waste reclaimed during the calendar year, and the volume of such waste remaining at the end of the year. Such record keeping requirements are reasonable to ensure wastes are not accumulated speculatively.

Item B of the rule states that subp. 6 does not apply to hazardous wastes

being accumulated speculatively, being managed by use constituting disposal, or being burned for energy recovery. This is consistent with 40 C.F.R. § 261.2. It is reasonable because these management methods involve a certain lack of control over the waste, and in order to protect the public health and the environment should not be relieved of regulation.

Minn. Rules pt. 7045.0125, subp. 7 provides that unless the activities of generators of hazardous waste destined for recycling fall within the provisions of Minn. Rules pt. 7045.0125, subps. 4, 5, 6, or 10, they are subject to all generator requirements of pts. 7045.0205 to 7045.0304. It is reasonable to place all the generator requirements of ch. 7045 on the generators of such waste because the waste has little commercial value until it is processed. Therefore, because of the lower value of the waste, the generator has less monetary incentive to handle the waste carefully, and the wastes should be regulated. For the most part, these requirements are the same as those contained in current State rules. Also, under 40 C.F.R. § 261.6 (b) generators are subject to full regulation under 40 C.F.R. Part 262 which is the federal counterpart to Minn. Rules pts. 7045.0205 to 7045.0304.

Minn. Rules pt. 7045.0125, subp. 8 provides that unless the activities of transporters of hazardous waste destined for recycle fall within the provisions of Minn. Rules pt. 7045.0125, subps. 4, 5, 6, or 10, they are subject to all requirements for hazardous waste transporters. This is reasonable in order to protect the public and environment to the fullest extent possible.

Minn. Rules pt. 7045.0125, subp. 9 sets forth the requirements for owners' or operators of facilities which recycle hazardous waste where the waste does

not meet the criteria of subps. 4, 5, 6, or 10 of pt. 7045.0125. Item A provides that if the owner or operator of a recycling facility stores the hazardous waste prior to recycling, the owner or operator is subject to the requirements of pts. 7045.0450 to 7045.0534, pt. 7045.0544, pts. 7045.0552 to 7045.0632, and the permitting requirements of ch. 7001. It is reasonable to place these requirements on such owners or operators because the wastes are being held at the facility site, and every effort must be made to protect the public and the environment during the storage. These requirements are consistent with the federal provisions under 40 C.F.R. § 261.6 (c)(1).

Item B provides that if the owner or operator of a recycling facility does not store the hazardous waste prior to recycling, the owner or operator is subject to the requirements of pt. 7045.0556, subp. 2 and pts. 7045.0580 and 7045.0582. These requirements govern the use of the manifest system including the requirement to obtain an EPA identification number. It is reasonable to require the facility owner or operator to comply with the manifest system requirements since the hazardous waste shipments are required to be accompanied by a manifest. This will ensure that the hazardous waste has been received by the designated facility. These requirements are consistent with those of 40 C.F.R. § 261.6 (c)(2).

Minn. Rules pt. 7045.0125, subp. 10 sets forth the requirements for the management of hazardous wastes which are burned for energy recovery. These are the same requirements as those in pt. 7045.0125, subp. 2, items D and E of the existing rules. These requirements are reasonable since they provide some assurance that the waste is being properly managed.

Item A of subp. 10 provides that if the waste is hazardous solely due to ignitability and is stored prior to burning, the facility owner or operator must have a hazardous waste storage facility permit, and is subject to all facility requirements for a storage facility. This is reasonable because there is a need to minimize risk to the public health and the environment by imposing the storage facility standards.

Item B of subp. 10 provides that if the hazardous waste is a sludge, or contains a waste listed for other than ignitability or a waste that is toxic under pt. 7045.0131, subp. 6, and if the waste is transported or stored prior to burning, the facility must have a hazardous waste storage facility permit and is subject to the requirements in pts. 7045.0205 to 7045.0534 and pt. 7045.0544, for generators, transporters, and storage facilities, pts. 7045.0552 to 7045.0632 for storage facilities, and pt. 7045.0542 except subp. 4, item C and subp. 7, item A, subitem (2) and pt. 7045.0640 for thermal treatment facilities. In addition, the facility must have or apply for an air quality facility permit as required. Placing these requirements on a facility which is burning a toxic waste is reasonable since it ensures that there is control over the management of the waste. Including the thermal treatment standards for any facility burning a hazardous waste is reasonable since it provides operating standards for the equipment to minimize emissions. Referencing the requirement for an air quality facility permit is reasonable, since it alerts the regulated person that there are additional regulatory requirements under another Agency program.

These requirements on hazardous waste burned for energy recovery are more

stringent than the federal requirements. The Agency believes this additional regulation is both necessary and reasonable to provide some degree of control over the management of the waste and protect the environment and the public. EPA has recognized that there are gaps in the federal regulatory scheme regarding the management of hazardous wastes burned for energy recovery, and has begun to close those gaps. The Agency believes the approach used in pt. 7045.0125, subp. 10 is a reasonable means of closing those gaps and is the same as the requirements under existing State rules. Once EPA promulgates final regulations regarding facility standards for the use of hazardous waste as a fuel, the Agency will review them and consider whether amending the rules is appropriate at that time.

E. Minn. Rules Pt. 7045.0135 (Lists of Hazardous Wastes.)

Minn. Rules pt. 7045.0135, subp. 2, governing hazardous wastes from non-specific sources is amended to delete the exceptions for the wastes from precious metal plating for waste numbers F007, F008, F009, F010, F011, and F012. This is reasonable since the reason for the wastes being listed for non-precious metals is due to the cyanide content, and the same waste from precious metal plating poses a similar threat. These deletions are the same as those in 40 C.F.R. § 261.31. Also, the recycling of these wastes will now be subject to special requirements under proposed pt. 7045.0675.

Minn. Rules pt. 7045.0135, subp. 4 is amended to expand the categories of discarded commercial chemical products, off-specification species, containers, and spill residues to include wastes burned for energy recovery, wastes used to produce fuels, wastes applied to the land directly, or wastes which are

contained in products which are applied to the land. This is a reasonable requirement since it clearly provides that the acutely hazardous wastes listed in pt. 7045.0125, subp. 4, item E are to be considered as hazardous wastes if they are discarded, burned for energy recovery either alone or blended, or when they are applied to the land as a waste or in a product. Such consideration is reasonable due to the risk associated with such wastes when they are burned or used in a manner constituting disposal. Also, this requirement is the same as that in 40 C.F.R. § 261.33.

F. Minn. Rules Pt. 7045.0142 (Method of Testing Primary Irritative Substances).

Minn. Rules pt. 7045.0142 is repealed by these amendments. This is reasonable since it refers to pt. 7045.0125, subp. 2 which must be repealed because it is less stringent than the federal regulations. The requirements of pt. 7045.0142 will no longer be necessary once pt. 7045.0125, subp. 2 is repealed.

G. Minn. Rules Pt. 7045.0214 (Evaluation of Wastes).

Minn. Rules, pt. 7045.0214, subp. 1 is amended to provide that a material is determined to be a waste according to the conditions of the definition of other waste material in pt. 7045.0020. This is reasonable since it clarifies that waste which "is recycled or is accumulated, stored or treated prior to being recycled" or "is a spent material or by-product" is subject to the requirements of waste evaluation. This approach is consistent with existing State rules and the new federal regulations; however, the cross-reference to other waste material clarifies the applicability of this provision.

Pt. 7045.0214, subp. 3 is amended to add item C which provides that materials which have been reclaimed from hazardous wastes are not hazardous wastes unless the reclaimed material is used in a manner constituting disposal as described in pt. 7045.0665 or burned for energy recovery under pt. 7045.0125, subp. 10. This is a reasonable provision since the material after reclamation is no longer managed as a waste, but is more like a raw material or commodity. However, it is reasonable to consider the reclaimed material a hazardous waste if it is used in a manner constituting disposal or burned for energy recovery since the waste presents a greater risk to human health and the environment when managed in such a manner. Therefore, it is reasonable to require such activities be subject to regulation to minimize adverse effects, such as air emissions or ground water contamination. This provision is consistent with the requirements of 40 C.F.R. § 261.3 (c)(2).

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

Minn. Rules pt. 7045.0219, subp. 1, item C is amended to provide that hazardous wastes which are used as feedstock, characteristic by-products or sludges which are reclaimed, industrial ethyl alcohol that is reclaimed, used batteries or used battery cells returned to a battery manufacturer for regeneration, and scrap metal are not to be considered when calculating the total volume of waste generated. Because industrial ethyl alcohol, used batteries, and scrap metal are not subject to regulation under the management requirements of pts. 7045.0205 to 7045.0685 (as described in pt. 7045.0125, subp. 4), it is reasonable not to include these wastes when calculating the

volume of waste generated. It is also reasonable to exclude wastes used as a feedstock and characteristic by-products or sludges which are reclaimed in calculating the waste volume, since these wastes are managed more as commodities than wastes. Also, under the federal regulation, 40 C.F.R. 261.2, these wastes are not included in the volume calculations when determining volume of waste generated.

I. Minn. Rules Pt. 7045.0296 (Annual Reporting).

Minn. Rules pt. 7045.0296 is amended to add subp. 5 which sets forth the reporting requirements for wastes which are recycled according to the provisions of pt. 7045.0125 and which are exempt from the requirements for use of manifests. A generator of such hazardous waste is required to include in the annual report evidence that the waste was recycled as indicated in the management plan and evidence that a continuing market exists for the waste. It is reasonable to require generators to provide the Agency information regarding the past and future management of the waste since no manifests are required and the Agency needs to be able to assure itself that the management requirements have been complied with.

J. Minn. Rules, Pt. 7045.0450 (Facilities Governed by Facility Standards).

Minn. Rules pt. 7045.0450 subp. 3, item A is amended to clarify which recycling facilities are exempted from the facility standards. Facilities which manage recyclable hazardous wastes subject to regulation under pts. 7045.0125, 7045.0665, 7045.0675, or 7045.0685 are exempt except as those parts provide otherwise. It is reasonable to exempt the facilities receiving certain wastes because the waste that is received is more like a product than a waste and it is

not going to be disposed of or managed in a manner which would require the control provided in a permitted facility.

K. Minn. Rules, Pt. 7045.0542 (Thermal Treatment).

Minn. Rules pt. 7045.0542, subp. 1, item A is amended to include as thermal treatment facilities hazardous waste incinerators and industrial furnaces or boilers which burn hazardous wastes in order to destroy them. It is reasonable to include this amendment to clarify exactly what is meant by thermal treatment facilities.

L. Minn. Rules Pt. 7045.0552 (Facilities Governed by Interim Status).

Minn. Rules pt. 7045.0552, subp. 3, item B is amended to clarify which recycling facilities are exempted from the interim status facility standards. Facilities which manage recyclable hazardous wastes subject to regulation under pts. 7045.0125, 7045.0665, 7045.0675, or 7045.0685 are exempt except as those parts provide otherwise. It is reasonable to exempt the facilities receiving certain hazardous wastes because the waste that is received is more like a product than a waste, and it is not going to be disposed of or managed in a manner which would require the control provided by the requirements for a facility.

M. Minn. Rules, Pt. 7045.0640 (Thermal Treatment).

Minn. Rules pt. 7045.0640, subp. 1 is amended to include as thermal treatment facilities hazardous waste incinerators and industrial furnaces or boilers which burn hazardous wastes in order to destroy them. It is reasonable to include this amendment to clarify exactly what is meant by thermal treatment facilities.

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

Minn. Rules pt. 7045.0665 sets forth the requirements for management of hazardous wastes which are used in a manner constituting disposal. Use constituting disposal means the application or placement of recyclable wastes in or on the land.

It is reasonable to regulate hazardous wastes which are placed on the land in the form generated or which are mixed but retain the original chemical character of the waste in order to minimize soil and ground water contamination. Placing such wastes on the land poses the same risk of migration of the hazardous constituents as land treatment, and therefore should be regulated as such. In the preamble to the proposed regulation (48 Fed. Reg. 14496, April 4, 1983) EPA states, "...recycling that constitutes disposal is virtually tantamount to unsupervised land disposal." The requirements of this part are the same as those of 40 C.F.R. §§ 266.20 to 266.23.

Minn. Rules pt. 7045.0665, subp. 1 provides that use constituting disposal includes application or placement of recyclable wastes in or on the land:

- (1) without mixing with other substance(s);
- (2) after mixing with other substance(s) unless the recyclable waste undergoes a chemical reaction so as to become inseparable from the other constituents by physical means;
- (3) after combination with any other substance(s) if the resulting material is not produced for the general public's use.

These are reasonable provisions since they clarify which wastes used in a manner constituting disposal are regulated under this part. These conditions

indicate that unless the hazardous waste is changed to eliminate its potential hazard, the activity of placing it on the land is regulated. An example of an activity that will be regulated under this part is the incorporation of high pH waste into the soil as a soil conditioner. Products produced for the general public's use that are used in a manner constituting disposal that contain recyclable wastes which have undergone a chemical reaction in the course of producing a product so as to become inseparable by physical means are exempt from regulation under this part. This is reasonable because the wastes are chemically transformed and the threat to the public health and the environment is minimized.

Minn. Rules pt. 7045.0065, subp. 2 sets forth the requirements for generators of wastes used in a manner constituting disposal. The generators are subject to all generator requirements of ch. 7045. This is reasonable because it assures the Agency that the waste is being appropriately managed at all stages. Use of manifests also informs the generator that the waste is being shipped to the correct point of use.

Minn. Rules pt. 7045.0665, subp. 3 sets forth the requirements for transporters of waste used in a manner constituting disposal. Such transporters are subject to all transporter requirements of ch. 7045. Again, it is reasonable to apply these requirements to make sure the waste is being safely and correctly managed.

Minn. Rules pt. 7045.0665, subp. 4 sets forth the requirements applicable to facilities managing wastes that are used in a manner constituting disposal. Owners or operators of intermediate facilities which store the waste are subject

to all requirements for storage facilities of ch. 7045 and must obtain a permit. The facilities which use the hazardous waste in a manner constituting disposal are subject to all facility requirements of ch. 7045 and must obtain a hazardous waste facility permit. These requirements are reasonable because they provide the greatest protection of the environment at the time the wastes are first placed on the land and thereafter.

O. Minn. Rules pt. 7045.0675 (Recyclable Wastes Utilized for Precious Metal Recovery).

Minn. Rules pt. 7045.0675 sets forth the requirements for management of hazardous wastes utilized for precious metal recovery. It is reasonable to include these hazardous wastes in the hazardous waste management program because precious metals are frequently reclaimed from the cyanide plating baths, which are hazardous regardless of the metals involved due to the presence of cyanide. These requirements are the same as those of 40 C.F.R. § 266.70.

Minn. Rules pt. 7045.0675, subp. 1 specifies the precious metals to which the part applies. These are gold, silver, platinum, palladium, irridium, osmium, rhodium, ruthenium, or any combination of these. It is reasonable to list the metals to clarify what metals are considered precious.

Minn. Rules pt. 7045.0675, subp. 2 prescribes that generators of hazardous waste utilized for precious metals recovery are subject to all generator requirements of ch. 7045. It is reasonable to apply these requirements because of the hazard of the cyanide-containing waste.

Minn. Rules pt. 7045.0675, subp. 3 sets forth the requirements for transporters of hazardous wastes utilized for precious metals recovery.

Transporters of such wastes are subject to all transporter requirements of ch. 7045. This is a reasonable approach to assure that the hazardous waste is handled appropriately during transit.

Minn. Rules pt. 7045.0675, subp. 4 sets forth the requirements for persons who store recyclable hazardous waste utilized for precious metals recovery. If the hazardous waste is only being stored for a short period without any intent of speculative accumulation, the facility must obtain an identification number as provided in pt. 7045.0556, subp. 2, and must receive only wastes accompanied by a hazardous waste manifest. These are reasonable requirements because the reclaimers generally enter into batch tolling agreements requiring the return of the theoretically reclaimable metal to the generator and the facility does not keep the waste for long periods before beginning the reclamation process. The use of manifests is necessary to confirm that the waste has been received and is being appropriately treated.

The generator and facility must keep records showing: the volume of the precious metals stored at the beginning of the calendar year; the amount of the wastes generated or received during the calendar year; and the amount of wastes remaining at the end of the calendar year. These are reasonable requirements to avoid speculative accumulation of the waste with the intent of storing the waste for unknown periods of time at the risk of the environment and the public.

If the wastes are being accumulated speculatively with the intent of future reclamation, the person storing the waste becomes subject to all the facility requirements of ch. 7045 and must obtain a hazardous waste storage facility permit. It is reasonable to apply these requirements in order to protect the

public and the environment to the greatest extent possible.

O. Minn. Rules Pt. 7045.0685 (Spent Lead-Acid Batteries Being Reclaimed).

Minn. Rules pt. 7045.0685 sets forth the requirements for persons who generate, store, transport, collect, or reclaim spent lead-acid batteries that are recyclable.

Subp. 1 provides that, except as provided in subp. 2, persons who generate, transport, or collect spent batteries or store spent batteries but do not reclaim them are not subject to the generator, transporter or facility requirements of ch. 7045. Subp. 1 also defines indoor storage for the purpose of pt. 7045.0685 as "storage within a permanently constructed building consisting of at least a roof and three walls permanently affixed to a masonry or other composition floor placed on the ground." It is reasonable to define the scope of the part so it is clear which persons who handle spent lead-acid batteries must comply with the rules. It is reasonable to exclude the persons who generate, transport, or store spent batteries but do not reclaim them, or who collect batteries, from the generator, transporter, and facility requirements of ch. 7045 since they generally store batteries for only a short period of time. It is reasonable to distinguish indoor storage of batteries from other storage because outdoor storage of batteries by individuals who store them, but do not reclaim them, poses a soil and ground water contamination threat due to leaking and broken batteries.

Minn. Rules pt. 7045.0685, subp. 2 sets forth the specific requirements for storage of batteries by persons who do not reclaim them. Item A provides that if the batteries are stored indoors, they must be on an impermeable curbed

surface and provisions shall be made to place leaking or broken batteries into non-leaking containers, with regular inspection to assure the integrity of the stored batteries. These are reasonable requirements to protect the soil and the ground water at the storage site. The provisions are reasonable because they address the situation which has been brought to the attention of the Agency that intermediate collection sites frequently store the batteries under unsafe conditions.

Minn. Rules pt. 7045.0685, subp. 2 item B sets forth the requirements for storage of the batteries other than indoors as defined in subp. 1 of this part. Subitem 1 provides that if the batteries are not being speculatively accumulated, the storage must be on an impermeable curbed surface, provisions must be made to place leaking and broken batteries into non-leaking containers, and compliance with the requirements for the management of containers in pt. 7045.0526, subps. 2 through 6 and 9 must be maintained. These requirements are reasonable because they provide some degree of protection for the ground water and the soil at the storage site. It is reasonable to have the container requirements included because if the batteries are not stored in a structure, exposure to the elements will result in eventual deterioration of the battery cases.

Minn. Rules pt. 7045.0685, subp. 2, item B, subitem 2 sets forth the requirements for storage of batteries if it meets the provisions of speculative accumulation; that is, if at least 75 percent of the batteries are not sent for reclamation after a year. The storage becomes subject to the storage facility requirements of ch. 7045, except that waste analysis and manifests are not

needed, and a hazardous waste storage facility permit is required. These requirements are reasonable because of the risk of deterioration and damage to the batteries during long-term storage. These requirements are more stringent than the federal requirements for persons who store the batteries but do not reclaim them. It is reasonable to be more stringent in this case due to Minnesota's climate, particularly the freeze-thaw cycles. In addition, EPA has recognized that there are problems with the intermediate collection centers, and indicated in the preamble to the final rules (see 50 F.R. 649 January 4, 1985), that investigation is continuing as to whether further regulation of intermediate collection sites is appropriate. The Agency believes it is reasonable to regulate these collection sites at this time.

Minn. Rules pt. 7045.0685, subp. 3 sets forth the requirements for owners or operators of facilities that store spent batteries before reclaiming them. Such facilities are subject to all storage facility requirements except waste evaluation and use of manifests and the facilities must obtain a hazardous waste storage facility permit.

These requirements for the battery reclaimers are essentially the same as the federal requirements. It is reasonable to provide the environmental control and protection that a hazardous waste facility permit ensures. It is also reasonable not to require waste evaluation and manifests since the waste is homogeneous.

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

Minn. Rules pt. 7001.0520 is amended to reflect the changes in requirements for recycling hazardous wastes which are being made in the amendments to ch.

7045.

Minn. Rules pt. 7001.0520, subp. 2, item G is repealed. This is reasonable because of the reference to pt. 7045.0125 which was significantly amended to be more stringent.

Minn. Rules pt. 7001.0520, subp. 2, item H is amended to clarify that the recycling activity of a facility is not required to obtain a hazardous waste facility permit to the extent provided in pt. 7045.0125. This is reasonable because the specific wastes addressed in pt. 7045.0125 each have their own management requirements, and the cross-references must be consistent.

Minn. Rules pt. 7001.0520, subp. 2, item J specifically excludes from the permit requirement a facility which stores or reclaims economically significant amounts of precious metals, except where pt. 7045.0675 requires a permit. This is a reasonable exclusion because of the economic incentives to strictly manage the amount of wastes containing precious metals and is consistent with the requirements of proposed pt. 7045.0675.

Minn. Rules pt. 7001.0520, subp. 2, item K specifically excludes from the permit requirement facilities that store or reclaim spent lead-acid batteries except as provided in pt. 7045.0685. This is reasonable because the specific provisions of pt. 7045.0685 describe precisely what categories of persons who store or reclaim batteries need to obtain a permit.

IV. CONSIDERATION OF SMALL BUSINESS

Minn. Stat. § 14.115 (1984) requires Minnesota agencies when proposing , amendments to existing rules which may affect small business, to consider

reducing the impact of the rule on small business. The objective of Minn. Stat. ch. 116 (1984) is to protect the public health and welfare and the environment from the adverse effects which will result when hazardous waste is mismanaged. Consideration which would apply less stringent standards to be hazardous waste generated by small businesses would be contrary to the Agency's mandate.

However, consideration is given to the generators, collectors, and transporters of spent lead-acid batteries by generally not regulating them. In many cases these will be service stations and battery retailers who receive the spent battery. These will often be small businesses, which are not regulated by Minn. Rules pt. 7045.0685, as proposed.

For other wastes, the amendments will impose the same requirements on large businesses as small businesses. The amendments will require additional management of the hazardous waste based on the potential for adverse effects on human health and the environment. This potential is not diminished in relation to the size of the business generating or handling the wastes. Additional expenses will be incurred as a result of the amendments due to the need to change the management of hazardous wastes which are destined for recycling.

V. 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.

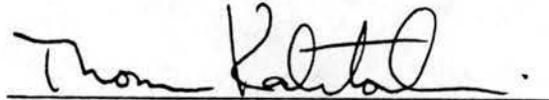
VI. LIST OF EXHIBITS

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

MPCA

<u>Ex. No.</u>	<u>Title</u>
1	<u>Federal Register</u> , Volume 48, Number 65, pages 14472-14512, April 4, 1983
2	<u>Federal Register</u> , Volume 50, Number 3, pages 614-668, January 4, 1985

Dated: 8/15/85



Thomas J. Kalitowski
Executive Director