Minnesota Pollution Control Agency

October 20, 1994

Ms. Maryanne Hruby, Executive Director
Legislative Commission to Review Administrative Rules
55 State Office Building
100 Constitution Avenue
St. Paul, Minnesota 55155

RE: Statement of Need and Reasonableness
Storm Water Discharge Permit Requirements and Fee Rules
Minn. Rules chs. 7001 and 7002

Dear Ms. Hruby:

Enclosed please find the *Statement of Need and Reasonableness for Proposed Amendments to the Rule Governing National Pollutant Storm Water Permits and Storm Water Permit Fees, Minn. Rules chs. 7001 and 7002.*

If I may be of any further assistance, please call me at (612) 296-7387.

Sincerely,

Dave L. Johnson
Assessment and Planning Section
Water Quality Division

DLJ:mbo

Enclosure

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Regional Offices: Duluth • Brainerd • Detroit Lakes • Marshall • Rochester

ERATA SHEET

NOTE TO READER:

The pages are numbered incorrectly. There is no page 20 in this Statement of Need and Reasonableness.

Attachment 2

STATE OF MINNESOTA
POLLUTION CONTROL AGENCY

In the Matter of the Proposed Amendments to the Rule Governing NPDES Storm Water Permits, and Storm Water Permit Fees; Minn. Rules pt. 7001, and 7002

STATEMENT OF NEED AND REASONABLENESS

I. INTRODUCTION

This statement of need and reasonableness (SONAR) is for the amendment of rules that relate to National Pollutant Discharge Elimination System (NPDES) storm water permits and storm water permit fees. The Water Quality Division within the Minnesota Pollution Control Agency (hereafter referred to as "MPCA") administers the storm water permit program. The storm water permit program is part of the MPCA's NPDES permit program which regulates discharges into waters of the state. The rule amendments outlined in this SONAR are specifically for storm water discharges and do not affect permit rules for individual municipal or industrial wastewater discharges.

The proposed rule amendments outlined in this SONAR address the problems that have developed: 1) staffing levels that gave rise to complaints that there is not enough assistance for permittees; 2) revenue shortfall from general storm water permits for construction; 3) excess revenue from industrial storm water permits; and 4) regulations for storm water permits that are not clearly described under the current state permit rules or the federal rules.

The reasonableness of the proposed rules is explained in detail in Section V of this document. This SONAR sets forth the MPCA's statutory authority to adopt the proposed rule amendments, the need for the rule amendments, and that the proposed rule amendments are reasonable.

II. BACKGROUND

In 1985, the Minnesota State Legislature required the MPCA to begin collecting fees for water quality permits. The MPCA was directed to cover reasonable costs of administration, enforcement and regulation of permittees and permit applicants. Minnesota Laws 1985, First Special Session, Chapter 13 required the MPCA to collect $750,000 annually for the Water Quality Division. Based on this mandate, the MPCA adopted Minn. Rules pts. 7002.0210 to 7002.0310 for the administration of the water quality permit fee program. The effective date of the rules was April 7, 1986.

The Legislature increased the amount of revenue to be collected through water quality permit fees in the 1987, 1989, and 1991 sessions. In 1991, the amount the MPCA was required to collect increased to $3, 842,000.

In 1991, the MPCA revised Minn. Rules ch. 7002 to reflect the increase in the amount of fee revenue the MPCA was required to collect. At that time, federal regulations had been proposed to expand the NPDES permit program to cover storm water discharges from certain industrial and municipal sources. The industrial storm water sources to be regulated included manufacturing, warehousing, mining, landfills, power generation, recycling, wastewater treatment and hazardous waste storage and treatment. The municipal sources included all incorporated areas with separate storm sewers and a population greater than 100,000. This program had the potential to add several thousand new permittees to the water quality permit program. The storm water permit program was being developed on both the federal and state levels contemporaneously with the development of the 1991 permit fee revisions. Consequently, assumptions needed to be made concerning the number of storm water permit applicants and the types of permits to be issued to them.

Last year, 2,100 industrial businesses required NPDES permits. Barring changes to the Clean Water Act and federal regulations, the MPCA expects that the number of storm water permittees will remain relatively stable. As of September 1994, the MPCA has received applications for storm water discharge permits from 594 construction sites. The MPCA expects over 700 applications by the end of the year.

After nearly two years of administration of the storm water permit program, the MPCA had made a number of adjustments to the program which streamline the administration, but may affect the revenues collected through water quality permit fees. This makes it necessary to reevaluate the fee structure, and add definitions and a description of the permit issuance process to Minn. Rules chs. 7001 and 7002. No changes in the fee structure are being proposed for water quality permits other than those associated with storm water discharges.

Advisory committees were used to develop the rule amendments. An industrial and construction storm water advisory committee was established and met six times from December 16, 1993, to September 22, 1994 to discuss the contents of the rule. The 34 member group represented both construction and industrial clients.

III. STATEMENT OF THE AGENCY'S STATUTORY AUTHORITY

The MPCA's general statutory authority to adopt rules regulating water quality is established in Minn. Stat. § 115.03, subd. 1(e) (1993). The statute states the agency has the power to:

> Adopt, issue, reissue, modify, deny, or revoke, enter into or enforce reasonable orders, permits, variances, standards, rules, schedules of compliance, and stipulation agreements, under such conditions as it may prescribe, in order to prevent, control or abate water pollution, or for the installation or operation of disposal systems or parts thereof, or for other equipment and facilities.

The MPCA's statutory authority to adopt rules for the NPDES permit program is established in Minn. Stat. § 115.03, subd. 5. (1992). The statute states in relevant part:

> The agency shall have the authority perform any and all acts minimally necessary including but not limited to the establishment and application of standards, procedures, rules and permit conditions consistent with the provisions of the Federal Water Pollution Control Act as amended, applicable to the participation by the state of Minnesota in the National Pollutant Discharge Elimination System.

The MPCA's statutory authority to adopt permit fee rules is established in Minn. Stat. § 116.07, subd. 4d (1992):

> The agency may collect permit fees in amounts not greater than those necessary to cover the reasonable costs of reviewing and acting upon applications for agency permits and implementing and enforcing the conditions of the permits pursuant to agency rules. Permit fees shall not include the costs of litigation. The agency shall adopt rules under section 16A.128 establishing the amounts collected under this subdivision. (Minn. Stat. 16A.128 was repealed . See 1993 Minn. Laws ch. 192, sec. 110). The fee schedule must reflect reasonable and routine permitting, implementation, and enforcement costs.

IV. NEED FOR RULE AMENDMENTS

Minn. Stat. ch. 14 (1992) requires the MPCA to make an affirmative presentation of facts establishing the need for, and the reasonableness of, the proposed rule amendments. In general terms, this means the MPCA must set forth the reasons for the proposed rule amendments 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 has come to mean that the solution proposed by the MPCA is appropriate. The need for the proposed rule amendments is discussed below.

The storm water discharge permit program has been in operation since June of 1992. The experience of the last two years has made it clear that amendments to the current rules are needed in order to reflect changes in the program. The rule amendments will include additional definitions to the water permit rules. This is necessary because the storm water program originally had only one category of storm water discharge permits and one fee rate. This was appropriate initially in order to provide some general regulations with respect to storm water runoff for all industries. However, because there are different environmental concerns among the industries, it is necessary to have particular permits to suit those concerns. Staff is therefore proposing three distinct categories of permits.

Also, the federal regulations do not set apart industrial activities from construction activities. Staff feels that defining construction and industrial activities and the associated permits will help to clarify the rules and avoid confusion.

In addition, staff is proposing a new part pertaining to storm water permit application requirements. This part is needed to coincide and comply with the federal NPDES application requirements. It will also clarify who is required to apply for and obtain a permit for storm water discharges.

Finally, staff proposes to amend the current fee rates to increase the construction permit application fee from $85 to $240. All other permit application fees remain the same. Staff proposes to reduce the industrial annual permit fee rate from $270 to $210. These rate changes are necessary to meet the costs of running the storm water permit program.

Minn. Stat. § 116.07, subd. 4d(a) authorizes the MPCA to collect fees necessary to cover the reasonable costs of reviewing and acting upon applications for MPCA permits and implementing and enforcing conditions of the permits. Currently, the storm water permit program has four staff people. This is not enough people to draft and review permits, answer inquiries from permittees, or do inspections. Staff is proposing to add six new positions to meet client needs in these areas. In order to pay for those new positions it is necessary to modify the fee rates as mentioned above.

Not only do the fees need to be modified to cover program costs but also to balance the contributions between industrial and construction permittees. The current fee rates for construction and industrial permits are not equitable based on the fact that the construction application fee of $85 dollars does not pay for the costs attributed to administering the construction permit. The industrial permittees pay a greater share of the overall costs to administer the storm water program. The aggregate revenue collected from the industrial permits exceeds the costs necessary to administer the industrial permit portion of the program.

The application fee rate for the construction permit needs to be increased in order to equitably pay for MPCA services required by the construction permit. A new reduced annual fee rate of $210 is needed for the general industrial storm water permit because revenue collected from permittees under the permit exceeds the cost of MPCA services for the permit. The new fee rates will allow for a more equitable distribution of revenue in relationship to costs of operating the construction and industrial components of the storm water permit program.

V. REASONABLENESS OF PROPOSED RULE AMENDMENTS

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

A. Reasonableness of the rules as a whole.

The proposed amendments to Minn. Rules chs. 7001and 7002 are reasonable because they are consistent with existing federal regulations. Minnesota rules must be at least as stringent as federal

rules. These proposed rules bring Minnesota rules into compliance with the federal rules and provide uniformity of regulation.

An individual who is required to apply for a storm water permit in Minnesota must comply with the MPCA's NPDES permit program based on the Delegation Agreement between the United States Environmental Protection Agency and the MPCA. The proposed rule amendments to the storm water permit fees, as outlined in this document, are reasonable because the fee amounts reflect current costs of administering the program fees. Also, the proposed permit fee ratés reflect the actual cost of services related to the storm water permit. Moreover, it is reasonable to provide specific fee rates for new types of general permits that require different levels of MPCA resources.

B. Reasonableness of the individual rules.

The following paragraphs address specific provisions of the proposed rule amendments. in 7001.1020 discussed below.

7001.1020 Definitions

Subpart 16a. **General Construction Storm Water Permit.**

Subpart 16b. **General Industrial Storm Water Permit.**

Subpart 16c. **Individual Storm Water Permit.**

Subpart 16d. Large Municipal Storm Sewer System.

Subpart 17b. Medium Municipal Storm Sewer System.

Subpart 28a. **Storm Water.**

The above proposed additions of Subparts 16a-16b and 17b to the permit rules are reasonable because the federal rules in the Code of Federal Regulations, Title 40, Section 122.26(b)(14)(i-xi) require that these types of activities be regulated by a storm water discharge permit. Also, these definitions clearly define the types of activities addressed in the federal rules. This will help those reading the Minnesota rules to more easily understand which category their business activity falls into. Subpart 28a matches the federal definition and this is reasonable to provide consistency between the state and federal rules.

7001.1030 Permit Requirements and Exemptions. Subpart 2J(1-3)

Staff is proposing to delete Subpart 2J(1), and (3) entirely and to move 2J(2) to a new section 7001.1035 discussed below. Subpart 2J(1) exempts persons from needing a permit except if the activity is subject to storm water rules. This is being deleted because rules are now being developed for storm water discharges and this subpart is no longer needed.

Subpart 2J(2) is being moved to a new section entitled "storm water permits" because it is reasonable to locate this subpart under a more specific part addressing storm water permit requirements. It is being retained as a separate category of activity requiring a permit because this language refers to local storm water programs which may have different compliance requirements from the MPCA's rules.

Subpart 2J(3) is being deleted because this language is essentially created in part 7001.1035 where the Commissioner has discretion to determine if a discharge is a "significant contributor of pollutants to waters of the state." This new language matches the federal language.

7001.1035 Storm Water Permits

Staff proposes to add a new section with rule language that defines permit requirements for storm water permit applicants. There are four situations in which a storm water permit will be required under the proposed rules: 1) if activity is defined under 40 C.F.R. 122.26(b)(14)(i-xi); 2) if the Commissioner determines the discharge is a significant contributor of pollutants to waters of the state; 3) if a water quality management plan adopted under the Clean Water Act recommends that pollution control requirements be applied to the discharge and; 4) if the discharge is from a large or medium municipal separate storm sewer system. Current state NPDES rules do not have specific references to the federal storm water permit requirements. This proposal is reasonable because the proposed rule language is consistent with the existing federal storm water permit regulations that are already applicable to potential storm water permit applicants. This will provide consistency between the state and federal rules. It will also make clear that all persons whose activities fall within those four groups must first apply and obtain a permit before discharging storm water.

7001.1040 Application Deadline for New Permits

Staff is proposing to add a subpart "B" to the deadline for filing a storm water permit application with the MPCA. Currently, all water permit applicants are required to submit a permit application 180 days prior to initiation of activity. Staff proposes to allow construction storm water permit applicants to submit an application anytime prior to initiation of construction.

The issuance of a general construction storm water permit is a different process than that for issuing an individual permit. An individual permit is designed initially by the company and is sent into the MPCA technical staff for review and approval. This permit is then published for public notice for 30 days. After the public notice period there may be changes to the individual permit. This process may take up to six months.

Issuing construction permits on the other hand, is a much shorter process. For a construction storm water discharge permit the MPCA has designed a general permit for all construction sites. The construction company owner or agent certifies to the MPCA that she will comply with the requirements of the general permit. Usually, this process takes only a matter of days to complete. Because the individual permit and general construction storm water permit processes are so different, Staff feel it is reasonable to set different application deadlines for each and to delineate this in the rules.

7002.0220 Definitions

Staff proposes to add to the Water Quality Permit Fees section of chapter 7002 the definitions for **"general construction storm water permit," "general industrial storm water permit," and "individual storm water permit,"** newly proposed in part 7001.1020. Chapter 7001 is the chapter which addresses permits in general. Chapter 7002 addresses fees in general. Including these definitions in both the chapters on permits and on fees, makes for ease of reading and understanding and so it is reasonable to include the definitions in this part.

The MPCA proposes to delete subpart 3a. "General storm water permit" of this section and replace it with the term "general construction storm water permit." Also, the term "general industrial storm water permit" is being proposed. It is reasonable to include these terms because the general

storm water permits have been separated into the categories of construction and industrial under the proposed rule language of part 7001.1020 and they need to be defined.

The current definition of "individual storm water permit" in this section is being redefined to be consistent with the definition being proposed in chapter 7001.1020.

7002.0270 F. Annual Fee

Staff proposes to delete this rule language exempting permittees from paying annual fees unless they are required to submit reports to the MPCA. When this language was added to the rule, the storm water program had not been fully developed. This language was based on an assumption that all of the permittees that discharge storm water that comes into contact with materials or material handling equipment as described in 40 C.F.R 122.26(b)(14) would be required to report on an annual basis. Industries currently covered by storm water permits meet this description. The MPCA would like to reduce reporting requirements. The present language in this part ties submittal of a fee with the submittal of a report. The MPCA needs to have a predictable and appropriate revenue stream to administer the storm water permit program. Deleting this language is reasonable because it would allow the MPCA to collect fees independent of receiving reports.

7002.0310, subpart 3 Water Quality Permit Fees

The MPCA proposes to amend the current fees in this section to specify the categories of permittees and their permit rates. The amendment is reasonable because permittees need to know the rates they are expected to pay for permit coverage.

General Construction Storm Water Permit Applicants. The proposed rule language would replace the existing permit application fee in Minn. Rules. pt. 7002.0310, subp. 3. The existing rule requires a construction permit applicant to pay an $85 application fee under the category of general storm. The new application fee will be $240.

A total of 3 FTE (full time employee equivalent) will be needed in 1995-96 to administer the construction storm water discharge permit program. The total cost of one FTE is $61,960 which includes all direct and indirect costs affiliated with the position. The total cost per year to administer the construction permit is $185,880 based on the need for three FTE. The number of construction permit applications received this year is 594. Staff estimates that by the end of the year the Agency will have

received approximately 787 applications. Dividing the $185,880 required for program costs by approximately 787 permits this year equals $240. (see ex. 1).

The MPCA believes that it is reasonable to increase the application fee to cover the cost of the three positions that are necessary to manage the construction permit program. Moreover, the construction storm water permit program has been subsidized by fee revenue paid by other NPDES permittees, and increasing the fee for construction permits is a reasonable means of equitably balancing costs.

General Industrial Storm Water Permit annual fee. Staff proposes to add new rule language that identifies the annual fee for the general industrial storm water permit. The new rule would replace the existing general storm water permit fee in Minn. Rules pt. 7002.0310, subp. 3. Staff proposes to modify the existing annual permit fee for the industrial permit by reducing the fee amount from the current $270 annual fee to the proposed $210 annual fee. This proposal is reasonable because permittees covered under the industrial permit are currently paying a fee rate that is not in relationship to costs to administer the industrial permit.

The MPCA will require a total of 7 FTE (full time employee equivalent) to administer the industrial permit. The total cost of one FTE is $61,960 which includes all direct and indirect costs affiliated with one FTE position. The total cost per year to administer the industrial permit is approximately $443,720 based on the need for seven FTE. The number of industrial permit applications this year is 2,100. Dividing the $443,720 required for staff costs by 2100 permits equals $210. (see ex.1). The MPCA believes that it is reasonable to decrease the annual fee for the industrial permit because the current fee rate generates in excess of what it costs to administer the permit.

VI. ECONOMIC IMPACTS EVALUATION

A. Introduction

The MPCA is required to take economic matters into account in its rulemaking activities:

> In exercising all its powers the pollution control agency shall give due consideration to the establishment, maintenance, operation and expansion of business, commerce, trade, industry, traffic, and other economic factors and other material matters affecting the feasibility and practicability of any proposed action, including, but not limited to, the burden on a municipality of any tax

which may result therefrom, and shall take or provide for such action as may be reasonable, feasible, and practical under the circumstances

Minn. Stat. § 116.07, subd. 6

This law has general applicability to all actions of the MPCA. In the rulemaking context, this law has been interpreted by the MPCA to mean that, in determining whether to adopt proposed rules or amendments, the MPCA must consider, among other evidence, the impact that economic factors may have on the feasibility and practicability of the proposed rules or amendments.

Public policy decisions must weigh the values of competing goals. The MPCA interprets the law cited to mean that the Legislature and the MPCA recognize the need to take into account different, sometimes competing, goals when setting environmental policy. Budget constraints in all economic sectors and at all income levels require decision makers to choose among programs and projects that compete for scarce budget resources.

Minn. Stat. § 116.07, subd. 6 is a cautionary note telling the MPCA to be mindful of economic and financial limits. The MPCA's work consists of the application and enforcement of environmental laws. The MPCA tries always to work with Minnesota's citizens, businesses and civic organizations to design, deliver and improve environmental programs.

This work is not done without cost. Environmental laws and regulations impose costs on people, businesses and other institutions. Some of the state's economic capacity must be devoted to environmental protection. The MPCA is directed to take care that environmental regulations do not strain the limits of available economic resources. The MPCA generally takes this directive a step further, seeking least-cost regulatory solutions over affordable ones if least-cost solutions do not compromise environmental goals.

B. Simulation Of Economic Impacts

This analysis of economic impacts covers a range that is, at first, constrained to sectors directly affected and then broadens out to include all of the state's economic sectors. A model of the state's economy makes this possible. The Department of Revenue and other state agencies use this Economic and Demographic Forecasting and Simulation Model (EDFS-53) to evaluate the economic effects of proposed projects, laws and rules. The model gets its results by solving a set of equations that describe

the interrelated activities of a local economy. This chapter will describe the model's basic structure. Exhibit (RJM-1) titled "The REMI EDFS Model" is provided for those who want a more detailed description.

The EDFS-53 can be considered as a series of linkages. For example, one factor of primary concern in economic impact studies, employment, is linked to a series of other factors such as wage rates, demand and production costs. Three groups of linkages form the model's basic structure.

1. Demand and Supply Linkages

Local and external demand determine gross state output. This is the total value of goods and services produced within the state. The state's output thus depends on the strength of consumers' desires for the goods and services that can be offered in the state. The EDFS-53 takes into account the goods and services each economic sector demands from all other sectors. These sectoral demands are further subdivided into the familiar elements of macroeconomic studies: consumption, investment, government spending and trade. An accountant's picture of gross state output would look like this:

1.	Total consumption	C
2.	Total investment	+I
3.	Total government spending	+G
4.	Total exports	+Ex
5.	Total imports	-Im
	Gross state output	Y

2. Cost Linkages

The costs of goods and services have important effects on supply and demand. Every good and service competes with all other goods and services for a share of the consumer's budget. If all other things remain equal and the price of a product rises, consumers will demand less of the product. They will either find substitutes or they will make do with less. The availability (measured as relative cost) of substitutes and the strength (measured as "elasticity") of demand also matter.

Cost considerations matter because policy makers often are concerned with issues that go beyond total output. They want to know what changes in total output mean in terms of investment

and employment as well. For example, increases in labor costs (e.g., new payroll taxes) may lead employers to substitute capital for labor.

The EDFS-53 includes these influences through the use of statements made in functional form (Cobb-Douglas) that describe the relation between output and production costs. Firms buy labor and capital in order to produce goods and services. These purchased inputs are called factors of production. The amount of each factor that a firm hires depends on factor costs and the strength of demand for the firm's product(s). The variables in the EDFS-53 production functions include: sectoral demand, the relationship of local wage rates to national wage rates, the relative cost of capital, fuel costs, and the output/employment ratio. Production values further depend on relationships determined within the EDFS-53 that are referred to as Regional Purchase Coefficients (RPCs). The RPC measures the amount of total demand that is supplied by local firms. Local production depends on production costs relative to the rest of the nation, local industry growth trends and the strength of export demand.

3. Wage Determination Linkages

Labor wage rates influence relative factor costs. The EDFS-53 includes a separate set of relationships that determines wage rates. The model calculates wage rates for each industrial sector, depending on wages for each occupational group within the industry (weighted by each occupation's share of industry employment), local trends and wage factors not related to occupational supply and demand. Local wages for occupational groups depend on demand for labor in that occupation, population, and a wage growth factor that takes into account current and past wages.

The linkages describe the framework of the EDFS-53 and relate this framework to the conventional description of how mature economies work. The next step is to use this framework to forecast development and to measure the effects of specific changes. Survey data are compiled so that they can be used within the EDFS-53 system of equations.

National data compiled by federal agencies provide the foundation for the model. Exhibit (RJM-2) titled "Data Sources and Estimation/Calibration Procedures" describes the sources of the data used in the model. Input/output (I/O) tables, developed by the U.S. Commerce Department's Bureau of Economic Analysis, provide structure for the model of the local economy. The I/O tables present an information series on the way national economic sectors relate to each other.

An economy, like a natural system, consists of identifiable groups that interact in complex and dynamic ways. Business firms, nonprofit organizations and governments produce goods and services (supply) to meet the consumption needs (demand) of people and their organizations. A firm's output can satisfy either final demand (e.g., groceries) or intermediate demand (e.g., paper stock), in which case the product is used to make new goods or services.

Each economic sector in the I/O tables relates to every other sector in a way that is based on the resources it demands from other sectors in the form of goods or services. Likewise, each sector supplies some part of its final output to other sectors and to final demand. The strength of these relationships varies, depending on the specific conditions of each sector.

An example will help explain the I/O tables:

HYPOTHETICAL I/O TABLE

	Agr.	Mfg.	Svcs.	Final demand	Gross output
Agriculture	60	60	20	60	200
Manufacturing	40	25	90	80	235
Services	10	70	55	105	240
Value Added	90	80	75	245	

Reference: "Simulation of the Economic Impact of Pollution Abatement and Control Investments: Methodology, Data Base, and Detailed Estimates," Management Information Services, Inc., (May 1986), p. 7.

The rows have the units of output from one sector that provide intermediate inputs for itself and other sectors along with output of finished goods and services. The service sector in this table provides ten units to agriculture, 70 units to manufacturing, 55 units to itself and 105 units to final demand. This adds up to 240 units, which is called gross output. The columns present the demands made by each sector and the value added produced in each sector. The service sector buys 20 units of agricultural output, 90 units of manufacturing output and 55 units of its own output. Value added is the measure of the extra value economic activity within a sector has added to the inputs it buys. Notice that the value added is equal to gross output less the sum of the inputs demanded by the sector. In the example, value added for the service sector is 240 - (20+90+55) = 75.

The example is kept simple for instructive purposes. The I/O tables used in the EDFS-53 have nearly 500 economic sectors. The value of the I/O tables for this analysis is that any change made in one sector has effects in all other sectors. This feature means that the EDFS-53 methodology provides a comprehensive way to meet the statutory directive to consider "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..." The EDFS-53 methodology also takes into account the relative strengths of inter-sectoral impacts, which depend on the extent to which some sectors rely on other sectors for productive inputs or economic demand. Changes induced in one specific sector will have only slight effects on another sector that either demands little of the changed sector's output or supplies few of the changed sector's inputs. Conversely, a heavily-dependent sector will be strongly affected by induced changes.

A series of calibration and "bridging" adjustments reconcile the data from the I/O tables with data from a number of other sources. These other sources are used for two reasons. First, the other surveys are more recent than the benchmark I/O study. Including the later surveys' data in the model provides the model with more current information. Second, many of the other surveys contain regional data. The data provide the means (Regional Purchase Coefficients) to translate national economic statistics into a model that describes the economy of a single state.

The EDFS-53 provides a wide array of outputs, including the areas of legislative concern. Forecasts can be extended to the year 2035. Output tables can be made very brief or quite detailed. The information available from intermediate-level tables includes estimates for the 53 economic sectors on:

Employment, by occupation
Occupational wage rate changes
Private, non-farm employment
Various secondary employment effects
Sales prices, relative to the U.S.
Input costs, relative to the U.S.
Labor costs, relative to the U.S.
Fuel costs, relative to the U.S.
Capital costs, relative to the U.S.
Productivity, relative to the U.S.
Profits, relative to the U.S.
Labor intensity
Proportions of local demand supplied by local output
Total demand

Total imports
Various export measures
Total output
Gross regional product
Wage and salary disbursements

Some examples will show how the simulation model is used. Consider a proposal to increase income taxes. The amount of the increase would be introduced into the model through a single policy variable, "Personal Taxes." The likely effects of this change would include a decrease in statewide demand leading to lower employment and income. Consider another example under which a large manufacturer proposed to build a new plant in the state. This change could be simulated through increases in the demand for construction services, followed by employment and output increases in the manufacturer's sector. Exhibit (RJM-3) titled "Policy Variables" has an annotated list of the policy variables used to simulate changes and includes, in the special translation policy variable section, a full list of the model's economic sectors in which changes can be made. Note that the sectoral list covers completely the areas described in the statutory directive that requires the MPCA to make this analysis.

The actual simulation of proposed changes is a three-step process. First, the economic model calculates a "control forecast." Next, policy variables are changed to simulate the effects of the proposal in question and the model's outputs are recalculated under the changed conditions. This yields a "simulation forecast." Finally, the model calculates the difference between the control forecast and the simulation forecast. This last value measures the impact of the simulated changes. Figure 1 illustrates the process.

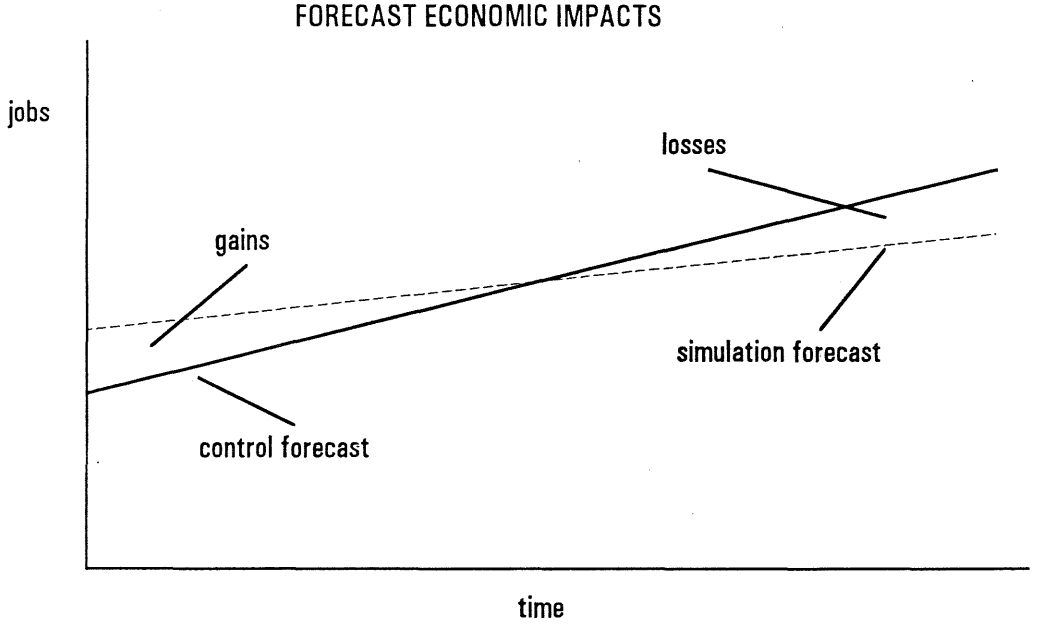

Figure 1

The difference between the simulation forecast and the control estimates the impact of the proposed change on statewide employment. When the simulated effect is above the control forecast value, there are employment gains. When the simulation drops below the control, there are job losses.

The EDFS-53 has been used by the Minnesota Department of Revenue and by other state agencies. The basic model has also been adapted for use in other states, where it has received favorable evaluations. (See Exhibit RJM-4 titled: "Articles about Reviewing the Model"). The model's comprehensive scope and interactive operations suit it well to the analysis of economic impacts required by the law.

C. Applications: Variables Used To Simulate Effects Of The Proposed Rules

The simulation of the economic impact of the proposed rules is done in four stages. First, the basic EDFS-53 control forecast is considered to represent current conditions in all affected sectors. This assumes that the proposed fees are new for all affected firms.

The next stage features sector-level estimates of the financial impacts of the proposed fees. This analysis balances impacts among economic sectors. Resources used in one sector may be income in another sector (e.g., government revenue and spending). The simulation becomes a series of charges

and revenues that affect different sectors in varying degrees and at different times. A charge to one economic sector is either balanced by revenues received in other sectors or absorbed by the sector that incurs the cost.

A five-year forecast period was used so that initial effects could be reflected in the early years and longer-term effects could be stabilized by the end of the period. Table 1, below, shows the costs assumed for each economic sector.

TABLE 1: Estimated costs of proposed fees ($millions)

Sector	firms	1995	1996	1997	1998	1999
Mining	361	$0.08	$0.08	$0.08	$0.11	$0.08
Food	152	$0.03	$0.03	$0.03	$0.04	$0.03
Textiles	1	$0.00	$0.00	$0.00	$0.00	$0.00
Lumber	201	$0.04	$0.04	$0.04	$0.06	$0.04
Furniture	10	$0.00	$0.00	$0.00	$0.00	$0.00
Paper	33	$0.01	$0.01	$0.01	$0.01	$0.01
Printing	7	$0.00	$0.00	$0.00	$0.00	$0.00
Chemicals	197	$0.04	$0.04	$0.04	$0.06	$0.04
Petroleum Pdts.	152	$0.03	$0.03	$0.03	$0.04	$0.03
Rubber	59	$0.01	$0.01	$0.01	$0.02	$0.01
Leather	4	$0.00	$0.00	$0.00	$0.00	$0.00
Stone, Clay & Glass	401	$0.08	$0.08	$0.08	$0.12	$0.08
Primary metals	112	$0.02	$0.02	$0.02	$0.03	$0.02
Fabricated metals	167	$0.03	$0.03	$0.03	$0.05	$0.03
Mach. & computers	125	$0.03	$0.03	$0.03	$0.04	$0.03
Elect. equipment	35	$0.01	$0.01	$0.01	$0.01	$0.01
Motor vehicles	12	$0.00	$0.00	$0.00	$0.00	$0.00
Other transport eqpt.	36	$0.01	$0.01	$0.01	$0.01	$0.01
Instruments	19	$0.00	$0.00	$0.00	$0.01	$0.00
Misc. manufacturing	16	$0.00	$0.00	$0.00	$0.00	$0.00
Construction	387	$0.09	$0.09	$0.09	$0.09	$0.09
Municipalities	400	$0.10	$0.10	$0.10	$0.10	$0.10
TOTAL: gov't. spending	2,887	$0.63	$0.63	$0.63	$0.81	$0.63

Economic sectors of fee-paying firms are described in the first column. The second column shows how many firms the MPCA estimates will pay fees in each sector. Values for most industrial

sectors in the first year of the forecast are calculated by multiplying the number of firms by the $210 annual fee and the $85 application fee. The value is a rounded figure. The application fee is dropped for succeeding years. Values for the construction and municipality sectors were calculated differently because firms in these sectors will not pay annual fees. Instead, they will pay a $240 application fee for each permitted site.

Production cost increases are used to estimate impacts in the industrial sectors. The effects of fees on municipalities are modeled as local tax increases. The last row in the table shows the estimates of total fee collections throughout the forecast period. State and local government spending are increased to simulate the revenue effects of the proposed fees.

Results of two economic impact simulations show that the proposed fees will probably not cause significant changes in the state's economy. Tables 2A, 2B, & 2C present control forecast values for the years 1995 through 1999. These values estimate economic conditions with no simulated change introduced by the proposed fees.

TABLE 2.A.: Control forecasts, September 1994
A. General summary

	1995	1996	1997	1998	1999
TOTAL EMPLOYMENT (1,000s)	2,913.886	2,953.254	2,999.339	3,046.619	3,095.024
EMPLOYMENT % OF U.S.	2.004	2.002	2.001	2.000	1.999
PRIVATE, NON-FARM EMPL.	2,434.530	2,470.290	2,511.613	2,554.419	2,598.513
EMPLOYMENT % OF U.S.	2.005	2.003	2.002	2.001	2.001
GRP ($billions)	$136.527	$145.486	$156.251	$168.552	$182.748
PERSONAL INCOME ($billions)	$107.475	$113.586	$122.074	$131.729	$142.874
PERS INCOME % OF U.S.	1.796	1.793	1.791	1.787	1.784
DISPOSABLE INCOME ($billions)	$90.868	$96.004	$103.172	$111.323	$120.729
REAL DISP INCOME ($billions)	$69.012	$70.231	$72.032	$73.817	$75.653
POPULATION (1,000s)	4,687.594	4,743.702	4,793.518	4,838.361	4,879.516
POP AS % OF US	1.777	1.78	1.781	1.78	1.778

2.B. Employment, by economic sector (1,000s of jobs)

	1995	1996	1997	1998	1999
LUMBER(24)	23.557	24.227	24.698	25.054	25.435
FURNITURE(25)	7.052	7.128	7.177	7.207	7.235
STONE,CLAY,ETC.(32)	11.962	11.919	11.822	11.674	11.531
PRIMARY METALS(33)	5.950	5.945	5.966	5.939	5.916
FABRICATED METALS(34	31.741	31.271	30.719	30.095	29.490
MACH. & COMPUTERS(35	71.596	70.177	68.979	67.193	65.497
ELECT. EQUIPMENT(36)	30.859	30.926	30.749	30.442	30.143
MOTOR VEH.(371)	6.187	6.256	6.285	6.271	6.255
REST TRANS EQUIP(R37)	5.249	5.277	5.353	5.448	5.560
INSTRUMENTS(38)	35.300	35.524	35.703	35.818	35.957
MISC. MANUF.(39)	9.132	9.029	9.018	8.989	8.959
FOOD(20)	50.655	50.468	50.514	50.607	50.726
TOBACCO MANUF(21)	0.006	0.006	0.006	0.006	0.005
TEXTILES(22)	1.989	1.969	1.959	1.941	1.923
APPAREL(23)	4.323	4.268	4.272	4.267	4.266
PAPER(26)	33.530	33.730	33.957	34.151	34.346
PRINTING(27)	58.617	59.161	59.935	60.799	61.665
CHEMICALS(28)	10.563	10.610	10.716	10.807	10.911
PETRO PROD(29)	1.777	1.708	1.671	1.606	1.544
RUBBER(30)	17.289	17.692	18.087	18.435	18.798
LEATHER(31)	1.432	1.363	1.353	1.323	1.292
MINING(10,12-14)	8.427	8.529	8.461	8.384	8.304
CONSTRUCTION(15-17)	129.615	132.447	133.939	134.805	135.818
RAILROAD(40)	8.129	8.156	8.179	8.192	8.201
TRUCKING(42)	40.336	40.839	41.439	41.996	42.576
LOCAL/INTERURBAN(41)	11.528	11.565	11.622	11.691	11.742
AIR TRANSP.(45)	23.840	24.397	25.053	25.694	26.334
OTHER TRANSP(44,46,47)	12.061	12.427	12.836	13.216	13.596
COMMUNICATION(48)	19.395	19.189	19.042	18.930	18.817
PUBLIC UTILITIES(49)	17.044	17.199	17.392	17.582	17.771
BANKING(60)	43.689	43.683	43.782	43.977	44.155
INSURANCE(63,64)	72.105	73.250	74.605	76.206	77.818
CREDIT&FIN(61,62,67)	32.733	33.676	34.751	35.819	36.899
REAL ESTATE(65)	71.066	72.151	73.528	74.873	76.240
EATING/DRINKING(58)	154.201	156.407	159.303	162.522	165.838
RESTRETAIL(52-57,59)	347.385	348.255	350.601	353.542	356.594
WHOLESALE(50,51)	148.006	149.292	150.994	152.426	153.892
HOTELS(70)	34.128	35.357	36.748	38.266	39.845
PER SERV/REPR(72,76)	70.007	70.968	72.211	73.420	74.624
PRIV. HOUSEHOLD(88)	13.619	13.221	12.924	12.610	12.306
AUTO REP/SERV(75)	30.312	31.012	31.822	32.657	33.510
MISC. BUSI. SERV(73)	163.891	169.416	175.546	181.896	188.455
AMUSE&RECREATION(79)	49.517	50.459	51.688	52.994	54.336
MOTION PICTURES(78)	9.296	9.449	9.630	9.832	10.039
MEDICAL(80)	215.307	221.834	228.555	236.942	245.398
MISC PROF(81,87,89)	101.442	104.274	107.253	110.263	113.370
EDUCATION(82)	41.544	42.035	42.627	43.421	44.213
NON-PROFIT(83,84,86)	124.574	129.035	134.398	139.836	145.394
AGRI/F/F SERV(07-09)	22.564	23.103	23.746	24.352	24.974
TOTAL	2,434.530	2,470.279	2,511.613	2,554.419	2,598.513

2.C. Output, by economic sector ($ billions)

	1995	1996	1997	1998	1999
LUMBER(24)	$3.718	$4.017	$4.329	$4.687	$5.102
FURNITURE(25)	$0.792	$0.839	$0.889	$0.947	$1.014
STONE,CLAY,ETC.(32)	$1.836	$1.940	$2.048	$2.171	$2.315
PRIMARY METALS(33)	$0.907	$0.973	$1.034	$1.106	$1.188
FABRICATED METALS(34	$5.280	$5.559	$5.840	$6.162	$6.533
MACH. & COMPUTERS(35	$15.879	$17.346	$18.758	$20.391	$22.287
ELECT. EQUIPMENT(36)	$4.468	$4.865	$5.243	$5.680	$6.188
MOTOR VEH.(371)	$5.269	$5.734	$6.178	$6.687	$7.272
REST TRANS EQUIP(R37)	$0.765	$0.812	$0.874	$0.948	$1.035
INSTRUMENTS(38)	$5.601	$6.087	$6.627	$7.253	$7.981
MISC. MANUF.(39)	$0.885	$0.947	$1.021	$1.105	$1.201
FOOD(20)	$9.727	$10.265	$10.958	$11.753	$12.673
TOBACCO MANUF(21)	$0.004	$0.004	$0.004	$0.004	$0.005
TEXTILES(22)	$0.285	$0.304	$0.325	$0.349	$0.376
APPAREL(23)	$0.244	$0.260	$0.279	$0.301	$0.327
PAPER(26)	$11.449	$12.290	$13.263	$14.377	$15.659
PRINTING(27)	$6.320	$6.715	$7.226	$7.811	$8.482
CHEMICALS(28)	$2.371	$2.538	$2.734	$2.963	$3.230
PETRO PROD(29)	$1.554	$1.654	$1.755	$1.870	$2.004
RUBBER(30)	$2.402	$2.613	$2.840	$3.103	$3.409
LEATHER(31)	$0.157	$0.166	$0.173	$0.179	$0.188
MINING(10,12-14)	$1.846	$1.984	$2.101	$2.237	$2.392
CONSTRUCTION(15-17)	$16.141	$16.993	$17.907	$18.960	$20.197
RAILROAD(40)	$1.395	$1.492	$1.604	$1.732	$1.880
TRUCKING(42)	$3.182	$3.391	$3.640	$3.925	$4.256
LOCAL/INTERURBAN(41)	$0.410	$0.431	$0.458	$0.489	$0.523
AIR TRANSP.(45)	$4.323	$4.683	$5.115	$5.608	$6.175
OTHER TRANSP(44,46,47)	$1.708	$1.835	$1.983	$2.151	$2.344
COMMUNICATION(48)	$3.837	$4.088	$4.406	$4.769	$5.187
PUBLIC UTILITIES(49)	$4.368	$4.593	$4.877	$5.202	$5.574
BANKING(60)	$3.642	$3.853	$4.130	$4.444	$4.804
INSURANCE(63,64)	$5.896	$6.249	$6.716	$7.247	$7.858
CREDIT&FIN(61,62,67)	$2.051	$2.221	$2.434	$2.679	$2.961
REAL ESTATE(65)	$19.116	$20.160	$21.535	$23.094	$24.883
EATING/DRINKING(58)	$5.709	$6.009	$6.403	$6.854	$7.375
RESTRETAIL(52-57,59)	$16.167	$17.093	$18.313	$19.708	$21.322
WHOLESALE(50,51)	$14.299	$15.212	$16.285	$17.513	$18.933
HOTELS(70)	$0.935	$0.986	$1.053	$1.131	$1.221
PER SERV/REPR(72,76)	$2.765	$2.940	$3.169	$3.429	$3.727
PRIV. HOUSEHOLD(88)	$0.128	$0.132	$0.139	$0.147	$0.156
AUTO REP/SERV(75)	$2.321	$2.465	$2.650	$2.862	$3.105
MISC. BUSI. SERV(73)	$6.477	$7.014	$7.666	$8.415	$9.282
AMUSE&RECREATION(79)	$1.581	$1.687	$1.829	$1.991	$2.178
MOTION PICTURES(78)	$0.406	$0.432	$0.467	$0.506	$0.551
MEDICAL(80)	$10.108	$10.856	$11.852	$12.982	$14.282
MISC PROF(81,87,89)	$5.811	$6.221	$6.721	$7.293	$7.955
EDUCATION(82)	$1.763	$1.869	$2.015	$2.179	$2.368
NON-PROFIT(83,84,86)	$4.714	$5.101	$5.605	$6.179	$6.842
AGRI/F/F SERV(07-09)	$0.605	$0.647	$0.697	$0.755	$0.821
TOTAL	$221.614	$236.566	$254.165	$274.327	$297.619

Tables 3A, 3B, & 3C present the results of the simulation that imposed the costs described in Table 1 on affected economic sectors. Fee proceeds were assumed to be used for government spending at the state level. Values in the tables are the differences between the control forecast and the simulation forecast. The numbers show the changes caused by assessment of the proposed fees.

TABLE 3.A. CONTROL - SIMULATION FORECAST
General summary

	1995	1996	1997	1998	1999
TOTAL EMPLOYMENT	0.005	0	-0.002	-0.003	-0.006
EMPLOYMENT % OF U.S.	0	0	0	0	0
PRIVATE, NON-FARM EMPL.	-0.001	-0.006	-0.007	-0.009	-0.01
EMPLOYMENT % OF U.S.	0	0	0	0	0
GRP ($ billions)	0	0	0	0	0
PERSONAL INCOME	0	0	0	0	0
PERS INC % OF US	0	0	0	0	0
DISPOSABLE INCOME	0	0	0	0	0
REAL DISP. INCOME	0	0	0	0	0
POPULATION (3)	0	-0.001	-0.003	-0.005	-0.008
POP AS % OF US	0	0	0	0	0

A number of the individual sectors for which impacts were simulated showed no change in values from the control forecast. In the tables that follow, the sectors that showed no effects are excluded.

3.B. Employment, by economic sector
(1,000s of jobs)

	1995	1996	1997	1998	1999
	FCST	FCST	FCST	FCST	FCST
CONSTRUCTION(15-17)	0.001	0	0	0	0
EATING/DRINKING(58)	0	0	0	0	-0.001
RESTRETAIL(52-57,59)	0	-0.001	-0.001	-0.001	-0.001
WHOLESALE(50,51)	0	0	-0.001	-0.001	-0.001
MEDICAL(80)	-0.001	-0.001	-0.001	-0.001	-0.001
NON-PROFIT(83,84,86)	0	0	0	-0.001	-0.001
TOTAL	0.000	-0.002	-0.003	-0.004	-0.005

3.C. Output, by economic sector
($ billions)

	1995	1996	1997	1998	1999
LUMBER(24)	($0.00002)	($0.00003)	($0.00004)	($0.00005)	($0.00006)
FURNITURE(25)	$0.00000	$0.00000	$0.00000	($0.00001)	($0.00001)
STONE,CLAY,ETC.(32)	($0.00001)	($0.00002)	($0.00003)	($0.00003)	($0.00004)
PRIMARY METALS(33)	($0.00001)	($0.00002)	($0.00003)	($0.00004)	($0.00004)
FABRICATED METALS(34	($0.00002)	($0.00004)	($0.00006)	($0.00007)	($0.00008)
MACH. & COMPUTERS(35	($0.00005)	($0.00008)	($0.00010)	($0.00011)	($0.00012)
ELECT. EQUIPMENT(36)	($0.00001)	($0.00003)	($0.00004)	($0.00005)	($0.00005)
MOTOR VEH.(371)	($0.00001)	($0.00001)	($0.00001)	($0.00002)	($0.00002)
REST TRANSP EQUIP(R37)	($0.00001)	($0.00001)	($0.00002)	($0.00002)	($0.00002)
INSTRUMENTS(38)	($0.00002)	($0.00003)	($0.00004)	($0.00005)	($0.00005)
MISC. MANUF.(39)	$0.00000	$0.00000	$0.00000	($0.00001)	($0.00001)
FOOD(20)	($0.00004)	($0.00007)	($0.00010)	($0.00011)	($0.00013)
PAPER(26)	($0.00002)	($0.00004)	($0.00005)	($0.00007)	($0.00009)
PRINTING(27)	$0.00000	($0.00001)	($0.00002)	($0.00002)	($0.00003)
CHEMICALS(28)	($0.00003)	($0.00004)	($0.00006)	($0.00007)	($0.00008)
PETRO PROD(29)	($0.00001)	($0.00002)	($0.00002)	($0.00003)	($0.00003)
RUBBER(30)	($0.00001)	($0.00002)	($0.00003)	($0.00004)	($0.00005)
MINING(10,12-14)	($0.00001)	($0.00002)	($0.00002)	($0.00003)	($0.00003)
CONSTRUCTION(15-17)	$0.00014	($0.00002)	($0.00006)	($0.00010)	($0.00012)
RAILROAD(40)	$0.00000	$0.00000	($0.00001)	($0.00001)	($0.00001)
TRUCKING(42)	$0.00000	($0.00001)	($0.00002)	($0.00002)	($0.00003)
AIR TRANSP.(45)	$0.00000	($0.00001)	($0.00001)	($0.00002)	($0.00002)
OTHER TRANSP(44,46,47)	$0.00000	($0.00001)	($0.00001)	($0.00001)	($0.00001)
COMMUNICATION(48)	$0.00000	($0.00002)	($0.00003)	($0.00003)	($0.00004)
PUBLIC UTILITIES(49)	$0.00000	($0.00003)	($0.00004)	($0.00005)	($0.00006)
BANKING(60)	$0.00001	$0.00000	($0.00001)	($0.00001)	($0.00002)
INSURANCE(63,64)	($0.00001)	($0.00003)	($0.00004)	($0.00004)	($0.00005)
REAL ESTATE(65)	($0.00004)	($0.00009)	($0.00010)	($0.00011)	($0.00011)
EATING/DRINKING(58)	($0.00001)	($0.00002)	($0.00003)	($0.00004)	($0.00004)
RESTRETAIL(52-57,59)	($0.00005)	($0.00010)	($0.00012)	($0.00014)	($0.00015)
WHOLESALE(50,51)	($0.00004)	($0.00009)	($0.00011)	($0.00013)	($0.00014)
HOTELS(70)	$0.00000	$0.00000	$0.00000	($0.00001)	($0.00001)
PER SERV/REPR(72,76)	($0.00001)	($0.00002)	($0.00002)	($0.00003)	($0.00003)
AUTO REP/SERV(75)	$0.00000	($0.00001)	($0.00002)	($0.00002)	($0.00002)
MISC. BUSI. SERV(73)	$0.00001	($0.00002)	($0.00003)	($0.00004)	($0.00005)
AMUSE&RECREATION(79)	($0.00001)	($0.00001)	($0.00001)	($0.00001)	($0.00002)
MEDICAL(80)	($0.00006)	($0.00009)	($0.00011)	($0.00012)	($0.00013)
MISC PROF(81,87,89)	$0.00000	($0.00003)	($0.00004)	($0.00005)	($0.00005)
EDUCATION(82)	($0.00001)	($0.00001)	($0.00001)	($0.00002)	($0.00002)
NON-PROFIT(83,84,86)	($0.00002)	($0.00003)	($0.00004)	($0.00005)	($0.00005)
TOTAL	$0.00000	($0.00100)	($0.00200)	($0.00200)	($0.00200)

Simulation results indicate that the proposed fees will probably not have a large effect on the state's economy. The negative effects on both employment and output are less than 0.01 per cent. Sectoral employment and output effects are just as small.

VII. Small Business Considerations in Rulemaking

Minn. Stat. § 14.115, subd. 2 (1992), requires the MPCA to consider a proposed rule's affect on small businesses. The MPCA has considered the following statutory methods for reducing the impact of the rules on small businesses:

A. The establishment of less stringent compliance or reporting requirements for small businesses. The substance of the rule proposes to increase the permit fee for construction companies and reduce the annual permit fee for industrial companies. The financial impact of the proposed fees on small businesses is negligible and is discussed below in the part on the economic analysis. The proposed rules do not change the reporting requirements for small businesses. Since all industrial storm water permittees have to submit a one-page report only twice every five years, and construction storm water permittees do not have to submit reports, staff feels the reporting requirements are not unduly burdensome and are appropriate to protect the waters of the state.

B. The establishment of less stringent schedules or deadlines for the compliance or reporting requirements for small businesses. Part 7001.1040 concerns deadlines for submitting permit applications. The proposed rule amendment does not change the application deadline for industrial activities. That deadline remains at 180 days prior to commencement of constructing the facility or beginning activity at the facility. This deadline is necessary even for small businesses because of the nature of the permitting process for industrial facilities. As explained in section V of this SONAR, industrial permits require fairly extensive review and discussion between MPCA Staff and the permittee. In addition, the permit once approved, has to be published for public notice. Because this process takes time, Staff feels allowing a shorter application deadline is not feasible.

The issuance of storm water discharge permits for construction companies is a much shorter process. The process requires no review of the permit since the permit is designed by the MPCA and has general applicability to all construction companies. Construction company representatives must

simply certify that that they will comply with the permit. The proposed rule is less stringent for construction companies in that it allows companies to submit applications for a storm water discharge permit anytime prior to beginning construction at a site.

C. The consolidation or simplification of compliance or reporting requirements for small businesses. As stated in (A) above, the reporting requirement is eliminated. Staff feels that compliance with the permit requires fairly simple measures to reduce runoff from industrial or construction sites and are appropriate to protect water quality in the state.

D. The establishment of performance standards for small businesses to replace design or operational standards required in the rule. These rules deal primarily with fees and this consideration is not applicable.

E. The exemption of small businesses from any or all requirements of the rule. To exempt small businesses would result in degradation of water quality in the state and would violate federal requirements.

Economic Analysis

The proposed changes to the permit and fee rules will have no significant financial impact on small businesses in the state. An explanation of the economic analysis follows.

An economic impact analysis specifically focused on small businesses can be developed with the forecasting model that was used to analyze general economic effects. Analytical results relate directly to the assumptions made in simulating regional economic impacts. The forecasting model takes the employment results of a simulation and "distributes" them on a proportionate basis to small businesses in all affected sectors. Small business employment proportions derive from data in the federal statistical compilation known as County Business Patterns. The table below shows the estimated employment impacts of the proposed fees on small businesses in Minnesota. As in the previous section, sectors that showed no impacts are excluded.

TABLE 1. Employment impacts - small business
(no. of jobs)

Sector	1995	1996	1997	1998	1999
CONSTRUCTION(15-17)	0.001	0	0	0	0
EATING/DRINKING(58)	0	0	0	0	-0.001
RESTRETAIL(52-57,59)	0	-0.001	-0.001	-0.001	-0.001
WHOLESALE(50,51)	0	0	0	-0.001	-0.001
MEDICAL(80)	0	0	-0.001	-0.001	-0.001
NON-PROFIT(83,84,86)	0	0	0	-0.001	-0.001
Total	0.000	-0.001	-0.002	-0.004	-0.005

Although the estimated impacts appear small, they may well be overstated. The part of the economic forecasting model that estimates small business impacts is a "module" that is added on to the main model. The small business was only recently received from the model vendor. Proportionate small business employment for each sector is set at first according to national patterns. Model users have means available to adjust employment proportions if they have local statistics that they prefer to the preset national data.

Proportions in the new module show small businesses employ about 70 per cent of all workers in the state. Information from the Minnesota Department of Trade and Economic Development (1989) indicates the small business share is more like 55 percent. MPCA staff has not yet been able to make appropriate adjustments to the preset proportions in the small business forecasting model. However, since the proportions in the model probably overstate current conditions, the current impact estimate can be considered as a conservative statement indicating that expected impacts are probably going to be smaller than what is forecast.

VIII. Impact on Agricultural Lands and Farming Operations

Minn. Stat. § 14.11, subd. 2, requires that if the MPCA determines that a proposed rule may have a direct and substantial adverse impact on agricultural land in the state, the MPCA shall comply with specified additional requirements. Minn. Stat. 116.07, subd. 4, requires that before the Pollution

Control Agency adopts or repeals rules that affect farming operations, the agency must provide a copy of the proposed rule change and a statement of the effect of the rule change on farming operations to the commissioner of agriculture for review and comment and hold public meetings in agricultural areas of the state.

This proposed rule addresses fees charged to persons performing industrial and construction activities which may result in storm water discharge. Farms may feel the effect of a fee if there were construction activities being performed on the farm. However, none of the construction permit applications to date have been for farm sites. Assuming in the future there may be some farms which require construction permits for storm water discharge, the negative effect on employment and output can be expected to be as small or smaller than that forecasted for construction and industrial activities (see tables 3A,3B & 3C). For these reasons the proposed rule does not and will not have a measurable affect on agricultural lands.

IX. Costs to Local Public Bodies

Minn. Stat. § 14.11, subd. 1, requires the MPCA to include a statement of the rule's estimated cost to local public bodies if the rule would have a total cost of over $100,000 to all local public bodies in the state in either of the two years immediately following adoption of the rule. The cost to municipalities as a result of these proposed rule is approximately $96,000 in each year. (see table 1of section VI). This is based on the approximately 400 construction storm water discharge permits applied for each year by municipalities at a fee of $240.

X. Review By Commissioner of Transportation

Minn. Stat. § 174.05 requires the MPCA to inform the Commissioner of Transportation of all rulemakings that concern transportation, and requires the Commissioner of Transportation to prepare a written review of the rules. These rules propose to amend the permit fees and do not concern transportation.

XI. Commissioner of Finance Approval of Fee

As required by Minn. Stat. § 16A.1285, subd. 5, the Commissioner of Finance has approved the fees proposed in this rule. The Commissioner of Finance's approval is attached as exhibit 2.

XII. Conclusion

Based on the foregoing, the proposed Minn. Rules pts. 7001.1020, 7001.1030, 7001.1035, 7001.1040, 7002.0220, subp. 3a, 7002.0270 F, 7002.0310, subp. 3 are both needed and reasonable.

Dated: 10/13/94

Charles W. Williams
Commissioner

EXHIBITS LIST

Exhibit #	Document
1	Fee Calculation
2	Finance

Exhibit 1

Basis for Storm Water Permit Fee Rates

Industrial

1. # of FTE (s)
2. X average annual cost per FTE
3. = total program cost
4. # of permittees
5. divide program cost by the # of permittees = individual fee rate

Construction

1. # of FTE (s)
2. X average annual cost per FTE
3. = total program cost
4. # of permittees
5. divide program cost by the # of permittees = individual fee rate

1. # of Staff Needed to Operate the Program

INDUSTRIAL = 7.0 FTE

Program Management

1	Program administrator
2	*Vacant (compliance)
1	*Vacant (program administration)

Regional Staff (1 FTE distributed among 5 regions)

Support Services

1	Compliance Support (consists of several individuals)
.5	Management support
.5	Financial services support

CONSTRUCTION = 3.0 FTE

1	Program administrator
1	*Vacant (compliance)
.5	Compliance Support
.25	Management support
.25	Financial services support

2. Average Annual Cost Per FTE

1 FTE (full-time employee equivalent)

Salary =	$ 37,000 ($18 per hour)
Fringe benefits =	$ 7,585 (20.5% of salary)
Indirect (over head) =	$ 13,375 (30% of salary and fringe)
Supply/Exp. =	$ 4,000

Cost of Average FTE = $61,960

3. Program Costs (estimates 7/94)

INDUSTRIAL	7.0 FTE = $433,720
CONSTRUCTION	3.0 FTE = $185,880
TOTAL	10 FTE = $619,600

4. General Storm Water Permittees (1994)

2,100	Industrial
787	Construction

5. Program Costs Divided by # FTE's = Fee Rate

INDUSTRIAL

$433,720 (7.0 FTE) / 2,100 permittees = $210

CONSTRUCTION

$185,880 (3.0 FTE) / 787 permittees = $240

Exhibit 2

STATE OF MINNESOTA

Department: of Finance

Office Memorandum

Date: August 17, 1994

To: Keith Ness, Chief Financial Officer
MN Pollution Control Agency

From: Michelle Harper
Budget Operations

Phone: 296-7838

Subject: Departmental Earnings Rate Change Response-Storm Water Permit Fee Rule Modification

Pursuant to provisions of Laws 1993, sec. 56, subd. 5 (M.S. 16A.1285), the Department of Finance has reviewed and approved the attached departmental earnings proposal submitted by Pollution Control on July 27, 1994. If you have any questions or concerns, please call me at the above number.

cc Bruce Reddemann
Doug Watnemo

FI-00399

Department of Finance

Departmental Earnings: Reporting/Approval

Part A: Explanation

Earnings Title: WQ Fees - Environmental Fund	*Statutory Authority:* M.S. 116.07, subd. 4dA7	*Date:* July 27, 1994

Brief Description of Item: Application and annual fee are paid by industrial and construction activities that are regulated by a general stormwater permit. Approximately 2,000 industrial facilities are covered under a general permit. Approximately 300 construction activities will be covered under a general permit per year.

Earnings Type (check one):

1. ___ Service/User 2. X Business/Industry Regulating 3. ___ Occupational Licensure
4. ___ Special Tax/Assessment 5. ___ Other (specify):

Submission Purpose (check one):

1. X Chap. 14 Review and Comment 2. ___ Approval of Allowable Inflationary Adjustment
3. ___ Reporting of Agency Initiated Change in Departmental Earnings Rate
4. ___ Other (specify):

If reporting an agency initiated action (option 3 above), does agency have explicit authority to retain and spend receipts? ___ Yes ___ No
If yes, cite pertinent statutes: NA

Impact of Proposed Change (change in unit rate, number of payees impacted, etc.):
See attached memo.

WATER QUALITY FEES
APID 42000:03-33
CURRENT AS OF: JULY 27, 1994
FY '94 AS OF 6-30-94

	ACTUAL F.Y. 1991	ACTUAL F.Y. 1992	ACTUAL F.Y. 1993	ACTUAL F.Y. 1994	ESTIMATED F.Y. 1995
BALANCE FORWARD IN	-58,508	-57,674	-765,416	-574,666	-599,157
REVENUES:					
FEE COLLECTIONS TO DATE	1,380,614	1,569,320	2,356,963	2,388,820	2,454,000
LESS REFUNDS: APID 42000:39-33 (AID 830703)		8,445	2,790	49,124	3,000
TOTAL RESOURCES AVAILABLE	1,380,614	1,560,875	2,354,173	2,339,696	2,451,000
EXPENDITURES:					
ACTUAL EXP/APPROPRIATION	1,095,780	1,886,617	1,816,254	1,757,510	1,910,374
REMAINING FY 94 ENCUMBRANCES				148,676	
INDIRECT ALLOCATIONS (STATEWIDE & AGENCY)	284,000	382,000	347,169	404,000	404,000
FEE TRANSFER TO GENERAL SUPPORT				54,000	56,000
TOTAL EXPENDITURES	1,379,780	2,268,617	2,163,423	2,364,187	2,370,374
CURRENT DEFICIT/EXCESS	834	-707,742	190,750	-24,491	80,626
ACCUMULATED EXCESS/DEFICIT	-57,674	-765,416	-574,666	-599,157	-518,531

NOTE: FY 1994 AND FY 1995 DO NOT REFLECT THE AMOUNTS SHOWN IN THE BIENNIAL BUDGET. FY 1994 IS BASED ON ACTUALS AS OF 6/30/94 AND FY 1995 IS BASED ON ESTIMATED FY 1995 BUDGET.