

Minnesota Attorney General: Administrative Rules Proceedings

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Version 3
August 20, 2018

Our File #568
Lee
Jerry

Permanent Rule X

Temporary Rule _____

RULES REVIEW CHECKLIST

DATE RULES RECEIVED 12-20 DUE DATE 1-9

Resubmitted and Received 2/15 due 2/25

a. Returned to Agency w/o Filing w/Secretary of State _____
b. Approved 2/20/80 Date Sent Back to Agency 1-4-80
2-22-80

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1. Rules as Adopted ✓
" " " printed in State Register 10.29.79 ✓
2. Rules as Proposed See No. 10 - SR 1.15.79 and revised 3.15.79
3. Certificate of Board's Authorizing Resolution, where applicable N/A
4. Order for Hearing ✓ ?
5. a Notice of Hearing ✓ cancellation ✓ 5c. 3rd Date ✓
1st date Sufficiency ✓ Sufficiency ✓
2nd date b " ✓ ✓
6. Secretary of State's List ✓ ✓ (one copy only)
7. a Certificate of Acquisition of Secretary of State's List ✓
b. ✓
8. a. Secretary of State's Certification of Delivery of Secretary of State's List to Agency ✓
b. ✓
9. a. Affidavit of Mailing ✓
At least 30 days prior to hearing ✓
b. ✓
10. Publication in State Register ✓
At least 30 days prior to hearing see J. Wmemo & H. E rpt.
11. Statement of Need and Evidence a ✓ b. Revised 12.26.78 ✓
12. Hearing Examiner's Report ✓
13. Agency's Findings of Fact ✓
14. Certificate of Board's Resolution Adopting Rules, where applicable N/A
15. Order Adopting ✓
16. Report of Chief Hearing Examiner ✓
17. Order Approving Incorporation by Reference, where applicable N/A
18. Certificate of Compliance with Rulemaking Procedures ✓
19. Copy of Notice of Intent to Solicit Outside Opinion, where applicable N/A
20. Petition by Public, where applicable N/A
21. Rules

ADMIN 1000 (Rev. 1/78)
SF-00006-01

STATE OF MINNESOTA

DEPARTMENT ATTORNEY GENERAL

Office Memorandum

TO : JOSEPH N. ALEXANDER
Commissioner
Department of Natural Resources

DATE: February 21, 1980

Attn: BILL CLAPP

FROM : JERRY ANDERSON
Special Assistant
Attorney General

PHONE: 296-1288

SUBJECT: Rules as Approved In the Matter of the Adoption of the Proposed Rules for Dam Safety

Enclosed herewith are the rules you have submitted for approval. These rules have been approved by this office and filed with the Secretary of State. Note that they have NOT been filed with the State Register; this must be done promptly by your agency.

Upon receipt and before transmittal to your agency, however, it is important that you recheck these rules as to:

1. Affixation of the stamps of the Attorney General and Secretary of State to the last page of the rules;

2. Coverage by these stamps of all rules submitted; and

3. Inclusion of all pages of the rules in the approved set.

Directly following the approved rules is a complete set of required documents and transcript which must be retained with the rules by you or your agency.

If you have any questions in this regard, please contact me.

JA/bw
Enclosure
cc: Duane Harves
Susan Robertson

Our File 568

ADMIN 1000 (Rev. 1/78)

STATE OF MINNESOTA

DEPARTMENT ATTORNEY GENERAL

Office Memorandum

TO : JOSEPH N. ALEXANDER
Commissioner
Department of Natural Resources

DATE: January 4, 1980

FROM : LEE E. SHEEHY
Special Assistant
Attorney General

PHONE: 296-1288

SUBJECT: In the Matter of the Adoption of the Proposed Rules for Dam Safety

The above-captioned rules have not been approved by this office for the below-enumerated reasons. Following agency consideration of these reasons and appropriate action, if any, the rules may be resubmitted to this office after resubmittal to the Chief Hearing Examiner. At the time of resubmittal to this office, please ensure that the original of the Order Adopting and the Rules as Adopted accompany the resubmitted documents as they are necessary for filing with the Secretary of State.

The above-captioned rules have been disapproved for the following reasons:

1. 6 MCAR § 1.5034 A. appears to create a grant of absolute sovereign immunity to the State. Judicial and legislative action in recent years has eroded this legal concept. Two questions, therefore, arise. First, what is the agency's statutory authority for the adoption of such a rule? Secondly, how does the agency reconcile its administrative rule with legislative action such as the Torts Claim Act and judicial interpretations striking down the concept of absolute sovereign immunity?

6 MCAR § 1.5034 B. in the second sentence also appears to create tort liability for private parties. What is the agency authority for such a rule?

2. 6 MCAR § 1.5033 A. discusses Commissioner's authority to waive certain details requiring submittals when the dam is sponsored by governmental agency or inspection is performed by a federal agency. However, the clause discussing the grounds upon which the Commissioner may waive certain details appears to limit that waiver upon a requirement that a "federal" agency will furnish the Commissioner with certain facts.

However, the preceding clause permits waiver by governmental agencies, not just federal agencies. Therefore, there appears to be an inconsistency between the apparent scope of the rules as stated in the first clause and the condition placed upon the Commissioner's waiver decision.

3. Two typographical errors exist. 6 MCAR § 1.5033 B. (7) contains the word "any" which should be "and". Secondly, 6 MCAR § 1.5032 A. (2) (b) contains the word "completely" which should be the word "complete."

If you have any questions, do not hesitate to contact me.

LES/bw
cc: Susan Robertson
Duane Harves
William Clapp

ADMIN 1000 (Rev. 1/78)
SF-00006-01

STATE OF MINNESOTA

DEPARTMENT ATTORNEY GENERAL

Office Memorandum

TO : FILE

DATE: February 20, 1980

FROM : JERRY S. ANDERSON
Special Assistant
Attorney General

PHONE: 296-1288

SUBJECT: Rules for Dam Safety
Our File: 568

Upon reviewing the resubmitted rules, it was noted that the heading for Sec. 1.5034 A. had been changed in the rules but that the change was not made in the table of contents. Pursuant to a phone conversation with Bill Clapp and at his direction, I removed the Table of Contents sheet from the copy of the rules that was filed with the Secretary of State.

JSA/bw

STATE OF MINNESOTA
OFFICE OF HEARING EXAMINERS

FOR THE DEPARTMENT OF NATURAL RESOURCES

In the Matter of Proposed Rules for Dam Safety.

REPORT OF HEARING EXAMINER

The above-entitled matter came on for hearing before Hearing Examiner Howard L. Kaibel, Jr., of the Minnesota Office of Hearing Examiners on the First day of March, 1979, in the Weyerhaeuser Room of the State Historical Building, Saint Paul, Minnesota, commencing at 10:00 a.m. An additional hearing was conducted on March 30, 1979, at the William Mitchell College of Law, Saint Paul, Minnesota.

William Augustus Clapp, III, Special Assistant Attorney General, represented the Department of Natural Resources (hereinafter "Department"). Chief Hydrologist Gene Hollenstein and Dam Safety Engineer Manouses Katsoulis also appeared representing Department Staff. The hearings continued until all representatives of associations or other interested groups or persons had an opportunity to participate and be heard concerning the adoption of the proposed rules.

Pursuant to Minn. Stat. Sec. 15.0412, subd. 4, this Report shall be available for review to all affected individuals upon request for at least five days.

Thereafter, the Department shall, if it proposes to adopt the rules as originally proposed or amended, submit a copy of the Order Adopting Rules, a copy of any additional agency findings, a copy of the rules as originally proposed, and a copy of the rules as adopted to the Chief Hearing Examiner for review pursuant to Minn. Stat. Sec. 15.052, subd. 4. The submission to the Chief Hearing Examiner shall precede review by the Attorney General. The Chief Hearing Examiner shall complete his review and submit his report to the Department on the issues of substantial changes in the rule and compliance with Minn. Stat. Sec. 15.0412 within ten calendar days. The Department will be responsible for filing the rules with the Attorney General and for notifying persons who have indicated that they wish to be notified of such filing.

Based upon all the records and proceedings herein, the Examiner makes the following:

FINDINGS OF FACT

1. On November 6, 1978, the Department filed the following documents with the Chief Hearing Examiner:

(a) A copy of the proposed rules.
(b) The Order for Hearing proposed to be issued.
(c) The Notice of Hearing proposed to be issued.
(d) A Statement of the number of persons expected to attend the hearing and estimated length of the Agency's presentation.

2. On January 29, 1979, a Notice of Hearing and a copy of the proposed rules were published at 3 State Register 1526.

3. On January 10, 1979, the Department mailed the Notice of Hearing to all persons and associations who had registered their names with the Secretary of State for the purpose of receiving such notice.

4. On February 2, 1979, the Department filed the following documents:

(a) The Order for Hearing and authorizing resolution.
(b) The Notice of Hearing as mailed.
(c) The Affidavit of Receipt of the Secretary of State's list.
(d) The Affidavit of Mailing the Notice to all persons on the Secretary of State's list.
(e) The Secretary of State's Certificate and list.
(f) The Statement of Need and Reasonableness.
(g) The names of Department personnel who will represent the Agency at the hearing together with the names of any other witnesses solicited by the Agency to appear on its behalf.

The documents were available for inspection at the Office of Hearing Examiners from the date of filing to the date of the hearing.

5. The record remained open through April 19, 1979, for receipt of written comments and statements. This was a considerable extension of the time that would normally have been available for public comment, as requested by several participating members of the public. It was accomplished by recessing and reconvening the hearing.

6. From the very beginning of this proceeding, it became clear that there was overwhelming public concern regarding these proposed rules relating to form as well as substance. Written comments from the public exceed 300 pages, and the initial hearing lasted approximately seven hours with more than 200 pages of testimony. The most frequently recurring concern centered on the need to revise the proposed definition of dam and the provisions relating to hazard classification so as to exempt small rural wildlife and flood control structures. The public also objected, generally, that the rules were too lengthy, repetitive, redundant and ambiguous. Department Staff agreed at the initial hearing to an extended recess to permit them to redraft the rules in order to meet these and other concerns. A copy of this redraft (dated March 15, 1979) was then mailed to all persons signing the register at the initial hearing. An additional hearing was conducted where the proposed redraft was presented and further public reactions solicited. The revision cut the length of the proposed rules in half and eliminated virtually all of the concerns of the public, except as hereinafter discussed.

It is specifically found that the Department has adequately documented the need for and the reasonableness of the rules as revised together with further revisions agreed to by the Department at the second hearing and in final written comments. This documentation is contained generally in the Statement of Need presented by the Department and a provision-by-provision repetition of that document is omitted in this Report in the interests of brevity.

7. It is specifically found that the redraft involves generally insubstantial, nonsubstantive, editorial revisions, needed to shorten, simplify and make the rules enforceable, equitable and more understandable. Because they fulfill this documented need, they are reasonable. The only change in the rules that might arguably be considered a major substantive change in the rules as contained in the Notice of Hearing, requiring a new notice and hearing pursuant to Uniform Rule 9 MCAR Sec. 2.111, is the definition of dam. Mr. Whitlock, Executive Secretary of the Legislative Commission to Review Administrative Rules, indicates in final written comments that the final revised language "has satisfied my original concern regarding substantial change". No one else argued that this final revised language was a substantial change, and it does not appear to be so.

8. The major objection which was not eliminated by the revised language, is the requested explicit exemption of dams inspected by the Federal Energy Regulatory Commission (FERC). Minnesota Power & Light and Northern States Power filed persuasive briefs indicating that regulation of these dams is preempted by federal law. With regard to safety inspections, this requested recommendation has been carefully considered and rejected. The First Iowa Hydro and deRham cases cited in support of preemption both involved construction of new dams and stressed the importance of avoiding the possibility of state vetoes of such projects via permitting provisions. The Department points out that the National Safety Inspection Act exemption is limited to "dams which have been constructed pursuant to licenses issued under the authority of the Federal Power Act". They argue that none of the dams which they seek to inspect were constructed pursuant to such licenses. The FERC inspection regulation (attached to the Minnesota Power & Light Brief) is considerably less strict than the rules proposed herein. It is limited to dams exceeding 35 feet in height (10 feet higher than the proposed state rule) or over 2,000 acre feet in storage capacity (as opposed to 50 acre feet in the proposed state rule). They only require one inspection every five years while the proposed state rule would require inspections annually or once every two years for large dams, depending on the hazard presented by the dam to downstream citizens and property. The federal rule further appears to contemplate additional state inspections, indicating that the consultant performing the federal inspection "shall give due consideration to pertinent reports made by or under the direction of federal or state agencies". A similar provision has been included in the proposed state rules for maximum feasible utilization of federal information in 6 MCAR Sec. 1.5032 B.2.b.(2)(d). The Department promised to eliminate further duplication by entering into an interagency agreement. Finally, as Department Staff counsel points out in final written comments, there is no need to explicitly deal with preemption in these rules. If state safety inspections have been preempted, these proposed rules will not not change the law. The courts have clearly not been reluctant to restrain preempted state action in this area where the state action threatens the congressional purpose of the federal regulatory scheme.

9. Similarly, Boise-Cascade Corporation argues that an international treaty prohibits the state from regulating two of its dams. This argument has been considered by the Minnesota Supreme Court and rejected in State v. Kuluvar, 266 Minn. 408, 123 N.W.2d 699 (1963) at 701:

> The international boundary waters of Rainy Lake are subject to concurrent regulation by the state and the International Joint Commission created by the 1909 Treaty of Ghent between the United States and Great Britain; but the mere fact of overlapping jurisdiction over such waters does not forbid state regulation of them in the absence of proof that such regulation conflicts with the exercise of jurisdiction by the dominant federal authority.

10. Further attention should be devoted by the Department upon final adoption to the concern of Mr. Whitlock and Senator Gunderson as to the affect of the proposed rules on dikes and flood levies. Department Staff indicated at the close of the first hearing that these proposed rules were not intended to govern dikes or levies because they "divert" rather than "impound" water (R. 187). Attempts to amend the rules to regulate dikes and levies may involve a substantial change requiring future amendment after a new hearing.

11. Department Staff agreed to a number of additional changes at the final hearing which should not be overlooked on final adoption, including the following: environmental assessment worksheets should be specified as a cost reduction in computing inspection fees; the exemption for dams where the hazard is limited to the owner's property should be incorporated; the "maintenance" definition should be inserted and the definition of "repair" should be tied into it by adding language such as "other than maintenance"; the federal exemption should be changed to United States' owned dams; "maximum storage elevation" and "failure or misoperation" should be added to the first clause of the dam definition and "overtopping" should be omitted from the first clause of the hazard classification section; and the reporting provision should be revised to omit the requirement of reporting "any sudden or unprecedented flood or" so that reports will only be necessary in the case of an "unusual or alarming circumstance or occurrence affecting the dam".

CONCLUSIONS

1. The Department of Natural Resources duly acquired and now has jurisdiction over the within proceeding.

2. All relevant, legal and procedural requirements of statute and rule have been complied with.

3. The Department has documented its statutory authority to adopt the proposed rules.

4. The Department has demonstrated the need for and reasonableness of its proposed rules as hereinafter recommended for adoption with an affirmative presentation of facts.

RECOMMENDATION

It is hereby recommended that the proposed rules of the Department of

Natural Resources be promulgated, approved and adopted after attention to the modifications suggested by the Findings.

Dated: May 18, 1979.

HOWARD L. KAIBEL, JR.
Hearing Examiner

RULES FOR DAM SAFETY

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6 MCAR Sec. 1.5030

A. PURPOSE

The purpose of these rules is to regulate the construction, enlargement, repair, alteration, maintenance, operation, transfer of ownership and abandonment of dams to best provide for public health, safety and welfare. In the application of these rules, the Department shall be guided by the policies and requirements declared in Minn. Stat. Ch. 105 and Sec. 116D.

The rules are pursuant to Laws of 1978, Ch. 779, Sec. 8 (Minn. Stat. Sec. 105.535) and Minn. Stat. Sec. 105.64 and are intended to be consistent with the goals and objectives of applicable federal and state environmental quality programs and policies including, but not limited to, mineland reclamation, and the management of: shorelands, flood plains, water surface use, boat and water safety, wild and scenic rivers, critical areas, recreational or wilderness areas, scientific and natural areas and protected vegetative species.

B. SCOPE

To achieve this purpose, the Commissioner hereby sets forth minimum standards and criteria for dam classification and identification of hazards to health, safety and welfare, and for permits for dam projects for water and waste impoundments and for ordering repairs.

C. JURISDICTION

These rules shall apply to all dams defined below (Section D), unless excluded in other sections of the rules. They are supplementary and complementary to the rules which establish standards and criteria for permits to change the course, current or cross-section of public waters. (6 MCAR Sections 1.5020 - 1.5023, 1.5025 and 1.5026)

Where these rules conflict with other appropriate rules and requirements, the most restrictive provision shall apply.

All provisions of 6 MCAR Sec. 1.5024 are superseded by these rules for dams as defined herein, except the section relating to water level controls.

D. DEFINITIONS

For the purposes of these rules, certain terms used herein shall be interpreted as follows.

These definitions are in addition to those contained in 6 MCAR Sec. 1.5020 (D) except where the same word is contained in both lists of definitions in which case the definitions in these rules shall apply in respect to dam safety administration.

"Alteration" means any activity which will affect the safety of a dam and/or which will result in a change in the course, current or cross-section of public waters.

"Commissioner" means the Commissioner of Natural Resources and any duly authorized representative.

"Cost" includes labor and materials; preliminary investigations and surveys; construction plant properly chargeable to the project; excluding costs of right-of-way, detached powerhouses, electrical generating machinery, and roads and railroads affording access to the project.

"Dam" means any artificial barrier, together with appurtenant works, which does or may impound water and/or waste materials containing water except:

1. Dams which are less than 25 feet, in height, and have storage capacity at maximum storage elevation of less than 50 acre feet, which shall be exempt from dam safety permit requirements if they do not have potential for loss of life resulting from failure or misoperation.

2. An artificial barrier which is not in excess of six (6) feet in height regardless of storage capacity or which has a storage capacity, at maximum storage elevation, not in excess of fifteen (15) acre-feet regardless of height.

3. Underground or elevated tanks to store water and/or waste.

4. Any artificial barrier constructed solely for the purpose of containment of sewage or biological treatment of wastewater which is under the jurisdiction of the Minnesota Pollution Control Agency.

5. United States owned dams.

6. These rules do not apply to dikes and levees constructed for flood control purposes to divert flood waters and which are not intended to act as impoundment structures.

This does not preclude the need for any permits from the Commissioner which may be required under applicable provisions of 6 MCAR Sec. 1.5020 through 1.5026 as further explained in the 6 MCAR Sec. 1.5031 section on "Classification of Dams".

"Enlargement" means any change which may raise the maximum storage elevation of the dam.

"Height" means the vertical distance from the natural bed of the stream or watercourse measured at the downstream toe of the dam or from the lowest elevation of the outside limit of the dam, if it is not across a stream channel or watercourse, to the maximum storage elevation.

"Maintenance" means any work which will not result in a change in the hydraulic capacity of the structure or entail any changes in the structural character of the dam.

"Maximum Storage Elevation" means the highest elevation to which water or waste materials can be effectively stored behind the dam on either a temporary or permanent basis, whichever is greater.

"Owner" means the owner or lessee of the property to which the dam is attached, unless the dam is sponsored by a governmental agency which will be responsible for operation and maintenance of the dam, in which case that sponsoring agency shall be considered the "Owner".

"Repair" means any work which will change the hydraulic capacity of the structure or entail any changes in the structural character of a dam.

"Shall" is mandatory and not permissive.

"Surface" shall be determined by multiplying total dam length by average height.

"Total Dam Length" means the maximum horizontal distance between the outer limits of all artificial containment structures, including any artificially constructed dike, which are essential to containment, but does not include the length of emergency spillways which are located outside the abutments of the dam.

E. SEVERABILITY

The provisions of these rules shall be severable, and the invalidity of any paragraph, subparagraph or subdivision thereof shall not make void any other paragraph, subparagraph, subdivision or any other part.

6 MCAR Sec. 1.5031 CLASSIFICATION OF DAMS

All existing and proposed dams shall be exempted or classified by the Commissioner into the following three (3) hazard classes.

Those dams where failure, misoperation or other occurrences or conditions would probably result in:

Class I - any loss of life or serious hazard, or damage to; health, main highways, high-value industrial or commercial properties, major public utilities or serious direct, or indirect, economic loss to the public.

Class II - possible health hazard or probable loss of high-value property, damage to secondary highways, railroads or other public utilities

or limited direct, [redacted] indirect, economic loss to th[redacted]ublic other than that described in Class III.

Class III - property losses restricted mainly to rural buildings and local county and township roads which are an essential part of the rural transportation system serving the area involved.

Any dam whose failure, misoperation or other occurrences or conditions would result only in damages to the owner and would not otherwise affect public health, safety and welfare as described in Classes I, II and III, shall not be subject to this hazard classification.

A dam which is not classified as a Hazard Class I, II or III dam, and those which are not included in the 6 MCAR Sec. 1.5030 D. definition of dam, shall be subject to applicable provisions of 6 MCAR Sec. 1.5020 through Sec. 1.5026 and shall not be subject to these dam safety rules.

Changes in development in the vicinity of the dam may result in future reclassification.

6 MCAR Sec. 1.5032 EXISTING DAMS

A. GENERAL PROCEDURES FOR ALTERATION, REPAIR OR REMOVAL

1. Application.

Before commencing action, the owner shall make a separate application for each existing dam proposed to be changed upon forms provided by the Commissioner, except as provided in Section A.2 for emergencies. The application shall contain:

a. Name and address of owner(s);

b. Proposed changes;

c. Maps, plans and specifications which set forth pertinent details including location, type, dimensions and storage capacity; and

d. Proposed date of start and completion of construction.

A filing fee of $15.00 shall accompany the application in the form of a check or money order payable to the State Treasurer.

2. Emergency Work.

a. Actions by the Owner: Where immediate action is necessary for public health, safety and welfare, repairs may be started, but the owner shall notify the Commissioner at once. As soon as practicable, the owner shall apply for a permit for the emergency and necessary permanent repairs.

b. Commissioner's actions: Where necessary to protect public health, safety and welfare, if the condition of any dam or impoundment is imminently dangerous to the safety of life or property or imminent floods threaten the safety of a dam or impoundment; the Commissioner may, in an emergency, require and enforce lowering or completely emptying of the water level from the impoundment and taking other steps essential to safeguard life and property.

3. Removal.

Before commencing removal, the owner shall comply with the application requirements of Section A.1, above. After removal, the owner shall submit evidence as to the manner in which the work was performed and the conditions obtained after the removal. The Commissioner shall inspect to determine that a sufficient portion of the dam has been removed to eliminate the hazard directly attributable to the presence of the dam.

B. INSPECTIONS

1. Hazard Classification.

The Commissioner shall make initial inspections of each dam in the state to determine the appropriate hazard classification or exemption according to criteria in 6 MCAR Sec. 1.5031.

2. Dam Safety.

a. The Commissioner shall make an initial detailed systematic

technical inspection and evaluation of every Class I, II, or III dam to assess the general safety conditions, including a:

(1) review and analysis of available data on the design, construction and operation;

(2) visual inspection of the dam and downstream and upstream areas, including (a) an examination of significant structural, geotechnical, hydraulic and hydrologic features including, where applicable, electrical and mechanical equipment for the operation of control facilities; (b) evidence of leakage, erosion, seepage, slope instability, undue settlement, displacement, tilting, cracking, deterioration and improper functioning of drains and relief wells; and (c) adequacy and quality of maintenance and operating equipment and procedures.

(3) report on general condition including, when possible, an assessment of storage capacity, hydraulic and hydrologic capabilities, structural stabilities, and any other conditions which constitute a hazard based upon current prudent design considering the size and hazard class of the dam. The safety evaluations involve constraints on water control such as blocked entrances, restrictions on operation of spillway and outlet gates, if any, inadequate energy dissipators or restrictive channel conditions, significant reduction in impoundment capacity by sediment deposits and for waste impoundments, the material balance. Where essential design data are lacking, evaluations of watershed characteristics, rainfall and impoundment records may be used to evaluate effects of the dam.

The report shall determine the need for: (a) emergency measures or actions; (b) corrective actions relating to design, construction and operation; and (c) additional detailed studies, investigations and analyses.

b. Timing.

Subject to the availability of staff and funds:

(1) The Commissioner shall make initial inspections of all Class I, II, and III dams as soon as reasonably possible based on the degree of hazard involved.

(2) After the initial detailed inspections, the Commissioner shall make periodic inspections of dams based on the following schedule: (a) Class I dams, at least one time every year; (b) Class II dams, at least one time every two years; and (c) Class III dams, at least one time every four years.

(3) The Commissioner shall utilize the services of governmental agencies to the maximum extent feasible to provide for periodic inspections.

3. Reports On Inspections.

Upon completion of each inspection, the Commissioner shall notify the owner of the dam, in writing, of the results of the inspection and if the dam needs corrective action, the Commissioner shall order such action.

C. TRANSFER OF OWNERSHIP

The owner shall not transfer the ownership of any Class I or II dam without a permit from the Commissioner. For Class III dams, the owner, or the party to whom a dam is transferred, shall apply to the Commissioner for a permit for the transfer of ownership within thirty (30) days after the ownership changes. Permits shall be issued based on evaluation of the hazard class, the conditions and the financial capabilities of the transferee.

No state agency or political subdivision may purchase or accept as a gift any privately owned dam subject to Department permit requirements until after compliance with the Commissioner and legislative action provided in Minn. Stat. Sec. 105.521.

D. OPERATION AND MAINTENANCE

1. Responsibilities: The owner shall operate and maintain the

dam. Regulation of maintenance and operation for public health, safety and welfare is vested with the Commissioner.

2. Reports and Records: Owners may be required to keep records and report on maintenance, operation, staffing and engineering and geologic investigations and any other data necessary to protect the public health, safety and welfare. In addition, the owner shall fully and promptly advise the Commissioner of any unusual or alarming circumstance or occurrence affecting the dam.

E. TERMINATION OF OPERATIONS AND PERPETUAL MAINTENANCE

1. Unless the dam is removed, the owner shall perpetually maintain the dam and appurtenances so as to ensure the integrity of the structure.

2. The Commissioner may impose such requirements as may be necessary prior to the ultimate termination of the owner's operations to ensure that the owner will be financially responsible for carrying out the activities required for perpetual maintenance and that adequate funding will exist.

3. In respect to dams utilized for waste disposal, the owner shall prepare and submit plans for termination of operations and perpetual maintenance which will address the owner's plans for both an unanticipated or premature termination of operations and for the ultimate intended termination of operations. The plans for termination of operations and perpetual maintenance shall, at a minimum, address the following issues, where applicable.

a. Perpetual maintenance and safety including adequate monitoring programs.

b. Disposal and treatment of ponded and channeled waters.

c. Monitoring and mitigation of surface and groundwater pollution.

d. Silt, sedimentation and erosion control.

e. Vegetation and landscaping.

F. REPORTS TO THE LEGISLATURE ON PUBLICLY OWNED DAMS

As required by Laws of 1978, Ch. 779, Sec. 7 (Minn. Stat. Sec. 105.482), the Commissioner shall make an annual report to the Legislature on the status of dams owned by the state or local governmental units which shall include recommendations for action including any requests for state share or matching funds for grants-in-aid to local governments.

6 MCAR Sec. 1.5033 NEW DAMS OR ENLARGEMENTS

A. CLASS III DAMS, WAIVERS

For Class III dams which are sponsored by a governmental agency which will be responsible for operation and maintenance or for which the design, construction supervision, and inspection is performed by a federal agency; the Commissioner may waive certain details of the required submittals, provided that the federal agency will furnish the Commissioner with adequate facts on the design and construction inspection to allow the Commissioner to adequately evaluate the permit and approvals.

B. SPECIFIC PROCEDURAL REQUIREMENTS

1. Permit Application, Preliminary Report and Filing Fees.

a. Permit Application. A separate application including a preliminary report for each new dam or each dam proposed to be enlarged, shall be filed upon forms provided by the Commissioner which shall contain the following:

(1) name and address of the owner(s) or prospective owner;

(2) purpose;

(3) location, type, size and height of the dam; and

(4) storage capacity of the impoundment.

For waste impoundment dams, the permit application shall include facts necessary for the issuance of a permit which extends throughout the

life of the impoundment project.

b. The Preliminary Report. The preliminary report shall consist of:

(1) A general statement setting forth the effect on the environment.

(2) Maps showing the location, County, Township and Section lines; the outline of the impoundments; the location of state, county and township roads; the locations of utilities, e.g. pipelines, transmission, telegraph and telephone lines; the topography; and other structures or facilities including dwellings affected by the proposed dam. State, county and U.S.G.S. maps and aerial photographs may be used for this purpose.

(3) A written report of surface conditions, i.e. geology, topography, which is based on a field examination by the applicant's engineer or other qualified personnel.

(4) Typical cross-sections of the dam accurately showing elevations, proposed impoundment levels and top width.

(5) Logs of borings in the foundation and in the borrow areas, and results of seismic and resistivity subsurface investigations, when they are readily available.

(6) Preliminary design assumptions, operations aspects, tentative conclusions and references. The design assumptions shall pertain to such hydrologic features as drainage area, rainfall data, runoff, inflow, area-capacity-elevation data and flood routing, in addition to structural, geologic and geotechnical assumptions.

(7) A preliminary cost estimate.

(8) Where applicable, future plans on ultimate project size including dams and impoundments.

(9) A general description of all other activities and

elements related to and part of the total dam project, such as operational plans and details of smaller dams, dikes, diversions, reclaim water facilities and other facility and utility lines including pipelines, roads and railroads. The report shall identify each element or activity of the total dam project which would require a permit under the provisions of 6 MCAR Sec. 1.5020 - Sec. 1.5026.

c. Filing Fees.

Each application must include a $15.00 fee in the form of a check or money order payable to the State Treasurer.

2. Professional Engineer's Requirements.

The applicant must engage professional engineer(s) registered in the State of Minnesota or acting solely as officers or employees of the United States as provided in Minn. Stat. Sec. 326.13, subd. (3), who are proficient in dam engineering to prepare the engineering documents, plans and specifications, to inspect the construction, or enlargement, and to establish operation and maintenance procedures for the structure.

3. Final Design Requirements.

Upon acceptance and agreement by the Commissioner of the preliminary report, the applicant shall submit, for his approval, a final design report, together with plans and specifications and the initial inspection fee (6 MCAR Sec. 1.5034 K.2.). The final design report shall include, but not be limited to, the following:

a. General description of the project, such as its service life, production rates, required storage and area(s); geological considerations such as physiography, topography, geology, seismicity, groundwater conditions and maps; hydrologic studies such as physical features, climatology, design

storm and design flood characteristics, flood routing, water-material balance, freeboard requirements, dam-break flood; geotechnical information, such as rock-soil sampling and logging, geophysical investigations, field and lab testing, instrumentation data; considerations of construction materials and their properties, such as quantities required, borrow and aggregate locations and volumes, field and lab work and investigations, concrete, waste materials generation and placement techniques; investigation of the stored waste materials such as generation, transportation, mechanical/chemical/special testing, disposal practice.

b. Analytical determinations, such as seepage and underseepage studies, stability, deformation and settlement analysis; analytical and design details of facilities, such as dam, foundation, impoundment, abutments, spillways (for the purpose of these rules, spillway means any facility appurtenant to the dam available to discharge excess water and/or waste from the impoundment) or decant facilities, diversions, outlet works, instrumentation; operational aspects, such as impoundment operating criteria, initial filling criteria, responsibility and coordination, emergency procedures and warning systems; air, water and solid pollution controls, sedimentation and erosion controls; operational and post-operational maintenance and abandonment considerations; surveillance and inspection programs.

c. A detailed cost estimate.

4. Plans and Specifications.

a. Plans shall consist of a bound portfolio of the drawings with all sheets being of the same size, of such scale that specifications can be drafted, and construction accomplished.

b. Specifications shall contain:

(1) general provisions, specifying the rights, duties and responsibilities of the owner, designer and contractor; and the prescribed

order of work; and

(2) technical provisions describing approved work methods, equipment, materials and desired end results; and

(3) special conditions.

5. Permit Standards.

Approval or denial shall be based on the potential hazards to the health, safety and welfare of the public and the environment including probable future development of the area downstream or upstream. The applicant may be required to take measures to reduce risks, and the Commissioner shall furnish information and recommendations to local governments for present and future land use controls to minimize risks to downstream areas.

The Commissioner shall determine if the proposal is adequate with respect to:

a. For Class I, a showing of lack of other suitable feasible and practical alternative sites, and economic hardship which would have a major adverse effect on population and socio-economic base of the area affected.

b. For Class II, a showing of lack of other suitable feasible and practical alternative sites and that the dam will benefit the population or socio-economic base of the area affected.

c. The need in terms of quantifiable benefits.

d. The stability of the dam, foundation, abutments and impoundment under all conditions of construction and operation, including considerations of liquefaction, shear or seepage failure, overturning, sliding, overstressing and excessive deformation, under all loading conditions including earthquake. This determination must be based on current, prudent engineering practice, and the degree of conservatism employed must depend on hazards.

e. Discharge and/or storage capacity capable of handling the

design flood based [redacted] current, prudent engineering p[redacted]ctice and hazard classification.

f. Compliance with prudent, current environmental practice throughout its existence.

6. Work Inspection and Construction Reports.

a. Conformity with Approved Designs, Plans and Specifications.

(1) The permittee shall be responsible for providing adequate controls of construction and operation activities and for the development of data in the ordinary course of those activities on design, construction and operation assumptions. The owner may engage a professional engineer to operate and inspect the construction, but the designer should also periodically monitor construction.

(2) All construction shall be carried out in accordance with approved design, plans and specifications. No alteration, modification or addition to the approved designs, plans, and specifications that could adversely affect the safety or environmental impact of the dam shall be made by the permittee without prior permission of the Commissioner. Such approvals shall be provided, if a proper margin of safety is maintained, as rapidly as possible to preclude interference with construction work schedules. Emergency short term revisions may be made by the permittee followed by prompt notice to the Commissioner. Records of alterations, modifications, or additions to the approved design, plans and specifications, for which approval of the Commissioner was not required shall be submitted with the Construction Report (Section 1.5033, B.6.c.).

(3) The Commissioner shall make inspections for the purpose of securing conformity with approved designs, plans and specifications and shall require the permittee to perform, at the permittee's expense, work or tests as found necessary to disclose sufficient information to determine if

there is conformity

(4) If, at any time as work progresses, the Commissioner finds that changes are necessary to protect health, safety, welfare and the environment, he shall order the permittee to revise designs, plans and specifications.

(5) At his discretion, the Commissioner may observe and approve foundation preparation and may approve construction material placement on an intermittent or continuing basis when field conditions dictate. The Commissioner shall be notified at least three (3) days in advance of start of construction.

b. Permanent Markers.

At least one (1) permanent marker for vertical and horizontal control shall be established in the natural ground by the permittee in the vicinity of each dam so as to be accessible and protected against disturbance throughout its existence. The permanent marker for vertical control must be based upon datum and degree of accuracy based upon considerations of the hazards involved and the size of the dam, as specified by the Commissioner.

The permittee shall submit the locations of these permanent markers plotted on the best available maps or plans within time limits prescribed in the permit.

c. Construction Report.

The permittee may be required to submit monthly reports on construction observation and quality control when construction is complex or hazardous, including: Daily construction documentation; foundation preparation and treatment; quality control tests; records and summaries of actual tests of foundation and construction materials, cut-off trench, grouting, etc; instrumentation installation and maintenance of records and readings; geologic mapping, if any, of exposed foundations; logs of drill holes and other exploration features, if any, completed during construction; review

and evaluation of disclosed field conditions by the designer; and any other items which may be pertinent to a construction quality assurance program.

7. As-Built Plans and Data.

Immediately upon completion of construction, the permittee shall file supplementary drawings or descriptions of the dam as actually constructed, any any other items which may be of future value bearing on the adequacy and permanency of the dam.

In enlargements, the data need apply only to the new work.

8. Statement of Completion and Affidavit of Cost.

Within ninety (90) days following completion of construction, the permittee shall notify the Commissioner, by certified mail, including a statement of the designer or professional engineer in charge of construction inspection that to the best of knowledge, the dam was completed in accordance with the approved design, plans and specifications and any revisions thereof.

As soon as practicable thereafter, the permittee shall file an affidavit stating the actual cost in detail or that the permittee is unable to report the actual cost stating the reasons therefor. In the latter event, the Commissioner shall make at the owner's expense an appraisal of the cost of construction or enlargement and determine what further fee, if any, is required. If a further fee is required, the Commissioner shall notify the permittee by certified mail of the amount within fifteen (15) days including notice that permittee may appear within sixty (60) days thereafter to protest the amount of the fee, in whole or in part and the sufficiency of the appraisal upon which such determination was based.

9. Issuance of Impoundment Approval.

Impoundment approvals may be necessary for Class I and Class II dams to allow adequate time for inspection before actual impoundment begins.

The type, location, hazard involved and the purpose served by the dam will be considered in respect to the degree and nature of impoundment approval needed. Certain waste disposal dams which will not be constructed to maximum storage elevation in five years will require a series of impoundment approvals for various stages of construction.

Pending issuance of impoundment approval (or reissuance in the event of termination), where required the owner of the dam shall not, through action or inaction, allow an impoundment.

The impoundment approval shall contain such terms and conditions as the Commissioner may prescribe.

The Commissioner may also revoke or amend the terms and conditions of any approval.

M.S. § 105.44, Subd 9 + above text sets forth stds.

10. Performance Reports.

The permittee may be required in the case of complex or hazardous dams to submit yearly a performance report detailing the instrumentation data and analysis and interpretation of these data as they relate to the safety of the dam and design assumptions. The frequency of submission may be modified if field conditions so dictate.

6 MCAR Sec. 1.5034 MISCELLANEOUS PROVISIONS

A. LIMITED STATE LIABILITIES

The granting of a permit for a dam shall not impose any liability upon the State of Minnesota, for its employees or consultants, for the activities of the permittee. Any permit shall be permissive only and shall not be construed as estopping or limiting any legal claims of persons other than the State against the permittee, or as estopping or limiting any legal claims of the State against the permittee for violation of any of the terms or conditions of the permit. No action shall be brought against the State or the Commissioner by virtue of:

1. Any approval.

2. The issuance or enforcement of orders.

3. Control and regulation.

4. Measures taken to protect against failure during an emergency.

B. LIABILITY OF OWNER AND PERMITTEE

Nothing in these rules shall be construed to relieve an owner of a dam or permittee of the legal duties, obligations or liabilities incident to the ownership or operation of the dam. The permittee and owner assume all risks and liabilities.

C. OWNER'S RIGHTS

Nothing in these rules shall be construed to deprive any owner of recourse to the courts.

D. INSPECTIONS

Owners of dams shall allow the Commissioner prompt access to and inspection of all records, plants, structures, facilities and operations at all reasonable times. Entry is subject to reasonable compliance with the owner's safety rules and avoidance of unreasonable impairment of or interference with construction and operation. Inspection shall be limited to testing and observing, rather than supervising and shall not relieve the owner from the full responsibility of providing adequate inspection and supervision.

E. COMPLIANCE WITH OTHER LAWS

The owner of a dam shall comply with all other state and federal laws and regulations and shall obtain such other permits as may be required including particularly any laws and rules regarding mineland reclamation.

F. ACQUISITION OF PROPERTY

Where the activities authorized by a permit involve the rights or interests of any other persons, or of any public interests, the permittee, before proceeding, shall acquire all necessary interests or permissions,

including paying the costs of the alteration, relocation or replacement of any publicly owned facility.

G. ASSIGNMENT

Permits may be assigned in whole or in part only if the Commissioner is notified and approves the assignment in writing.

Provisions of the permit shall extend to and bind the successors in authority of the Commissioner and the legally assigned successors in interest of the permittee.

H. WARNING SYSTEMS AND EMERGENCY PROCEDURES

1. Class I dam owners shall prepare and file for approval a contingency plan for notifying any persons whose lives, property or health may be endangered by failure, misoperation or other circumstances or occurrence affecting the dam; identifying the most practical and expeditious means for warning considering the time factor involved based on the proximity of the dam to affected parties.

2. If there is no feasible or practical means to provide for adequate evacuation warning in sufficient time if a catastrophe occurs, the owner shall be responsible for notifying affected downstream property owners of that fact.

I. PERMIT AND HEARING PROCEDURES

These rules, 6 MCAR Sec. 1.5030 - Sec. 1.5034, are subject to the permit and public hearing provisions of Minn. Stat. Sec. 105.44 - Sec. 105.462 and Sec. 105.64, including:

1. The Commissioner must act on permit applications within thirty (30) days of the time that all required data and fees are filed in his office.

2. The Commissioner may cancel or modify a permit at any time if the Commissioner deems it necessary for any cause for the protection of the public interests.

3. Whether or not a dam is under permit, if the Commissioner determines that it is unsafe or needs repair or alteration, he shall notify the owner to repair, alter or remove the dam as the exigencies of the case may require.

4. An order requiring immediate action is effective on the date thereof, but shall not be in effect for more than thirty (30) days from that date unless the permittee is on the same date mailed written notice of the order which includes notice of a Minn. Stat. Sec. 105.44 public hearing on a date not more than thirty (30) days from the date of the notice.

5. If at any time during construction of a project, the Commissioner finds that the work is not being done in conformance with approved designs, plans and specifications, except as provided in 6 MCAR Sec. 1.5033 B.6.a.(2), the Commissioner shall notify the permittee and shall order immediate compliance and may order that no further work be done until such compliance has been effected and approved.

6. If the permittee fails to comply with approved designs, plans and specifications or if conditions are revealed which will not permit the construction of a safe dam, the permit may be revoked.

7. Acceptance of Permit or Approval. Initiating any work by the permittee, authorized in an issued permit or approval, constitutes acceptance of all terms and conditions contained therein.

J. REQUIRED INFORMATION AND WAIVERS

When necessary to assess the safety of a dam or proposed project, the applicant or owner may be required to submit additional information at his own expense. Whenever information or conditions required by these rules is unnecessary, the Commissioner shall waive those provisions and shall allow appropriate revisions to make the requirements less burdensome.

K. INSPECTION FEES

1. Exemption.

No inspection fee shall be charged for dams owned or sponsored by a governmental agency or for any Class III dam for which the design, construction supervision, and inspection is provided by a federal agency.

2. The initial fee required by 6 MCAR Sec. 1.5033 B.3. shall be based on the following formula and no fees pursuant to 6 MCAR Sec. 1.5000 shall be charged.

(a) For the first $100,000 of estimated cost (as defined in 6 MCAR Sec. 1.5030 D., that portion of engineering evaluations and studies relating to safety which is also part of the final design report performed for the applicant which were included with environmental assessment worksheets and with Environmental Impact Statements required by law shall be subtracted provided that the applicant provides a notarized detailed accounting of expenditures), a rate of two and one-half percent.

(b) For the next $400,000, one and one-half percent.

(c) For the next $500,000, one percent.

(d) One-half of one percent of all costs in excess of $1,000,000.

(e) If the final total cost exceeds the estimate, the difference as provided in 6 MCAR Sec. 1.5033 B.8.

For dams which will not be constructed to maximum storage elevation within five years of the date construction begins (such as dams for storage of mining waste materials) computation will be based on applicant's work schedule outlining proposed staging and a certified estimate of costs based on staging intervals not exceeding five years in duration. At the end of each stage, or at intervals not exceeding five years in duration, until completion, the applicant shall file an affidavit of actual costs for each

stage or interval not exceeding five years. Whenever the actual cost exceeds the estimate the applicant shall pay the difference.

3. Periodic fees shall be charged to owners for each year an inspection is made pursuant to Section 1.5032 B.2.b., of $30.00 per dam plus an additional fee based on surface (as defined in 6 MCAR Sec. 1.5030 D.) of $0.01 per square foot for the first 1,000 and $0.001 for each square foot in excess of 1,000; payable on or before the end of the state fiscal year, June 30.

4. The Commissioner shall keep annual records of inspection costs which shall be provided upon request of any applicant who paid inspection fees.

Statement Need a.

STATE OF MINNESOTA
DEPARTMENT OF NATURAL RESOURCES

STATEMENT OF NEED AND REASONABLENESS

RECEIVED
NOV 2 3 1978
OFFICE OF HEARING EXAMINERS

PROPOSED RULES FOR DAM SAFETY

6 MCAR § 1.5030

Purpose: These rules were drafted in response to legislative directives contained in Minn. Stats. Ch. 105 and 116 and pursuant to laws of 1978, Ch. 779. They are intended to provide maximum protection for public health, safety and welfare in regulation of all activities involving new and existing dams. The Minnesota laws further supplement and complement Federal laws contained in the National Dam Safety Act PL 92-367 and directive of the Federal Government of December 30, 1977, which provide for a national program for the inventory and inspection of non-federal dams in cooperation with each state. The rules are necessary to meet state laws and to provide a state dam safety program which meets federal standards.

Scope: The rules relate to existing dams and new dams and include provisions concerning:

1. Minimum standards for dam classification and identification of risks and hazards to public health, safety and welfare.

2. Minimum standards and criteria for the review, issuance and denial of permits for new and existing dam projects for water and waste impoundments in and adjacent to public waters.

3. A fee schedule to defray a part of the state's costs in inspecting dams.

The rules apply to dams used for impounding water and waste materials containing water such as taconite tailings and fly ash. It is important that dams for these activities be carefully monitored and regulated in order to provide maximum protection to the public in the event of failure which could release the water and waste materials and potentially could result in loss of life, major economic loss and serious environmental damage.

Jurisdiction: It is also important to note that the dam safety rules apply to dams constructed in and across public waters as defined by Minn. Stats. Ch. 105, as well as at sites adjacent to public waters. The need is to protect public health, safety and welfare in the event of dam failure or other occurrence regardless of the facts that public waters are directly or indirectly involved, which is consistent with the definition of a dam in the Public Law 92-367, and in compliance with previous regulatory authority exercised by the Department.

Although there are rules governing permits for changes in public waters (6 MCAR § 1.5020-1.5026) these rules deal more specifically with dams and are especially concerned with the safety aspects of dam construction, operation, removal, abandonment and maintenance.

If there is conflict with these rules and others, those which are more restrictive shall apply.

The section on water level controls in 6 MCAR § 1.5024 is not superceded by these rules since it is more specifically designed to address particular types of dam operation relating to control of lake levels and the content of 6 MCAR § 1.5024 is not in conflict with provisions of these rules.

Definitions: The definitions used in these rules are designed to apply to considerations concerning dams and their construction, operation and management.

The definition of "dam" is based primarily on the National Dam Safety definition contained in PL 92-367. Figure 1 attached, graphically shows the height-storage relationships of dams. The limiting definition is intended to exclude smaller structures, which because of their size and character, would not cause serious hazards to public health, safety and welfare in the event of failure or overtopping.

6 MCAR § 1.5031 Classification of Dams

Dams are classified in order to provide a measure of the risk and hazard the dams pose in respect to public health, safety and welfare. The classification

system consists of 4 classes ranging from Class I, which dams pose the highest degree of hazard to life, health and properties, to Class IV, which dams have the lowest potential hazard for life, health and property.

The classifications are based on a similar system in use in Ohio ("Ohio Dam Permit and Inspection Laws", and "Administrative Rules 1972") and the first two classes closely parallel the existing National Dam Safety classes as contained in Appendix D of the directive of the Federal Government, December 30, 1977.

6 MCAR § 1.5032 Procedures for Existing Dams

This section is necessary to provide a system for dealing with dams which were constructed before these rules become effective. They are necessary in order to provide guidelines and controls over safety aspects relating to the existing dams. It should be noted that many dams in this category are quite old and often in a deteriorated condition. This section includes provisions which further amplify Minn. Stats. Ch. 105.42, Subd. 2, relating to emergency actions and to removal of dams, necessary to prevent danger to public health, safety and welfare.

Since a number of the existing dams were built before the laws requiring state permits under Minn. Stats. Ch. 105, it is necessary that these dams be carefully inspected and analyzed to determine the degree of hazard they may pose and the condition of the dam. The provisions relating to dam safety inspections under 6 MCAR § 1.5032 D are based on considerations of the provisions of the Ohio law and regulations (NRd-11) the California law and regulations (Chapter 4) and the Federal National Dam Safety guidelines contained in Appendix 1, "Recommended Guidelines for Safety Inpsection of Dams", Appendix D, Department of Army, Office of Chief of Engineers. They are an orderly listing of the types of determinations necessary to provide for proper inspection of dams.

6 MCAR § 1.5032 D.2.c. sets forth a time table for periodic inspections of dams in order to insure that dams having hazards to public health, safety and

welfare are continuously maintained in a safe condition and in order to assure that any newly occurring structural problems can be dealt with in a timely manner. The timing of the inspections is directly related to the Hazard Class of the dam, the higher the class the more frequent the inspection, and the fact that with a limited staff, it is impossible to inspect all dams in the 3 classes each year.

Provision 6 MCAR § 1.5032 E. is a restatement of Sec. 5, Ch. 779, laws of 1978 and is intended to prevent poorly constructed and maintained dams from being transferred by purchase or gift to a state or local governmental entity without certain examinations, reports and legislative considerations. Past experience has shown that privately-owned dams in poor condition have at times been transferred to government agencies and the government agency within a relatively short period of time has had to seek and expand considerable public funds for repair and reconstruction of the dam.

6 MCAR § 1.5032 F. Operation and Maintenance is essential to insure that dams are properly maintained in order to minimize risks to public health and safety.

6 MCAR § 1.5032 G. Termination of Operation and Perpetual Maintenance is designed to assure that owners of dam keep the dams in proper repair and operation even if the dam will no longer be used for the original purpose for which it was constructed due to the inherent safety problems associated with its mere existence. This section is particularly important in respect to dams for waste disposal.

6 MCAR § 1.5032 I. and J. contain provisions which reiterate and amplify specific statutory conditions as noted therein relating to Permit Cancellation, Suspension or Alteration and Reports to the Legislature on Publicly-Owned dams.

6 MCAR § 1.5033. Procedure for new dam or enlargement of dams sets forth criteria and standards for the construction of new dams and for any changes in or addition to existing dams which raises or may raise the storage and/or

elevations of water or waste impounding dams. (See definition of enlargement.)

Each of the provisions of this section are intended to provide a systematic method for applying for permits, for reviewing permits and for insuring that the construction authorized at various stages under the permit process is accomplished in the best possible manner to provide for public health, safety and welfare in construction of a safe dam which will have minimized risks to the maximum possible extent. These provisions are based largely on the California Dam Safety law, and the Model law for State Supervision of Safety of Dams, published in 1970.

6 MCAR § 1.5033 B.1.b. The Preliminary Report is necessary to allow the DNR to properly evaluate the proposed dam in respect to its location and proximity to people and public and private facilities, its size and character, the purpose for the dam and a review of environmental aspects.

The filing fee provided for in 6 MCAR § 1.5033 B.1.c. is only to defray a part of the states costs of receiving, recording and processing the permit application as required by Minn. Stats. 105.42, Subd. 10.

6 MCAR § 1.5033 B.3. Registered Professional Engineers Requirements is necessary to insure that the construction of dams is accomplished in the most professional, experienced and qualified manner possible. This provision is a basic requirement of other recognized laws and rules including the California law, Ohio law, Pennsylvania law and National Dam Safety Guidelines.

6 MCAR § 1.5033 B.3. Final Design Requirements is needed to provide the detailed facts which must be considered in constructing the dam. This requires considerable factual information to be supplied to the DNR by the applicant in order to allow the DNR to properly review and assess the proposal to determine if it will meet the best available dam engineering practice and will pose minimum risk to the public.

The section provides for relaxation of the requirements based on the size and character of the dam and the hazards and risks involved so that applicants for

for permits for small hazard dams will not have to provide unnecessary data.

6 MCAR § 1.5033 B.6. Payment of Dam Inspection Fees is established to provide a continuing means for the state to defray a large part of the costs to the state for the dam safety inspection program. This provision is established to meet the requirements of Sec. 6, Ch. 779, laws of 1978 which requires a fee schedule to cover the cost of dam inspection, but also provides that no such fees shall be charged to any state or federal agency or political subdivision of the state.

This section is based on the Model Law and the California dam safety inspection fee schedule which have been in existence for many years and has been determined to be an equitable and reliable fee schedule. (California Water Code, Division 3, Chapter 6.) The fee system consists of 2 types of fees:

1. An annual inspection fee which shall be charged to each owner of a Class I, II or III hazard dam (Hazard Class IV dams are exempt). This cost will defray a part of the states cost in making field examinations of the dams.

2. A dam inspection fee for the construction of a new dam or for enlargement of an existing dam.

This section provides that if the actual cost of the inspection by the DNR exceeds the amount collected under 6 MCAR § 1.5033 B.6.b., the DNR may provide an itemized and certified statement of such additional costs and the applicant must pay such costs.

The fees recoverable under this provision are all placed in the General Fund and, although they are considered by the Legislature in establishing budgets for the Dam Safety program each Legislative session, none of the collected fees are specifically dedicated to the Dam Safety Program. The fees do help reduce the public cost of the dam safety program. The exact amount of fees collected and the degree of reduction in public costs will only be determined after several years of experience with the program. It is very important to note that no

inspection fees may or will be charged to state or federal agencies or to local governmental subdivisions of the state.

6 MCAR § 1.5033 B.7. Commissioner's Approval and Issuance of Permits, which is a statutory authority vested to the Commissioner (Minn. Stats. Ch. 105), is necessary to explain the Commissioner's responsibilities in reviews and issuance of permits and to further relate to the requirement of Sec. 8, Ch. 779, laws of 1978 requires, "Rules...shall classify structures to adequately define risks and hazards involved in relation to public health, safety and welfare." This section further addresses the relationships of risks and hazards as required and sets more restrictive considerations for High Hazard dams. The section includes advice to local governments regarding land use considerations in order to minimize risks and to prevent land developments which could increase the hazard class.

This section also stresses the engineering aspects of construction as well as the environmental hazard considerations which must be made.

6 MCAR § 1.5033 B.8. Work Inspection and Construction Reports. This section is necessary to insure that the construction of the dam is being carried out with the best quality control so that the structure is as safe as reasonably possible. These controls, during the construction, are necessary so that there is assurance that new factors revealed during foundation preparation and borrow area development are taken into consideration and the design accordingly modified, and also so that the construction be carried out in compliance with the approved design.

The requirement of 6 MCAR § 1.5033 B.8.b. regarding acceptance of Permit or Approval, is needed to insure that once an applicant accepts a permit he will be bound by the provisions of the permit. Alternatively, the applicant may demand a contested case hearing in the manner specified by law in Minn. Stats. 105.44, if he so choses.

6 MCAR § 1.5033 B.8.c. requires establishment of permanent markers for surveying control elevations and distances. These control markers prove very valuable during future inspections of the structure and also during emergencies. Additionally, these markers would be used during the construction of the structure.

6 MCAR § 1.5033 B.8.d. Construction Report is necessary to provide a continuing record of construction facts which can provide evidence of engineering reliability and adherence to the design and the construction plans and specifications in the event such facts become necessary in a future question of dam safety involving the dam.

6 MCAR § 1.5033 B.9. As-Built Plans and Data are needed so there is a factual record to show the construction details and facts of the dam as it was actually built, because by the time the construction is complete, the original design and plans will have, in all probability, changed several times due to new factors revealed subsequent to the submission of the final design and the issuance of the permit.

6 MCAR § 1.5033 B.10. Statement of Completion and Affidavit of Cost is needed to substantiate that the dam was built as required, and to provide facts on the actual costs of construction which are considered in the schedule of fees required under 6 MCAR § 1.5033 B.6.

6 MCAR § 1.5033 B.11. Issuance of Impoundment Approval is needed to insure that the dam and its reservoir are capable of impounding water and/or waste materials before the actual impoundment takes place. This section is particularly important in regard to waste impoundments due to the environmental restrictions associated with them.

Sections A, B, C and D of 6 MCAR § 1.5034, Miscellaneous Provisions, are all directed at addressing the state's liabilities, and the liabilities, responsibilities and rights of dam owners and permittees. Most of these provisions have been established over a number of years through the statutes and laws and in conditions

of permits issued by the DNR.

6 MCAR § 1.5034 E. Inspections further explains the provisions of Sec. 4, Ch. 779, laws of 1978 relating to access for inspection of dams.

6 MCAR § 1.5034 F. and G. provide that owners of dams and permittees must also meet conditions and requirements of other laws and approvals.

6 MCAR § 1.5034 K. is necessary to insure that owners of high hazard dams will take all feasible and practical steps to provide warnings to parties who may be adversely affected in an emergency situation involving the dam.

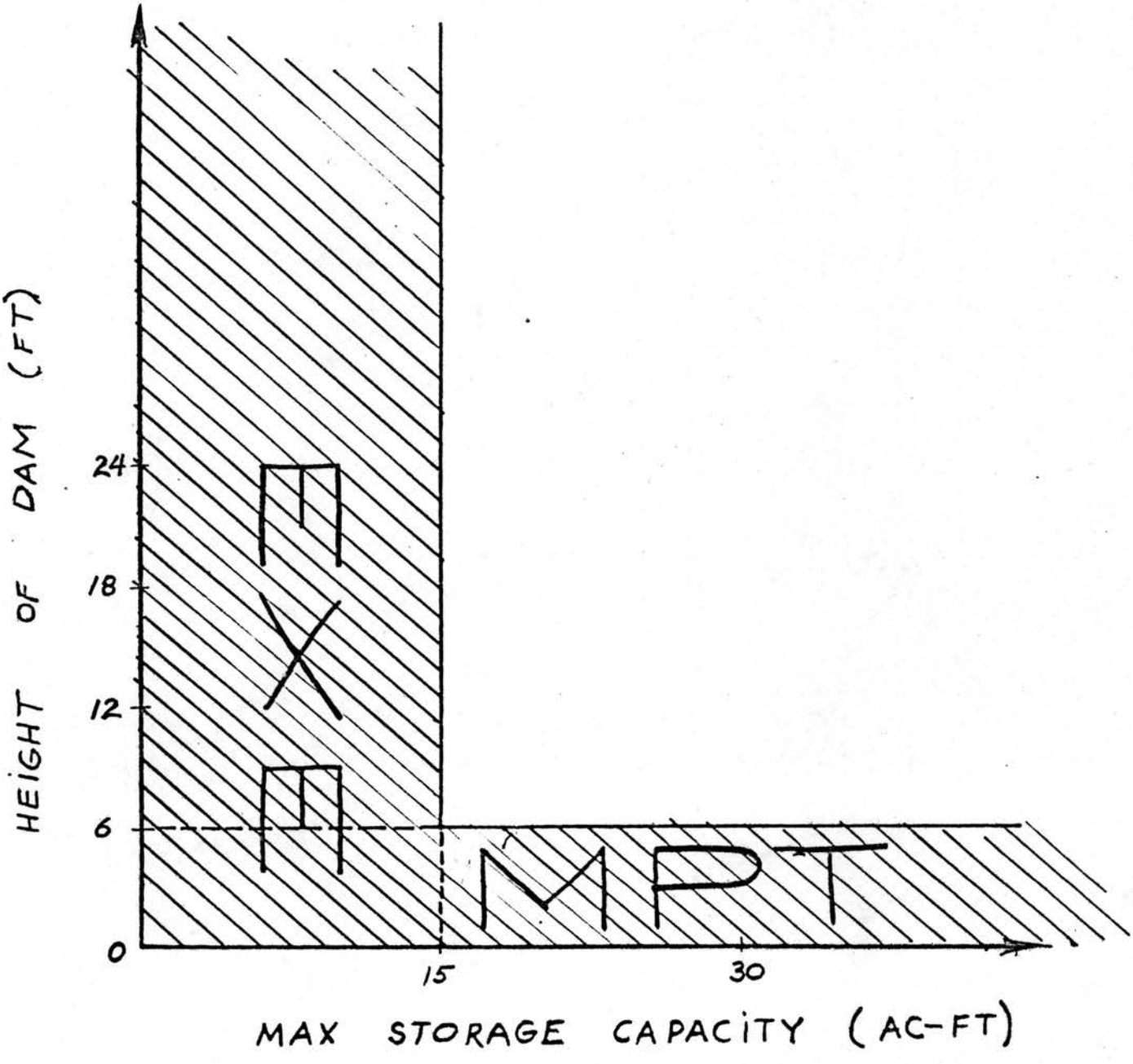

Fig. 1

"DAM" DEFINITION

ments or arguments. Statements or briefs may be submitted without personally appearing at the hearing.

Twenty-five days prior to the hearing a statement of need and reasonableness will be available for review at the agency and at the Office of Hearing Examiners. This statement of need and reasonableness will include a summary of all of the evidence which will be presented by the agency at the hearing justifying both the need for and the reasonableness of the proposed rules. Copies of the statement of need and reasonableness may be obtained from the Office of Hearing Examiners at a minimal charge.

After the public hearing, written material may be submitted and recorded in the hearing record for five working days, or for a longer period not to exceed 20 calendar days if so ordered by the hearing examiner.

Notice: Any person may request notification of the date on which the hearing examiner's report will be available after which date the agency may not take any final action on the rules for a period of five working days. Any person may request notification of the date on which the hearing record has been submitted (or resubmitted) to the Attorney General by the agency. If you desire to be so notified, you may so indicate at the hearing. After the hearing you may request notification by sending a written request to the hearing examiner (in the case of the hearing examiner's report) or to the agency (in the case of the agency's submission or resubmission to the Attorney General).

One free copy of the proposed rules may be obtained by writing to Department of Natural Resources, Division of Waters, Box #32, Centennial Office Building, Saint Paul, Minnesota, 55155. Additional copies will be available at the door on the date of the hearing.

Under Minn. Stat. § 10A.01, subd. 11 (1976), a lobbyist must register with the State Ethical Practices Board within five (5) days after he commences lobbying. According to the statute, "lobbyist" means any individual engaged for pay or other consideration or authorized by another individual or association to spend money who spends more than five hours of any month or more than $250 not including travel expenses and membership dues, in any year for the purpose of attempting to influence legislative or administrative action by communicating or urging others to communicate with public officials; or who spends more than $250, not including travel expenses and membership dues, in any year for the purpose of attempting to influence legislative or administrative action by communicating or urging others to communicate with public officials. "Lobbyist" does not include any: (a) public official or employee of the state or any of its political subdivisions or public bodies acting in his official capacity; (b) party or his representative appearing in a proceeding before a state board, commission or agency of the executive branch unless the board, commission or agency is taking administrative action; (c) individual in the course of selling goods or services to be paid for by public funds; (d) news media or their employees or agents acting in the ordinary course of business of publishing or broadcasting news items, editorials or other comments or paid advertisements which directly or indirectly urge official action; (e) paid expert witness whose testimony is requested either by the body before which he is appearing or one of the parties to a proceeding, but only to the extent of preparing or delivering testimony; or (f) stockholder of a family farm corporation as defined in § 500.24, subd. 1, who does not spend over $250, excluding travel expenses, in any year in communicating with public officials.

Questions regarding lobbying should be directed to the State Ethical Practices Board, Room 41, State Office Building, Wabasha Street, St. Paul, Minnesota, 55155; telephone (612) 296-1720.

Dated this 2nd day of January, 1979.

Joseph N. Alexander
Acting Commissioner

Rules as Proposed

6 MCAR § 1.5030 General provisions.

A. Purpose. The purpose of these rules is to regulate the construction and enlargement of dams, as well as the repair, alteration, maintenance, operation, transfer of ownership and abandonment in such a manner as to best provide for public health, safety and welfare. In the application of these rules, the Department shall be guided by the policies and requirements declared in Minn. Stat. ch. 105 and § 116.04.

The rules are pursuant to Laws of 1977, ch. 779, § 8 and are intended to be consistent with the goals and objectives of applicable federal and state environmental quality programs and policies including, but not limited to, mineland reclamation, shoreland management, flood plain management, water surface use management, boat and water safety, wild and scenic rivers management, critical areas management, recreational or wilderness management, scientific and natural areas managements and protected vegetative species management.

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B. Scope. To achieve the purpose declared in 6 MCAR § 1.5030, the Commissioner hereby sets forth minimum standards and criteria for dam classification and identification or risk and hazards to health, safety and welfare. These rules further establish minimum standards and criteria for the review, issuance and denial of permits for proposed new and existing dam projects for water and waste impoundments in and adjacent to public waters of the state and for ordering repairs. This also includes dams for impoundment of waste containing water not specifically requiring a change in public waters.

C. Jurisdiction. These rules shall apply to all existing and proposed dams other than those owned by the United States or those that do not meet the size criteria (Section D., below), unless otherwise excluded in other sections of the rules. These rules are supplementary and complimentary to the rules which establish standards and criteria for granting permits to change the course, current or cross-section of public waters. (6 MCAR §§ 1.5020-1.5023, 1.5025 and 1.5026)

With the exception of dams not subject to these rules, in situations where the provisions of these rules are in conflict with other appropriate rules and requirements, those provisions which are the most restrictive shall apply.

All provisions of 6 MCAR § 1.5024 are superseded by these rules as they relate to dams as defined herein, not including the section relating to water level controls.

D. Definitions. For the purposes of these regulations, certain terms or words used herein shall be interpreted as follows: The word "shall" is mandatory, not permissive. All distances unless otherwise specified shall be measured horizontally.

These definitions are in addition to those contained in 6 MCAR § 1.5020 D. except where the same word is contained in both lists of definitions in which case the definitions in these rules shall apply in respect to dam safety administration.

"Alteration" means any activity which will affect the safety of a dam and/or which will result in a change in the course, current or cross-section of public waters.

"Commissioner" means the Commissioner of the Department of Natural Resources and any duly authorized representative of the department who may be assigned responsibilities and authorities for dam safety.

"Cost" for the purpose of this clause, includes labor and materials entering into the project; preliminary investigations and surveys; the cost of construction plant properly chargeable to the cost of the project; and any and all other items entering directly into the cost of the project. "Cost" for the purposes of this clause, does not include costs of right-of-way, detached powerhouses, electrical generating machinery, and roads and railroads unrelated to the construction of the project affording access to the project.

"Dam" means any artificial barrier, together with appurtenant works, which does or may impound water and/or waste materials containing water and which is greater than six (6) feet in height and has a storage capacity of more than fifteen (15) acre-feet at maximum storage elevation; any artificial barrier which is not in excess of six (6) feet in height regardless of storage capacity or which has a storage capacity not in excess of fifteen (15) acre-feet regardless of height, shall not be considered a dam. No circular tank or tank elevated above the ground to store water and/or waste shall be considered a dam. In addition, the following shall not be considered as a dam for the purposes of these rules:

1. Earthen impoundment structures formed by construction of federal, state or local government state-aid roads which are primarily intended for transportation purposes;

2. Any artificial barrier constructed solely for the purpose of containment of sewage or biological treatment of wastewater which is under the jurisdiction of the Minnesota Pollution Control Agency.

This does not preclude the need for any permits from the Commissioner which may be required under applicable provisions of 6 MCAR §§ 1.5020 through 1.5026.

"Enlargement" means any change in or addition to an existing dam, which raises or may raise the storage elevation of the water or waste impounded by the dam.

"Height" means the vertical distance from the natural bed of the stream or watercourse measured at the downstream toe of the dam or from the lowest elevation of the outside limit of the dam, if it is not across a stream channel or watercourse, to the maximum storage elevation.

"Maximum Storage Elevation" means the maximum elevation to which the dam will be constructed or to which water or waste materials can be effectively stored behind the dam on either a temporary or permanent basis, whichever is greater.

"Owner" means the owner of the dam if the dam is not sponsored by a governmental agency. If the dam is sponsored by an agency of the state, a political subdivision of the state, or the federal government, and if the sponsoring agency has an agreement under which it will be responsible for operation and maintenance of the dam, then that sponsoring agency shall be considered the "Owner."

"Reconstruction" means the rebuilding or renovation of an existing structure.

"Repair" shall include any work which will change the hydraulic capacity of a dam or entail any changes in the structural character of a dam.

"Surface" shall be determined by multiplying total dam length by average dam height.

"Total dam length" means length of all artificial containment structures, including the length of any artificially constructed dike, abutment or other structural additions appurtenant to the dam, which are part of, and essential to, the containment structure, but does not include the length of emergency spillways which are located outside the abutments of the dam.

"Verifying" means the development of data in the ordinary course of the construction and operation of the project.

E. Severability. The provisions of these rules shall be severable, and the invalidity of any paragraph, subparagraph or subdivision thereof shall not make void any other paragraph, subparagraph, subdivision or any other part.

6 MCAR § 1.5031 Classification of dams. In order to safeguard the public health, safety and welfare, all existing and proposed new dams shall be classified by the Commissioner into the following three (3) classes with respect to the potential hazard.

Class I dams shall include those dams where failure, misoperation, overtopping or other occurrences or conditions may result in any loss of life or serious hazard or damage to health, homes, high-value industrial or commercial properties, major public utilities or serious direct, or indirect, economic loss to the public.

Class II dams shall include those dams where failure, misoperation, overtopping or other occurrences or conditions may result in possible health hazard or probable loss of high-value property, damage to major highways, railroads or other public utilities or limited direct, or indirect, economic loss to the public.

Class III dams shall include those dams where failure, misoperation, overtopping or other occurrences or conditions may result in property losses restricted mainly to rural buildings and local county and township roads which are an essential part of the rural transportation system serving the area involved.

Permits for a dam which is not classified as a Hazard Class I, II, or III dam, shall be subject only to applicable provisions of 6 MCAR § 1.5020 through 1.5026 and shall not be subject to these dam safety rules.

6 MCAR § 1.5032 Procedure for existing dams.

A. Applicant's responsibilities. This section identifies the procedures to be followed for existing dams, excluding dams being enlarged.

Before commencing the repair or alteration of a dam, or removal of a dam so that it no longer impounds water or waste, the owner shall make a separate application to the Commissioner for each existing dam proposed to be changed upon forms provided by the Commissioner, except as provided in emergencies. The application shall contain the following:

1. The name and address of the owner or owners, or the sponsoring agency responsible for operation, maintenance and repair of the dam.

2. The proposed changes in the existing dam.

3. Maps, plans and specifications which set forth pertinent details and dimensions of the dam as the Commissioner may require.

4. The storage capacity of the impoundment.

5. The location, type, size and height of the dam and any appurtenant structures.

6. Other pertinent information concerning the dam as may be required by the Commissioner and any information appropriate to a thorough consideration of the safety of the change to the dam.

7. The proposed date of start and completion of the repair, alteration or removal.

The Commissioner may waive any of these requirements if found unnecessary. Work described herein is subject to the "Fees" provision of 6 MCAR § 1.5034 B. 6.

B. Emergency work.

1. Actions by the owner. In the event of an emergency where immediate action is necessary for public health, safety and welfare, repairs may be started immediately, but the owner shall notify the Commissioner at once of the

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emergency repairs. As soon as practicable, the owner shall apply for a permit for the emergency repairs and any necessary permanent repairs.

2. Commissioner's requirements. The Commissioner shall immediately require any repairs or remedial action necessary to protect public health, safety and welfare, if either:

a. The condition of any dam or impoundment is so dangerous to the safety of life or property as not to permit time for the issuance and enforcement of an order relative to maintenance or operation; or

b. Imminent floods threaten the safety of a dam or impoundment.

3. Commissioner's actions. The Commissioner may, in an emergency, require and enforce any of the following actions:

a. Lowering of the water level by releasing water from the impoundment behind the dam.

b. Completely emptying the impoundment.

c. Taking any other steps as may be essential to safeguard life and property.

C. Removal of dams.

1. Applications. Any owner of a dam seeking its removal must apply to the Commissioner for permission and comply with all required procedures the Commissioner may prescribe.

2. Evidence of removal.

a. Upon completion of the removal of a dam, evidence as to the manner in which the work was performed and the conditions obtained after the removal, shall be filed with the Commissioner.

b. The evidence shall show that a sufficient portion of the dam has been removed to eliminate the hazard directly attributable to the presence of the dam.

3. Final inspection. Before final approval of a dam is issued, the Commissioner shall inspect the work and determine that danger to public health, safety and welfare has been eliminated.

D. Inspections of existing dams by the Commissioner.

1. Hazard classification inspections. The Commissioner shall make initial inspections of each dam in the state to determine the appropriate hazard classification according to criteria in NR 5031.

2. Dam safety inspections.

a. The Commissioner shall make, or cause to be made, an initial detailed systematic technical inspection and evaluations of every Class I, II, or III dam in order to assess the general condition of the dam with respect to safety. The inspection will include:

(1) a review and analysis of available data on the design, construction and operation of the dam;

(2) a visual inspection of the dam, appurtenant structures and downstream and upstream areas;

(3) a report shall be made of the general condition of the dam including, when possible, an assessment of hydraulic and hydrologic capabilities, structural stabilities and identification of any other conditions which constitute hazards to health, safety and welfare. Such report shall also include:

(a) a determination of any need for emergency measures or actions;

(b) a determination of the need for corrective actions relating to the design, construction and operation of the dam and appurtenant structures; and

(c) a determination of the need for additional detailed studies, investigations and analyses.

b. Technical areas to be investigated as part of the field inspections.

(1) Engineering data. Engineering data may include, but are not limited to, any data listed in Appendix I of "Recommended Guidelines for Safety Inspection of Dams", Appendix D, Department of Army, Office of the Chief of Engineers.

(a) To the extent feasible, engineering data relating to the design, construction and operation of the dam and appurtenant structures shall be collected from all available sources, including records of the owner.

(b) When necessary engineering data are unavailable or inadequate or invalid in respect to protection of health, safety and welfare, a list of deficiencies shall be made by the Commissioner, and the Commissioner may require that such information be provided by the owner.

(2) Visual field inspections. Visual inspections shall be made of the dam, appurtenant structures, impoundment area and downstream channel in the vicinity of

the dam including an examination of significant structural, geotechnical, hydraulic and hydrologic features including, where applicable, electrical and mechanical equipment for the operation of control facilities that affect the safety of a dam. Visual inspections shall include, but are not limited to, detecting evidence of leakage, erosion, seepage, slope instability, undue settlement, displacement, tilting, cracking, deterioration and improper functioning of drains and relief wells. The inspection shall also include an examination of the adequacy and quality of maintenance and operating equipment and procedures as they relate to safety of the dam. Other areas of inspection may include, but are not limited to, any of those listed in Appendix II "Recommended guidelines for safety inspection of dams". "Appendix D," Department of the Army, Office of the Chief of Engineers.

(3) Evaluation of hydraulic and hydrologic features. The evaluation of hydraulic and hydrologic features is required to determine the capability of the discharge and storage capacity of the dam for safely handling recommended design floods based on the size and hazard potential class of the dam. The safety evaluations involve constraints on water control such as blocked entrances, restrictions on operation of spillway and outlet gates, if any, inadequate energy dissipators or restrictive channel conditions, significant reduction in impoundment capacity by sediment deposits and other factors and material balance of the impoundment. Where essential design data are lacking, evaluations of watershed characteristics, rainfall and impoundment records may be used to evaluate effects of the dam.

(4) Evaluations of structural stability. The structural stability evaluations are made to determine the existence of conditions which are hazardous or which might develop into hazards and to formulate recommendations regarding the need for additional studies, investigations or analyses.

c. Timing of dam safety inspections.

(1) Subject to the availability of staff and funds, the Commissioner shall make or cause to be made, initial inspections of all Class I, II and III hazard dams as soon as reasonably possible based on the degree of hazard involved.

(2) After the initial detailed inspections and subject to the availability of funds and staff, the Commissioner shall make, or cause to be made, periodic inspections of dams based on the following schedule in order to determine their adequacy and their proper Hazard Classification:

(a) Class I dams, at least one time every year.

(b) Class II dams, at least one time every two years.

(c) Class III dams, at least one time every four years, provided that for such dams which were built in cooperation with a governmental sponsoring agency responsible for operation and maintenance the Commissioner shall utilize the services of the governmental sponsoring agency to the maximum extent possible and feasible to provide for periodic inspections.

3. Reports on inspections. Upon completion of the inspection of a dam, the Commissioner shall notify the owner of the dam, in writing, of the results and findings of the inspection and if a dam is unsafe or needs repair or corrective action, the Commissioner shall notify the owner and order such remedial action.

4. Need for further dam safety investigations. If the Commissioner determines that additional engineering investigations are necessary in order to determine the safety of a dam and the extent of needed repairs or alterations, he shall notify the owner thereof to cause such investigations to be made at the owner's expense and to file the results with the Commissioner for use in determining the conditions of dams and the degree and nature of repair, alteration or possible other action needed.

E. Transfer of dams. The owner shall not transfer the ownership of any Class I or II Hazard dam without a permit from the Commissioner. For Class III hazard dams, the owner, or the party to whom a dam is transferred shall apply to the Commissioner for a permit for the transfer of ownership within thirty (30) days after the ownership changes. Permits shall be issued based on evaluation of the hazard class, the conditions and the financial capabilities of the transferee.

No state department or agency and no county, city, town or other governmental entity may purchase or accept as a gift any privately owned dam subject to permit requirements until after: (1) the Commissioner has examined the dam, (2) the Commissioner has prepared a report of his examination and filed it with the legislature and (3) the legislature has had an opportunity to consider the report and has not prohibited the purchase or gift during the legislative session in which the report is filed, or if the report is filed when the legislature is not in session, the legislature has not prohibited the gift or purchase at the next succeeding session.

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F. Operation and maintenance.

1. Responsibilities. The owner shall operate and maintain the dam. Regulation of the maintenance and of the operation of the dam throughout its existence, insofar as necessary for public health, safety and welfare, is vested with the Commissioner.

2. Reports and records. The Commissioner may require owners to keep records of, and to report on maintenance, operation, staffing and engineering and geologic investigations and any other data necessary to secure maintenance and operation and to require staffing and engineering and geologic investigations in the interests of public health, safety and welfare. In addition, the owner shall fully and promptly advise the Commissioner of any sudden or unprecedented flood or unusual or alarming circumstance or occurrence affecting the dam.

3. Inspections and work requirements. The Commissioner, from time to time, shall make inspections of dams for the purpose of making safety determinations, but shall require owners to perform at their own expense work necessary to disclose information sufficient to enable the department to determine conditions of dams in regard to their safety and to perform at their own expense other work necessary to secure maintenance and operation which will safeguard life and property.

G. Termination of operations and perpetual maintenance.

1. Unless the dam is removed, the owner shall perpetually maintain the dam and appurtenances so as to ensure the integrity of the structure in order to achieve its intended and authorized functions and to protect public health, safety and welfare.

2. The Commissioner may impose such requirements as may be necessary, prior to the ultimate termination of the owner's operations, to insure that the owner will be financially responsible for carrying out the activities required for perpetual maintenance, and that adequate funding will exist.

3. In respect to dams utilized for waste disposal purposes, the owner shall prepare and submit to the Commissioner plans for termination of operations and perpetual maintenance which will address the owner's plans for both an unanticipated or premature termination of operations and for the ultimate intended termination of operations. The plans for termination of operations and perpetual maintenance shall, at a minimum, address the following issues, where applicable.

a. Perpetual maintenance and safety of the dam including adequate monitoring programs.

b. Disposal and treatment of ponded and channelled waters.

c. Monitoring and mitigation of surface water and groundwater pollution.

d. Silt, sedimentation and erosion control.

e. Vegetation and landscaping.

H. Investigations and studies. Relative to construction, operation, maintenance, enlargement, repair, alteration and abandonment of dams, the Commissioner shall require information of such nature and extent as to enable him to make a proper review and determination of the various features of the project as they relate to public health, safety and welfare.

I. Permit cancellation, suspension or alteration. Subject to all existing rights and remedies at law and subject to the rights of appeal in the manner provided by Minn. Stat. §§ 105.37-105.64 (1976):

1. As provided in Minn. Stat. § 105.44 (1976), the Commissioner may cancel or modify a permit at any time if the Commissioner deems it necessary for any cause for the protection of the public interests.

2. As provided in Minn. Stat. § 105.52, whether or not a dam is under permit, if the Commissioner determines that it is unsafe or needs repair or alteration, he shall notify the owner to repair, alter or remove the dam as the exigencies of the case may require.

3. As provided in Minn. Stat. § 105.64 for dams associated with the mining of iron ore, taconite, copper, copper-nickel or nickel, the Commissioner may:

a. Cancel or modify a permit at the request of or with the consent of the permittee.

b. Cancel, modify or suspend a permit, if any of its terms, or any law pertaining to the project is violated or necessary to protect the public health, safety or welfare, or to prevent substantial injury not authorized by the permit to public interests in lands or waters, or to persons or property.

c. For the same purposes as b. above, in an emergency suspend operations forthwith and require the owner or permittee to take any measures necessary to prevent or remedy the situation which has caused the emergency or imminent danger.

4. An order issued under paragraph 1., 2., 3.a., b. above is subject to the hearing provisions of Minn. Stat. §§ 105.44 and 105.462. An order issued under paragraph 3.c. above is effective on the date thereof, but shall not be in

effect for more than thirty (30) days from that date unless the permittee is on the same date mailed written notice of the order which includes notice of a Minn. Stat. § 105.44 public hearing on a date not more than thirty (30) days from the date of the notice.

5. If situations occur in the construction or operations authorized hereunder which may endanger the public health, safety and welfare, the owner/permittee shall notify the Commissioner immediately and shall immediately take corrective measures and cease construction or operations if the situation so requires.

6. If the Commissioner, pursuant to the terms of a permit, suspends or cancels a permit or orders the Permittee to cease operations permitted hereunder, the Permittee shall do so immediately.

J. Reports to the legislature on publicly owned dams. As required by Laws of 1978, ch. 779, § 7, the Commissioner shall make an annual report to the legislature on the status of dams owned by the state or local governmental units which shall include the following:

1. A listing of dams in need of repair or reconstruction.

2. The probable degree of severity of the need of repair or reconstruction.

3. The hazard classification of the dam.

4. The priority ranking of the need for action to repair or reconstruct a dam based on evaluation of items 2. and 3. above.

5. Recommendations for action including any requests for state share of matching funds for grants-in-aid to local governments as provided by Minn. Stat. § 105.482.

6 MCAR § 1.5033 Procedure for new dams or enlargement of dams.

A. General outline of permit process.

1. Construction of a new dam or enlargement of an existing dam shall include the following sequence of events for Hazard Class I & II dams.

a. A permit application, preliminary report outlining the proposed project and filing fees.

b. Certification that a professional engineer has been assigned to the project.

c. A final design report.

d. Detailed plans and specifications.

e. Other essential supporting data which the Commissioner may request.

f. Payment of dam inspection fees, where applicable.

g. Commissioner's approval and issuance of permit.

h. Work inspection and construction reports.

i. As-built plans and data.

j. Statement of Completion, and the Affidavit of Cost, where applicable.

k. Receipt of Impoundment Approval by Commissioner, where applicable.

l. Performance report.

2. For Hazard Class III dams the applicant (the owner or sponsoring agency where applicable) shall complete an application form and furnish a preliminary report, certification that a professional engineer has been assigned to the project, design data, plans and specifications, work inspection and construction reports and as-built plans and data as specified in 6 MCAR § 1.5033 Sections B.1., B.2., B.3., B.4., B.5., B.6., (where applicable), B.8., B.9., and B.10. (where applicable) with the following exception:

For Class III Hazard dams which are sponsored by an agency of the state, a political subdivision of the state or the federal government which has an agreement under which it will be responsible for operation and maintenance of the dam and also for Class III Hazard dams for which the design, construction supervision, and inspection is performed by a federal agency in accordance with provisions of the National Dam Safety Act PL 92-367 and applicable federal guidelines standards and requirements related to that act the Commissioner may waive certain details of the required submittals, provided that the federal agency will furnish the Commissioner with adequate facts on the design and construction inspection to allow the Commissioner to adequately evaluate the permit and approvals in respect to public health, safety and welfare.

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B. Specific procedural requirements.

1. The permit application, preliminary report, and filing fees.

a. The permit application. A separate application for each new dam proposed to be constructed or each existing dam proposed to be enlarged, shall be filed with the Commissioner upon forms provided by the Commissioner and shall contain the following:

(1) The name and address of the owner(s) or prospective owner.

(2) The purpose for the dam.

(3) The location, type, size and height of the dam and any appurtenant structures.

(4) The storage capacity of the impoundment.

(5) Other pertinent information as may be required by the Commissioner.

b. The preliminary report. The preliminary report shall consist of:

(1) A general description of the dam and all appurtenances. A statement of the purpose for which the dam is to be used and a statement setting forth the effect on the environment of such dam.

(2) Maps showing the location of the proposed dam, the County, Township and Section lines; the outline of the impoundment; the location of state, county and township roads; the locations of utilities, e.g. pipelines, transmission, telegraph and telephone lines; the topograph; and other structure or facility including human habitations affected by the proposed dam. State, county and U.S.G.S. maps and aerial photographs may be used for this purpose.

(3) A written report of surface conditions, i.e. geology, topograph and culture, which is based on a field examination by the applicant's engineer and other qualified personnel.

(4) Typical cross-sections of the dam accurately showing elevations, proposed impoundment levels and top width.

(5) Logs of borings in the foundation and in the borrow areas, and results of seismic and resistivity subsurface investigations, when they are readily available.

(6) Preliminary design assumptions, operational aspects, tentative conclusions and references. The design assumptions shall pertain to such hydrologic features as drainage area, rainfall data, runoff, inflow, area-capacity-elevation data and flood routing, in addition to structural, geologic and geotechnical assumptions.

(7) A preliminary cost estimate of the structure and appurtenances thereto.

(8) Where applicable, future plans on ultimate project size including dams and impoundments.

(9) A general description of all other activities and elements which are related to and part of the total dam project, such as operational plans and details of smaller dams, dikes, diversions reclaim water facilities and other facility and utility lines including pipelines, roads and railroads. Separate permit applications will be required for each element or activity of a total dam project in accordance with appropriate provisions of 6 MCAR §§ 1.5020-1.5026 and will be submitted with the application for the dam.

c. Filing fees. Each application for a permit must include a $15.00 fee in the form of a check or money order payable to the State Treasurer.

2. Professional engineer's requirements. The applicant must engage professional engineer(s) registered in the State of Minnesota or professional engineers acting solely as officers or employees of the United States as provided in Minn. Stat. § 326.13(3), who are proficient in dam engineering to prepare the engineering documents, plans and specifications and to inspect the construction, or enlargement and operation and maintenance of the dam.

All submitted material shall be certified for adequacy by a professional engineer, who shall not be an employee of the owner or of the construction contractor.

3. Final design requirements. Upon acceptance and agreement by the Commissioner of the preliminary report, the applicant shall submit to the Commissioner, for his approval, a final design report, together with plans and specifications and required fees. The final design report shall include, but not limited to, the following:

a. General description of the project, such as its function and service life, production rates, required storage and area(s); geological considerations such as physiography, topography, geology, seismicity, ground water conditions and maps; hydrologic studies such as physical features, climatology, design storm and design flood characteristics, flood routing, water-material balance, freeboard requirements, dam-break flood; geotechnical information, such as rock-soil sampling and logging, geophysical investigations, field and lab testing, instrumentation data; considerations of construction materials and their properties, such as quantities required, borrow and aggregate locations and volumes, field and lab work and investigations, concrete,

waste materials generation and placement techniques, investigation of the stored waste materials such as generations, transportation, mechanical/chemical/special testing, disposal practice.

b. Analytical determinations, such as seepage and underseepage studies, stability, deformation and settlement analysis; analytical and design details of facilities, such as dams, foundation, impoundment, abutments, spillways (for the purpose of these rules, spillway means any facility appurtenant to the dam available to discharge excess water and/or waste from the impoundment) or decant facilities, diversions, outlet works, instrumentation; operational aspects, such as impoundment operating criteria, initial filling criteria, responsibility and coordination, emergency procedures and warning systems; air, water and solid pollution controls, sedimentation and erosion controls; operational and post-operational maintenance and abandonment considerations; surveillance and inspection programs.

c. A detailed cost estimate of the structure and appurtenances.

d. Waiver of requirements.

(1) In instances wherein the physical conditions involved and the size of the dam or reservoir are such as to render the requirements as to drainage areas, rainfall, streamflow and drilling or prospecting of site unnecessary, the Commissioner may waive any of the requirements.

(2) Based on discussions between the applicant and the Commissioner and on evaluation of the hazards and risks involved, the Commissioner may waive any of the design requirements if they are found to be unnecessary.

4. Plans and specifications.

a. Plans. The plans shall consist of a bound portfolio of the drawings with all sheets being of the same site, and shall be of such scale that specifications can be drafted, and construction accomplished.

b. Specifications. These shall contain:

(1) The general provisions, specifying the rights, duties, responsibilities of the owner, designer, contractor and the prescribed order of work.

(2) The technical provisions describing approved work methods, equipment materials and desired end results.

(3) Special conditions.

5. Other information. The applicant shall also provide any other information or data concerning the dam, which is pertinent to the consideration of public health, safety and welfare, as may be required by the Commissioner.

6. Payment of dam inspection fees.

a. Fees required.

(1) Initial dam inspection fees:

(a) Payment of fees. An initial dam inspection fee shall accompany all applications for permits for dam construction, reconstruction, removal or any change in the dam with the following exception:

No initial dam inspection fee shall be charged to any state agencies, political subdivisions of the state and federal agencies nor to owners of any Class I, II, or III dams which are sponsored by a state agency, political subdivision of the state or federal agencies who are responsible for operation and maintenance of the dams or for any Class III Hazard dam for which the design, construction supervision, and inspection is provided by a federal agency in accordance with provisions of the National Dam Safety Act PL 92-367 and applicable federal guidelines, standards and requirements related to that act.

(b) The initial dam inspection fee shall be based on the formula and system established by these rules, and no field inspection fees for dams pursuant to 6 MCAR § 1.5000 shall be charged to the applicant, unless the actual cost of the field inspection of a dam as itemized and certified by the Commissioner, is greater than the amount of money collected under provisions of 6 MCAR § 1.5033 B.6.

(c) In the event that the actual costs of field inspection of a dam by the Commissioner exceeds the amount paid by the applicant under 6 MCAR § 1.5033 B.6.b., the Commissioner shall provide an itemized and certified listing of the costs of field inspection of the dam and may charge the applicant sufficient fees pursuant to provisions of 6 MCAR § 1.5000 for the additional costs incurred, but not compensated for by the initial dam inspection fees levied under 6 MCAR § 1.5033 B.6.b.

(2) Periodic inspection fees. Each owner of a dam, except those exempted under Section 1.5033 B.6.a.(1)(a) shall be charged periodic field inspection fees for each year an inspection is made pursuant to Section

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1.5032 D.2.c., for the purpose of providing funds for periodic inspection of dams according to the following schedule:

(a) A minimum fee of $30.00 per dam plus an additional fee based on surface of the dam as follows:

(i) For the first 1,000 square feet of surface $0.01 per square foot.

(ii) For each square foot in excess of 1,000 square feet of surface $0.001 per square foot.

The periodic inspection fee, for each year in which an inspection is made, is payable at the end of each state fiscal year, beginning July 1 and ending the following June 30. The first fee is payable on or before June 30, 1980 for any periodic inspections made during July 1, 1979 and June 30, 1980.

b. Procedure for determining initial dam inspection fees.

(1) With the exception of the exemptions noted in Section 1.5033 B.6.a.1.(a), the following dam inspection fee shall accompany each application for a permit required under Chapter 105, for a new dam or for enlargement or repair of an existing dam.

(a) For the first $100,000 of estimated cost, a fee of two and one-half percent.

(b) For the next $400,000 of estimated cost, a fee of one and one-half percent.

(c) For the next $500,000 of estimated cost, a fee of one percent.

(d) For all costs in excess of $1,000,000 a fee of one-half of one percent.

(2) For all dams, subject to initial dam inspection fees, which will be totally constructed to a maximum storage elevation within 5 years of the date construction begins the applicant shall submit a certified estimate of the cost with his application together with the appropriate fee based on cost. Upon completion of the project, the applicant shall file, with the Commissioner, an affidavit of the final total costs of construction. If the final total cost exceeds the estimate, the applicant shall pay the difference between the fee paid and the fee required based on the final total cost according to the schedule of 6 MCAR § 1.5033 B.6.b.(1) and 6 MCAR § 1.5033 B.6.c.

(3) For dams, subject to initial dam inspection fees, which will not be totally constructed to maximum storage elevation within 5 years of the date construction begins, such as dams for storage of mining waste materials, the applicant shall provide the Commissioner a work schedule outlining the proposed staging of dam construction and shall submit a certified estimate of costs based on staging of dam construction or based on an estimate of costs at construction intervals not exceeding 5 years in duration. At the end of each stage of dam construction, or at construction intervals not exceeding 5 years in duration, throughout the period of total construction until the maximum storage elevation is reached, the applicant shall file with the Commissioner an affidavit of costs for each stage or construction interval not exceeding 5 years in duration. If the actual cost, at the end of a stage or construction interval, exceeds the estimate the applicant shall pay the difference between the fee paid and the fee required, based on the actual cost, according to the schedule of 6 MCAR § 1.5033 B.6.b.(1).

Commissioner's approval and issuance of permits.

a. In reviewing proposals for new dams, the Commissioner will evaluate the potential hazards and risks to the health, safety and welfare of the public and to the environment in the vicinity of the proposed dam. Probable future development of the area downstream from the dam will be considered in evaluating potential hazard and risks.

(1) Permits to construct dams which would be in Hazard Class I shall not be approved unless there is justification for the construction of the dam at the proposed location. Such justification shall include but is not limited to, a showing of lack of other suitable feasible and practical alternative sites, and economic hardship which would have a major adverse effect on population and socio-economic base of the area involved.

(2) Permits to construct dams which would be in Hazard Class II shall not be approved unless there is justification for the construction of the dam at the proposed location. Such justification shall include, but is not limited to, a showing of lack of other suitable feasible and practical alternative sites and that the dam will benefit the population or socio-economic base of the area involved.

(3) In the event that justification is provided for construction of any Hazard Class dam, the applicant may be required by the Commissioner to take measures to reduce risks.

(4) The Commissioner shall furnish information to local governments which have legal authority to control land use, regarding the classification together with recommendations for present and future land use controls which should be implemented to insure that risks to downstream areas will be minimized.

b. In considering the issuance of a permit, the

Commissioner shall determine if the proposal is adequate with respect to the following:

(1) The need in terms of quantifiable benefits.

(2) The stability of the dam, foundation, abutments and impoundment under all conditions of construction and operation. An adequate margin of safety must be provided against liquefaction, shear failure, seepage failure, overturning, sliding, overstressing and excessive deformation, under all loading conditions including earthquake. These conditions must be based on current, prudent engineering practice, and the degree of conservatism employed must depend on hazard and risks as outlined in 6 MCAR § 1.5021.

(3) The discharge capacity and/or storage capacity of the dam, appurtenances and impoundment shall be capable of handling the design flood which must be based on current, prudent engineering practice and the hazard potential classification as provided in 6 MCAR § 1.5031.

(4) The project in its totality must be in compliance with prudent, current environmental practice throughout its existence. In particular, the project must meet the State's pollution standards for ground water, surface water and air quality throughout its existence. The Commissioner shall consider the effects and impacts on the natural environment based on state and federal environmental laws, rules and requirements.

(5) The cost of that portion of engineering evaluations and studies relating to the safety of dams which is also part of the final design report outlined in 6 MCAR § 1.5033, performed for the applicant by professional engineers, and which were included with Environmental Impact Statements required under applicable State and Federal Environmental Laws shall be subtracted from the total cost determined under 6 MCAR § 1.5033 B.6., provided that the applicant provides the Commissioner with a notarized statement which includes a detailed accounting of expenditures for such dam safety related professional engineering evaluations and studies.

(6) The Commissioner shall keep annual records of the costs incurred in inspection and monitoring of new or enlarged dams and repairs to existing dams before, during and after construction and such cost record shall be provided upon request of any applicant who paid inspection fees.

8. Work inspection and construction reports.

a. Conformity with approved designs, plans and specifications.

(1) The permittee, in cooperation with its designer, shall be responsible for providing adequate controls of construction and operation activities and for verifying design, construction and operation assumptions. The owner may engage a registered professional engineer to operate and inspect the construction of the project, but the designer should also periodically inspect the said structures.

(2) All construction shall be carried out in accordance with the approved design, plans and specifications. No alteration, modification or addition to the approved designs, plans, and specifications that could affect the safety and adequacy of the dam shall be made by the permittee without prior permission of the Commissioner. Such approvals shall be provided as rapidly as possible to preclude interference with construction work schedules. Records of alterations, modifications, or additions to the approved design, plans, and specifications, for which written approval of the Commissioner was not required shall be submitted with the Construction Report (Section 1.5023, B.8.d.).

(3) If the permittee finds at any time during construction or operation that, in order to adequately protect public health, safety or welfare or the environment alterations to the approved design, plans and specifications are required, the permittee shall promptly notify the Commissioner of such requirements and shall revise the designs, plans and specifications and submit the revisions to the Commissioner for approval. Emergency short term revisions may be made by the permittee followed by prompt notice to the Commissioner. If such short term revisions are to remain as permanent project features, they shall be subject to approval by the Commissioner.

(4) During the construction or operation of a dam, the Commissioner shall make inspections for the purpose of securing conformity with approved designs, plans and specifications and shall require the owner to perform, at the owner's expense, work or tests as found necessary to disclose sufficient information to enable the Commissioner to determine if there is conformity with approved designs, plans and specifications.

(5) If, after any inspections, investigations or examinations or at any time as work progresses, the Commissioner finds that amendments, modifications or changes are necessary to protect health, safety, welfare and the envi-

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ronment, the Commissioner may order the owner to revise designs, plans and specifications.

(6) In the event that conditions imposed by the Commissioner as part of the original designs, plans and specifications may be waived or made less burdensome without sacrificing a proper margin of adequacy and safety, the Commissioner may authorize an owner to revise designs, plans and specifications.

(7) If, at any time during construction, enlargement, repairs or alterations of a dam the Commissioner finds that the work is not being done in conformance with approved designs, plans and specifications, the Commissioner shall notify the owner and shall order immediate compliance.

(8) The Commissioner may order that no further work on a dam be done until such compliance has been effected and approved by the Commissioner.

(9) Failure to comply with the approved designs, plans and specifications shall render the approvals subject to revocation if compliance is not made.

(10) If conditions are revealed which will not permit the construction of a safe dam, the permit may be revoked.

(11) At his discretion, the Commissioner may observe and approve foundation preparation and may approve construction material placement on an intermittent or continuing basis when field conditions dictate. The Commissioner shall be notified at least (3) days in advance of construction material placement.

b. Acceptance of permit or approval. Initiating or undertaking any work or part thereof, by the permittee, authorized in an issued permit or approval, constitutes acceptance of all terms and conditions contained therein.

c. Permanent markers. At least one (1) permanent marker for vertical and horizontal control shall be established in the natural ground by the permittee in the vicinity of each dam structure. The permanent marker for vertical control must be based upon datum and degree of accuracy based upon considerations of the hazards involved and the size of the dam, as specified by the Commissioner.

Each marker shall be located so as to be accessible and protected against disturbance throughout the existence of the dam. The permittee shall submit to the Commissioner the locations of these permanent markers plotted on the best available maps or plans within time limits prescribed by the Commissioner.

d. Construction report. The permittee shall submit monthly to the Commissioner a report on construction observation and quality control. The report shall include, but is not limited to, daily construction documentation; foundation preparation and treatment; construction quality control tests; maintenance of records and summaries of actual tests of foundation and construction materials, cut-off trench, grouting, etc.; instrumentation installation and maintenance of instrumentation records and instrumentation readings; geologic mapping, if any, of exposed foundations; preparation of logs of drill holes and other exploration features, if any, completed during construction; review and evaluation of disclosed field conditions by the designer; and any other items which may be pertinent to a construction quality assurance program.

9. As-built plans and data. Immediately upon completion of a new dam or reservoir or enlargement of a dam, the owner shall file with the Commissioner supplementary drawings or descriptive matter showing or describing the dam as actually constructed, or any other items which may be of permanent value and have a bearing on the adequacy and permanency of the dam.

In connection with the enlargement of a dam, the supplementary drawings and descriptive matter need apply only to the new work.

10. Statement of completion and affidavit of cost.

a. Statement of completion. As soon as practicable following the completion of construction, the permittee shall notify the Commissioner, by certified mail. The notification shall include a statement on the part of the designer of the professional engineer in charge of the construction inspection that to the best of knowledge, the dam was completed in accordance with the approved designs, plans and specifications and any approved revisions thereof.

b. Affidavit of cost. As soon as possible after giving notice of completion, the owner shall file an affidavit with the Commissioner stating the actual cost of the dam in detail. In the event the owner of a new or enlarged dam is unable to report the actual cost of construction or enlargement, an affidavit to this effect shall be filed within thirty (30) days after written request by the Commissioner, stating the reasons therefor. The Commissioner shall then make an appraisal of the cost of construction or enlargement and determine what further fee, if any, is required. If a further fee is required, the Commissioner shall notify the owner by certified mail of the amount of such fee within fifteen (15) days and that the owner may appear within sixty (60) days thereafter before an authorized representative of the Commissioner to protest the amount of the fee, in whole or in part and the sufficiency of the appraisal upon which such determination was based.

11. Issuance of impoundment approval by the Com-

missioner. Impoundment approvals are necessary for Class I and Class II Hazard Dams to provide assurances that the dam has been constructed as safely as possible in accordance with detailed plans and specifications and to allow adequate time for inspection of the completed dam and its foundations before actual impoundment begins.

The type of dam, the location, the hazard involved, and the purpose served by the dam will be considered in respect to the degree and nature of impoundment approval needed. Certain waste disposal dams will be constructed over a considerable period of years and will require a series of impoundment approvals for various stages of construction.

Upon request by the owner, an Impoundment Approval shall be issued upon a finding by the Commissioner that the dam is adequate to impound water and/or waste within the limitations prescribed. Pending issuance of an Impoundment Approval by the Commissioner, the owner of the dam shall not, through action or inaction, allow an impoundment upstream of the dam.

a. Each Impoundment Approval issued by the department may contain such terms and conditions as the Commissioner may prescribe.

b. The Commissioner may revoke any Impoundment Approval if it is determined that the dam becomes a danger to public health, safety and welfare. Whenever action is necessary to protect public health, safety and welfare, the Commissioner may also amend the terms and conditions of any Approval by issuing a new Approval containing revised terms and conditions.

c. The owner of a dam for which an Impoundment Approval has been issued shall not, through action or inaction, cause the dam to impound water and/or waste after the Approval terminates unless a new Approval is issued for the dam. A new Approval shall be issued upon a finding by the Commissioner that the dam is adequate to impound water and/or waste within the limits prescribed in the Approval.

12. Performance Report. The permittee shall submit yearly to the Commissioner a Performance Report detailing the instrumentation data and analysis and interpretation of these data as they relate to the safety of the dam and design assumptions. The frequency of submission of this report may be modified if field conditions so dictate.

6 MCAR § 1.5034 Miscellaneous provisions.

A. Limited State liabilities. The granting of a permit for a dam shall not impose any liability upon the State of Minnesota, its officers, employees, agents or consultants, for any damage or injury to any persons or property resulting from the activities of the permittee under the permit. Any permit shall be permissive only and shall not be construed as estopping or limiting any legal claims of persons other than the State against the permittee, its agents or contractors, for any damage or any injury to any persons or property, or to any public water supply resulting from such operations, or as estopping or limiting any legal claims of the State against the permittee for violation of any of the terms or conditions or the permit. No action shall be brought against the State or the Commissioner for the recovery of damages caused by the partial or total failure of any dam or through the operation of any dam upon the ground that such defendant is liable by virtue of any of the following:

1. Any approval of the dam or appurtenant facilities.

2. The issuance or enforcement of orders relative to maintenance or operation of the dam.

3. Control and regulation of the dam.

4. Measures taken to protect against failure during an emergency.

B. Owner's responsibilities. Nothing in these rules shall be construed to relieve an owner of a dam of the legal duties, obligations or liabilities incident to the ownership or operation of the dam.

C. Liability of permittee. The permittee shall assume all legal risks and liabilities, including without limitation those for damages or any injury to persons or property, arising from the construction, operation, maintenance, alteration or abandonment of the dam and impoundments and other activities authorized under permit relating to dams.

D. Owner's rights. Nothing in these rules shall be construed to deprive any owner of such recourse to the courts as he may be entitled to under the laws of this State.

E. Inspections. Owners of dams shall allow the Commissioner prompt access to and inspection of all records, plants, structures, facilities and operations at all reasonable times as may be necessary to monitor compliance with the terms of existing permits and to insure protection of the public health, safety and welfare. Entry for the purposes indicated is subject to reasonable compliance with the owner's safety rules and avoidance of unreasonable impairment of or interference with construction and operation of the dam. The

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Commissioner's inspection shall be limited to testing and observing, rather than supervising the construction, operation, maintenance, alteration or abandonment of the dam. The Commissioner's inspections shall not relieve the owner, or the designer, or the professional engineer in charge of construction, operation, maintenance, alteration or abandonment, from the full responsibility of providing adequate inspection and supervision.

F. Compliance with other laws. The owner of a dam shall comply with all federal laws and regulations relating to any structures, facilities or operations under the permit and shall obtain such permits from federal authorities as may be required therefor. The owner shall comply with all state laws and regulations in effect now or adopted hereafter relating to such structures, facilities and operations, including but not limited to, any laws and rules regarding mineland reclamation subject to the provisions of a permit.

G. Other permits and approvals. Although it is the intent of the Commissioner to maintain consistency with the permits of other agencies, nothing in any permit shall waive or abrogate any other state or federal approvals or permits which may be necessary for the project involved. Any permit conditions for dams shall not waive or abrogate any conditions, whether similar or more stringent, which may appear in any other permit or approval.

H. Acquisition of property. In all cases where the activities authorized by a permit shall involve the taking, using or damaging of any property, rights, or interests of any other person or persons, or of any publicly owned lands or improvements thereon or interests therein, the permittee, before proceeding, shall acquire all necessary property, rights, interests or permissions. In case the authorized activities shall include the alteration, relocation or replacement of any public highway or other publicly owned facility, the permittee shall pay the cost thereof as may be required by the appropriate public authority.

I. Assignment. Permits for dams may be assigned in whole or in part, but no assignment shall be effective until written notice thereof is filed in the office of the Commissioner, and the Commissioner approves the assignment in writing.

J. Successors. Provisions of the issued permit shall extend to and bind the successors in authority of the Commissioner and the legally assigned successors in interest of the permittee.

K. Warning systems and emergency procedures.

1. In the event that an existing or new dam is classified as a Class I or II Hazard dam, the owner shall prepare and file with the Commissioner, for approval, a contingency plan for notifying any persons whose lives, property or health may be endangered by failure, misoperation or other circumstances or occurrence affecting the dam. The contingency plan shall include:

a. The most practical and expeditious means for warning downstream property owners and residents.

b. Consideration of the time factor involved in providing warning based on the proximity of the dam to parties who may be affected.

2. In the event there is no feasible or practical means to provide for adequate warning due to insufficient time before a catastrophe occurs and downstream parties can be notified to evacuate, the owner shall be responsible for giving appropriate notification to any downstream property owners that there is no practical and feasible means for warning in emergency situations.

These rules, 6 MCAR §§ 1.5030-1.5034, are subject to the public hearing provisions of Minn. Stat. §§ 105.44-105.462.

Peace Officer Standards and Training Board

Proposed Rules Governing Standards of Conduct for Peace Officers and Constables

Notice of Hearing

Notice is hereby given that a public hearing on the proposed permanent rules of the Peace Officer Standards and Training Board will be held on February 20, 1979 beginning at 9:30 a.m. at the Metropolitan Council, 3rd Floor, Metro Square Building, Hearings Room; on February 21, 1979 at 9:30 a.m., Department of Commerce, 5th Floor, Metro Square Building, Hearings Room; on February 22, 1979 at 7:00 p.m., Rm. 217 Lecture Center Building, Southwest State University, Marshall, MN; on March 1, 1979 at 1:30 p.m. and 7:00 p.m. at the St. Louis County Board Room, 2nd Floor, 5th Avenue West at 1st Street, Duluth, MN 55802.

All interested or affected persons will have an opportunity to participate. Statements may be made orally and written materials may be submitted by mail to Natalie Gaull, Hearing Examiner, 1745 University Avenue, Saint Paul, Minnesota 55104, telephone (612) 296-8114, either before the hearing or within twenty (20) days after the close of the hearing.

The proposed rules, if adopted, would govern the Standards of Conduct for peace officers in certain specified

The adoption of a rule becomes effective after the requirements of Minn. Stat. § 15.0412, subd. 4, have been met and five working days after the rule is published in the *State Register*, unless a later date is required by statutes or specified in the rule.

If an adopted rule is identical to its proposed form as previously published, a notice of adoption and a citation to its previous *State Register* publication will be printed.

If an adopted rule differs from its proposed form, language which has been deleted will be printed with strike outs and new language will be underlined, and the rule's previous *State Register* publication will be cited.

A temporary rule becomes effective upon the approval of the Attorney General as specified in Minn. Stat. § 15.0412, subd. 5. Notice of his decision will be published as soon as practicable, and the adopted temporary rule will be published in the manner provided for adopted rules under subd. 4.

Department of Natural Resources

Adopted Amendments to the Rules Governing Snowmobiles

The rules published at *State Register*, Volume 3, Number 39, April 2, 1979 (3 S.R. 1815) are now adopted, with the following changes.

Amendments as Adopted

6 MCAR § 1.0057 E. 4.a. No snowmobile manufactured on or after April 1, 1975, ~~in Minnesota,~~ except a snowmobile designed for competition purposes only, shall be sold, offered for sale, or operated in Minnesota unless it is so equipped that overall noise emission does not exceed and has been certified by the manufacturer ~~as being able~~ to conform to a sound level limitation of not more than 78 decibels on the A scale at 50 feet as originally equipped.

6 MCAR § 1.0057 E. 5. In certifying that a new snowmobile complies with the noise limitation requirements of this rule, a manufacturer shall make such a certification based on measurements made in accordance with the SAE Recommended Practice J192(a), ~~as amended or with such other standards for measurement of sound level as the department may adopt.~~ as set forth in the Report of the Vehicle Sound Level Committee, as approved by the Society of Automotive Engineers September 1970 and revised November 1973.

6 MCAR § 1.0057 F. 6. No snowmobile shall be sold or offered for sale in Minnesota unless its maker shall have previously furnished the Commissioner with a certificate of compliance certifying that all such snowmobiles made by that maker meet or exceed the applicable noise level restrictions established by these rules. The certification of compliance required in the foregoing shall be in the form of either a "Snowmobile Safety Certification Committee" label conspicuously attached to the machine showing certification by the Snowmobile Safety and Certification Committee, Inc.; ~~or a letter with test results showing an evaluation of the noise levels by a competent independent testing laboratory.~~ Snowmobiles intended for competition purposes only shall be exempt from this rule provided a separate placard identifying that such snowmobile is not so equipped is conspicuously and permanently affixed thereto.

6 MCAR § 1.0057 E. 7. Except for organized events as authorized by Minn. Stat. § 84.871, no snowmobile shall be modified by any person in any manner that shall amplify or otherwise increase total noise level above that emitted by the snowmobile as originally equipped, regardless of date of manufacture.

6 MCAR § 1.0058 Penalties.

A. Any person who shall violate any of the provisions of these regulations shall be guilty of a misdemeanor.

B. A manufacturer who certifies that a new snowmobile can meet the sound level limitations imposed by these rules shall be subject to the penalty provisions of subsection A. for each machine so certified which does not meet the applicable sound level limitation.

Department of Natural Resources

Adopted Rules Concerning Dam Safety

The proposed rules published at *State Register*, Volume 3, Number 28, pp. 1398-1412, January 15, 1979 (3 S.R. 1398), are adopted as printed below, with additions and deletions from the proposed rules indicated.

Rules as Adopted

6 MCAR § 1.5030 General provisions.

A. Purpose. The purpose of these rules is to regulate the construction and enlargement of dams, as well as the repair, alteration, maintenance, operation, transfer of ownership and

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abandonment in such a manner as to best provide for public health, safety and welfare. In the application of these rules, the Department shall be guided by the policies and requirements declared in Minn. Stat. ch. 105 and ~~§ 116.04.~~ ch. 116D.

The rules are pursuant to Laws of 1978, ch. 779, § 8 and are intended to be consistent with the goals and objectives of applicable federal and state environmental quality programs and policies including, but not limited to, mineland reclamation, and the management of: ~~shoreland management,~~ shorelands, flood ~~plain~~ plains ~~management~~, water surface use ~~management~~, boat and water safety, wild and scenic rivers ~~management~~, critical areas ~~management~~, recreational or wilderness areas ~~management~~, scientific and natural areas ~~managements~~ and protected vegetative species ~~management~~.

B. Scope. To achieve ~~the~~ this purpose ~~declared in 6 MCAR § 1.5030~~, the Commissioner hereby sets forth minimum standards and criteria for dam classification and identification ~~or risk and~~ of hazards to health, safety and welfare~~.~~. ~~These rules further establish minimum standards and criteria for the review, issuance and denial of~~ and for permits for ~~proposed new and existing~~ dam projects for water and waste impoundments ~~in and adjacent to public waters of the state~~ and for ordering repairs. ~~This also includes dams for impoundment of waste containing water not specifically requiring a change in public waters.~~

C. Jurisdiction. These rules shall apply to all ~~existing and proposed~~ dams defined below ~~other than those owned by the United States or those that do not meet the size criteria~~ (Section D~~,~~ ~~below~~), unless ~~otherwise~~ excluded in other sections of the rules. ~~These rules~~ They are supplementary and complimentary to the rules which establish standards and criteria for granting permits to change the course, current or cross-section of public waters. (6 MCAR §§1.5020-1.5023, 1.5025 and 1.5026)

~~With the exception of dams not subject to~~ Where these rules~~, in situations where the provisions of these rules are in~~ conflict with other appropriate rules and requirements, ~~these provisions which are~~ the most restrictive provision shall apply.

All provisions of 6 MCAR § 1.5024 are superceded by these rules as they relate to dams as defined herein, ~~not including~~ except the section relating to water level controls.

D. Definitions. For the purposes of these ~~regulations,~~ rules, certain terms ~~or words~~ used herein shall be interpreted as follows~~:~~. ~~The word "Shall" is mandatory, not permissive. All distances unless otherwise specified shall be measured horizontally.~~

These definitions are in addition to those contained in 6 MCAR § 1.5020 D. except where the same word is contained in both lists of definitions in which case the definitions in these rules shall apply in respect to dam safety administration.

"Alteration" means any activity which will affect the safety of a dam and/or which will result in a change in the course, current or cross-section of public waters.

"Commissioner" means the Commissioner of the Department of Natural Resources and any duly authorized representative ~~of the department who may be assigned responsibilities and authorities for dam safety~~.

"Cost" ~~for the purpose of this clause,~~ includes labor and materials ~~entering into the project~~; preliminary investigations and surveys; ~~the cost of~~ construction plant properly chargeable to ~~the cost of~~ the project; ~~and any and all other items entering directly into the cost of the project. "Cost" for the purposes of this clause, does not include~~ excluding costs of right-of-way, detached powerhouses, electrical generating machinery, and roads and railroads ~~unrelated to the construction of the project~~ affording access to the project.

"Dam" means any artificial barrier, together with appurtenant works, which does or may impound water and/or waste materials containing water except:

1. Dams which are less then 25 feet in height and have storage capacity at maximum storage elevation of less than 50 acre feet, which shall be exempt from dam safety permit requirements if they do not have potential for loss of life resulting from failure or misoperation ~~and which is greater than six (6) feet in height and has a storage capacity of more than fifteen (15) acre feet at maximum storage elevation~~;

2. ~~any~~ Any artificial barrier which is not in excess of six (6) feet in height regardless of storage capacity or which has a storage capacity not in excess of fifteen (15) acre-feet regardless of height~~, shall not be considered a dam~~.

3. ~~No circular tank or tank~~ Underground or elevated tanks ~~above the ground~~ to store water and/or waste ~~shall be considered a dam. In addition, the following shall not be considered as a dam for the purposes of these rules;~~

~~1. Earthen impoundment structures formed by construction of federal, state or local government state aid roads which are primarily intended for transportation purposes;~~

4. ~~2.~~ Any artificial barrier constructed solely for the purpose of containment of sewage or biological treatment of wastewater which is under the jurisdiction of the Minnesota Pollution Control Agency.

5. United States owned dams.

6. Dikes and levees constructed for flood control purposes to divert flood waters and which are not intended to act as impoundment structures.

This does not preclude the need for any permits from the Commissioner which may be required under applicable provisions of 6 MCAR §§ 1.5020 through 1.5026~~.~~ as further explained in the 6 MCAR § 1.5031, section on "Classification of Dams."

"Enlargement" means any change ~~in or addition to an existing dam,~~ which ~~raises or~~ may raise the maximum storage elevation of ~~the water or waste impounded by~~ the dam.

"Height" means the vertical distance from the natural bed of the stream or watercourse measured at the downstream toe

of the dam or from the lowest elevation of the outside limit of the dam, if it is not across a stream channel or watercourse, to the maximum storage elevation.

"Maintenance" means any work which will not result in a change in the hydraulic capacity of the structure or entail any changes in the structural character of the dam.

"Maximum Storage Elevation" means the ~~maximum~~ highest elevation to which ~~the dam will be constructed or to which~~ water or waste materials can be effectively stored behind the dam on either a temporary or permanent basis, whichever is greater.

"Owner" means the owner or lessee of the property to which the dam is attached, unless ~~dam~~ if the dam is ~~not~~ sponsored by a governmental agency. ~~If the dam is sponsored by an agency of the state, a political subdivision of the state, or the federal government, and if the sponsoring agency has an agreement under~~ which ~~it~~ will be responsible for operation and maintenance of the dam, ~~then~~ in which case that sponsoring agency shall be considered the "Owner."

~~"Reconstruction" means the rebuilding or renovation of an existing structure.~~

"Repair" ~~shall include~~ means any work which will change the hydraulic capacity of the structure ~~a dam~~ or entail any changes in the structural character of a dam.

"Shall" is mandatory and not permissive.

"Surface" shall be determined by multiplying total dam length by average ~~dam~~ height.

"Total dam length" means ~~length~~ the maximum horizontal distance between the outer limits of all artificial containment structures, including ~~the length of~~ any artifically constructed dike, ~~abutment or other structural additions appurtenant to the dam,~~ which are ~~part of, and~~ essential to~~,~~ ~~the~~ containment ~~structure~~, but does not include the length of emergency spillways which are located outside the abutments of the dam.

~~"Verifying" means the development of data in the ordinary course of the construction and operation of the project.~~

E. Severability. The provisions of these rules shall be severable, and the invalidity of any paragraph, subparagraph or subdivision thereof shall not make void any other paragraph, subparagraph, subdivision or any other part.

6 MCAR § 1.5031 Classification of dams.

~~In order to safeguard the public health, safety and welfare, all~~ All existing and proposed ~~new~~ dams shall be classified by the Commissioner into the following three (3) hazard classes ~~with respect to the potential hazard~~.

~~Class I dams shall include those~~ Those dams where failure, misoperation, ~~overtopping~~ or other occurrences or conditions ~~may~~ would probably result in:

Class I — any loss of life or serious hazard, or damage to: health, main highways, ~~homes,~~ high-value industrial or commercial properties, major public utilities or serious direct, or indirect, economic loss to the public.

Class II — ~~dams shall include those dams where failure, misoperation, over topping or other occurrences or conditions may result in~~ possible health hazard or probable loss of high-value property, damage to ~~major~~ secondary highways, railroads or other public utilities or limited direct, or indirect, economic loss to the public other than that described in Class III.

Class III — ~~dams shall include those dams where failure, misoperation, over topping or other occurrences or conditions may result in~~ property losses restricted mainly to rural buildings and local county and township roads which are an essential part of the rural transportation system serving the area involved.

Any dam whose failure, misoperation or other occurrences or conditions would result only in damages to the owner and would not otherwise affect public health, safety and welfare as described in Classes I, II and III, shall not be subject to this hazard classification.

~~Permits for a~~ A dam which is not classified as a Hazard Class I, II, or III dam, and those which are not included in the 6 MCAR § 1.5030 D. definition of dam, shall be subject ~~only~~ to applicable provisions of 6 MCAR §§ 1.5020 through 1.5026 and shall not be subject to these dam safety rules.

Changes in development in the vicinity of the dam may result in future reclassification.

6 MCAR § 1.5032 Procedure for Existing dams.

A. ~~Applicant's responsibilities.~~ General procedures for alteration, repair or removal. ~~This section identifies the procedures to be followed for existing dams, excluding dams being enlarged.~~

1. Application. Before commencing action ~~the repair or alteration of a dam, or removal of a dam so that it no longer impounds water or waste~~, the owner shall make a separate application ~~to the Commissioner~~ for each existing dam proposed to be changed upon forms provided by the Commissioner, except as provided in Section A.2. for emergencies. The application shall contain ~~the following~~:

a. ~~1.~~ ~~The name~~ Name and address of owner(s); ~~the owner or owners, or the sponsoring agency responsible for operation, maintenance and repair of the dam.~~

b. ~~2.~~ ~~The proposed~~ Proposed changes; ~~in the existing dam.~~

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c. ~~3.~~ Maps, plans and specifications which set forth pertinent details ~~and~~ including location, type, dimensions ~~of the dam as the Commissioner may require. 4. The~~ and storage capacity; ~~of the impoundment it.~~ and ~~5. The location, type size and height of the dam and any appurtenant structures. 6. Other pertinent information concerning the dam as may be required by the Commissioner and any information appropriate to a thorough consideration of the safety of the change to the dam.~~

d. ~~7. The proposed~~ Proposed date of start and completion of construction ~~the repair, alteration or removal.~~

A filing fee of $15.00 shall accompany the application in the form of a check or money order payable to the State Treasurer.

~~The Commissioner may waive any of these requirements if found unnecessary. Work described herein is subject to the "Fees" provision of 6 MCAR § 1.5034 B.6.~~

2. Emergency work. ~~B. Emergency Work~~

a. ~~1.~~ Actions by the owner~~:~~. ~~In the event of an emergency where~~ Where immediate action is necessary for public health, safety and welfare, repairs may be started ~~immediately~~, but the owner shall notify the Commissioner at once ~~of the emergency repairs~~. As soon as practicable, the owner shall apply for a permit for the emergency ~~repairs and any~~ necessary permanent repairs.

b. ~~2.~~ Commissioner's ~~Requirements:~~ actions. ~~The Commissioner shall immediately require any repairs or remedial action~~ Where necessary to protect public health, safety and welfare, if ~~either: a. The~~ the condition of any dam or impoundment is ~~so~~ imminently dangerous to the safety or life or property ~~as not to permit time for the issuance and enforcement of an order relative to maintenance or operation;~~ or ~~b. Imminent~~ imminent floods threaten the safety of a dam or impoundment~~:~~. ~~3. Commissioner's Actions: The~~ the Commissioner may, in an emergency, require and enforce ~~any of the following actions: a. Lowering~~ lowering or completely emptying of the water level ~~by releasing water~~ from the impoundment ~~behind the dam. b. Completely emptying the impoundment. c. Taking~~ and taking any other steps ~~as may be~~ essential to safeguard life and property.

3. Removal. ~~C. Removal of dams.~~

~~1. Applications.~~

Before commencing removal, the ~~Any~~ owner ~~of a dam seeking its removal must apply to the Commissioner for permission and~~ shall comply with the application requirements of Section A.1. above. ~~all required procedures the Commissioner may prescribe.~~

~~2. Evidence of removal.~~

~~a. Upon completion of the~~ After removal ~~of a dam~~, the owner shall submit evidence as to the manner in which the work was performed and the conditions obtained after the removal~~:~~ ~~shall be filed with the Commissioner. b. The evidence shall show~~ The Commissioner shall inspect to determine that a sufficient portion of the dam has been removed to eliminate the hazard directly attributable to the presence of the dam.

~~3. Final Inspection~~

~~Before final approval of the removal of a dam is issued, the Commissioner shall inspect the work and determine that danger to public health, safety and welfare has been eliminated.~~

B. ~~D.~~ Inspections ~~of existing dams by the Commissioner~~.

1. Hazard classification ~~Inspections~~.

The Commissioner shall make initial inspections of each dam in the state to determine the appropriate hazard classification or exemption according to criteria in ~~NR 5031~~ 6 MCAR § 1.5031.

2. Dam safety ~~Inspections~~.

a. The Commissioner shall make~~, or cause to be made,~~ an initial detailed systematic technical inspection and evaluations of every Class I, II, or III dam in order to assess the general ~~condition of the dam with respect to~~ safety~~.~~ conditions, ~~The inspection will include:~~ including a

(1) a review and analysis of available data on the design, construction and operation ~~of the dam~~;

(2) a visual inspection of the dam~~, appurtenant structures~~ and downstream and upstream areas~~;~~,

~~(3) a report shall be made of the general condition of the dam including, when possible, an assessment of hydraulic and hydrologic capabilities, structural stabilities and identification of any other conditions which constitute hazards to health, safety and welfare. Such report shall also include:~~

~~(a) a determination of any need for emergency measures or actions;~~

~~(b) a determination of the need for corrective actions relating to the design, construction and operation of the dam and appurtenant structures; and~~

~~(c) a determination of the need for additional detailed studies, investigations and analyses.~~

~~b. Technical areas to be investigated as part of the field inspections:~~

~~(1) Engineering data: Engineering data may include, but are not limited to, any data listed in Appendix I of "Recommended Guidelines for Safety Inspection of Dams," Appendix D, Department of Army, Office of the Chief of Engineers.~~

~~(a) To the extent feasible, engineering data relating to the design, construction and operation of the dam and appurtenant structures shall be collected from all available sources, including records of the owner.~~

~~(b) When necessary engineering data are unavailable or inadequate or invalid in respect to protection of health, safety and welfare, a list of deficiencies shall be made by the Commissioner, and the Commissioner may require that such information be provided by the owner.~~

~~(2) Visual field inspections: Visual inspections shall be made of the dam, appurtenant structures, impoundment area and downstream channel in the vicinity of the dam~~ including

(a) an examination of significant structural, geotechnical, hydraulic and hydrologic features including, where applicable, electrical and mechanical equipment for the operation of control facilities ~~that affect the safety of a dam.~~; ~~Visual inspections shall include, but are not limited to, detecting~~

(b) evidence of leakage, erosion, seepage, slope instability, undue settlement, displacement, tilting, cracking, deterioration and improper functioning of drains and relief wells~~.~~; ~~The inspection shall also include an examination of the~~ and

(c) adequacy and quality of maintenance and operating equipment and procedures ~~as they relate to safety of the dam. Other areas of inspection may include, but not limited to, any of those listed in Appendix H "Recommended guidelines for safety inspection of dams." "Appendix D," Department of the Army, Office of the Chief of Engineers.~~

~~(3) Evaluation of hydraulic and hydrologic features: The evaluation of hydraulic and hydrologic features is required to determine the capability of the discharge and storage capacity of the dam for safely handling recommended design floods based on the size and hazard potential class of the dam. The safety evaluations involve constraints on water control such as blocked entrances, restrictions on operation of spillway and outlet gates, if any, inadequate energy dissipators or restrictive channel conditions, significant reduction in impoundment capacity by sediment deposits and other factors and material balance of the impoundment. Where essential design data are lacking, evaluations of watershed characteristics, rainfall and impoundment records may be used to evaluate effects of the dam.~~

~~(4) Evaluations of structural stability: The structural stability evaluations are made to determine the existence of conditions which are hazardous or which might develop into hazards and to formulate recommendations regarding the need for additional studies, investigations or analyses.~~

(3) report on general condition including, when possible, an assessment of storage capacity, hydraulic and hydrologic capabilities, structural stabilities, and any other conditions which constitute a hazard based upon current prudent design considering the size and hazard class of the dam. The safety evaluations involve constraints on water control such as blocked entrances, restrictions on operation of spillway and outlet gates, if any, inadequate energy dissipators or restrictive channel conditions, significant reduction in impoundment capacity by sediment deposits and for waste impoundments, the material balance. Where essential design data are lacking, evaluations of watershed characteristics, rainfall and impoundment records may be used to evaluate effects of the dam.

The report shall determine the need for:

(a) emergency measures or actions;

(b) corrective actions relating to design, construction and operation; and

(c) additional detailed studies, investigations and analyses.

b. ~~c.~~ Timing ~~of dam safety inspections.~~

~~(1)~~ Subject to the availability of staff and funds~~:~~:

(1) ~~t~~The Commissioner shall make ~~or cause to be made,~~ initial inspections of all Class I, II and III ~~hazard~~ dams as soon as reasonably possible based on the degree of hazard involved.

(2) After the initial detailed inspections ~~and subject to the availability of funds and staff~~, the Commissioner shall make~~, or cause to be made,~~ periodic inspections of dams based on the following schedule ~~in order to determine their adequacy and their proper Hazard Classification~~:

(a) Class I dams, at least one time every year;

(b) Class II dams, at least one time every two years; and

(c) Class III dams, at least one time every four years~~.~~ ~~provided that for such dams which were built in cooperation with a governmental sponsoring agency responsible for operation and maintenance the~~ The Commissioner shall utilize the services of ~~the~~ governmental ~~sponsoring agency~~ agencies to the maximum extent ~~possible and~~ feasible to provide for periodic inspections.

3. Reports on inspections. Upon completion of ~~the~~ each inspection ~~of a dam~~, the Commissioner shall notify the owner of the dam, in writing, of the results ~~and findings~~ of the inspection and if ~~a~~ the dam ~~is unsafe or~~ needs ~~repair or~~ corrective action, the Commissioner shall ~~notify the owner and~~ order such ~~remedial~~ action.

~~4. Need for further dam safety investigations. If the Commissioner determines that additional engineering investigations are necessary in order to determine the safety of a dam and the extent of needed repairs or alterations, he shall notify the owner thereof to cause such investigations to be made at the owner's expense and to file the results with the Commis-~~

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~~sioner for use in determining the conditions of dams and the degree and nature of repair, alteration or possible other action needed.~~

C. ~~E.~~ Transfer of ~~dams~~ ownership. The owner shall not transfer the ownership of any Class I or II ~~Hazard~~ dam without a permit from the Commissioner. For Class III ~~hazard~~ dams, the owner, or the party to whom a dam is transferred, shall apply to the Commissioner for a permit for the transfer of ownership within thirty (30) days after the ownership changes. Permits shall be issued based on evaluation of the hazard class, the conditions and the financial capabilities of the transferee.

No state ~~department or~~ agency ~~and no county, city, town~~ or political subdivision ~~other governmental entity~~ may purchase or accept as a gift any privately owned dam subject to Department permit requirements until after: ~~(1) the Commissioner has examined the dam. (2) the Commissioner has prepared a report of his examination and filed it with the legislature and (3) the legislature has had an opportunity to consider the report and has not prohibited the purchase or gift during the legislative session in which the report is filed, or if the report is filed when the legislature is not in session, the legislature has not prohibited the gift or purchase at the next succeeding session.~~ compliance with the Commissioner and legislative action provided in Minn. Stat. § 105.521.

D. ~~F.~~ Operation and maintenance.

1. Responsibilities: The owner shall operate and maintain the dam. Regulation of ~~the~~ maintenance and ~~of the~~ operation ~~of the dam throughout its existence, insofar as necessary~~ for public health, safety and welfare, is vested with the Commissioner.

2. Reports and records. ~~The Commissioner may require owners~~ Owners may be required to keep records ~~of,~~ and ~~to~~ report on maintenance, operation, staffing and engineering and geologic investigations and any other data necessary to ~~secure maintenance and operation and to require staffing and engineering and geologic investigations in the interests of~~ protect the public health, safety and welfare. In addition, the owner shall fully and promptly advise the Commissioner of any ~~sudden or unprecedented flood or~~ unusual or alarming circumstance or occurrence affecting the dam.

~~3. Inspections and Work Requirements: The Commissioner, from time to time, shall make inspections of dams for the purpose of making safety determinations, but shall require owners to perform at their own expense work necessary to disclose information sufficient to enable the department to determine conditions of dams in regard to their safety and to perform at their own expense other work necessary to secure maintenance and operation which will safeguard life and property.~~

E. ~~G.~~ Termination of operations and perpetual maintenance.

1. Unless the dam is removed, the owner shall perpetually maintain the dam and appurtenances so as to ensure the integrity of the structure ~~in order to achieve its intended and authorized functions and to protect public health, safety and welfare.~~

2. The Commissioner may impose such requirements as may be necessary, prior to the ultimate termination of the owner's operations, to insure that the owner will be financially responsible for carrying out the activities required for perpetual maintenance, and that adequate funding will exist.

3. In respect to dams utilized for waste disposal ~~purposes~~, the owner shall prepare and submit to the Commissioner plans for termination of operations and perpetual maintenance which will address the owner's plans for both an unanticipated or premature termination of operations and for the ultimate intended termination of operations. The plans for termination of operations and perpetual maintenance shall, at a minimum, address the following issues, where applicable.

a. Perpetual maintenance and safety of the dam including adequate monitoring programs.

b. Disposal and treatment of ponded and channelled waters.

c. Monitoring and mitigation of surface water and groundwater pollution.

d. Silt, sedimentation and erosion control.

e. Vegetation and landscaping.

~~H. Investigations and studies. Relative to construction, operation, maintenance, enlargement, repair, alteration and abandonment of dams, the Commissioner shall require information of such nature and extent as to enable him to make a proper review and determination of the various features of the project as they relate to public health, safety, and welfare.~~

~~1. Permit cancellation, suspension or alteration. Subject to all existing rights and remedies at law and subject to the rights of appeal in the manner provided by Minn. Stat. §§ 105.37-105.64 (1976):~~

~~1. As provided in Minn. Stat. § 105.44 (1976), the Commissioner may cancel or modify a permit at any time if the Commissioner deems it necessary for any cause for the protection of the public interests.~~

~~2. As provided in Minn. Stat. § 105.52, whether or not a dam is under permit, if the Commissioner determines that it is unsafe or needs repair or alteration, he shall notify the owner to repair, alter or remove the dam as the exigencies of the case may require.~~

~~3. As provided in Minn. Stat. § 105.64 for dams associated with the mining of iron ore, taconite, copper, copper nickel or nickel, the Commissioner may:~~

~~a. Cancel or modify a permit at the request of or with the consent of the permittee.~~

~~b. Cancel, modify or suspend a permit, if any of its terms, or any law pertaining to the project is violated or necessary to protect the public health, safety or welfare, or to prevent substantial injury not authorized by the permit to~~

public interests in lands or waters, or to persons or property.

c. For the same purposes as b. above, in an emergency suspend operations forthwith and require the owner or permittee to take any measures necessary to prevent or remedy the situation which has caused the emergency or imminent danger.

4. An order issued under paragraph 1, 2, 3 a., b. above is subject to the hearing provisions of Minn. Stat. §§ 105.44 and 105.462. An order issued under paragraph 3 c. above is effective on the date thereof, but shall not be in effect for more than thirty (30) days from that date unless the permittee is on the same date mailed written notice of the order which includes notice of a Minn. Stat. § 105.44 public hearing on a date not more than thirty (30) days from the date of the notice.

5. If situations occur in the construction or operations authorized here-under which may endanger the public health, safety and welfare, the owner/permittee shall notify the Commissioner immediately and shall immediately take corrective measures and cease construction or operations if the situation so requires.

6. If the Commissioner, pursuant to the terms of a permit, suspends or cancels a permit or orders the Permittee to cease operations permitted hereunder, the Permittee shall do so immediately.

F. J. Reports to the legislature on publicly owned dams. As required by Laws of 1978, ch. 779, § 7. (Minn. Stat. § 105.482) the Commissioner shall make an annual report to the legislature on the status of dams owned by the state or local governmental units which shall include the following:

1. A listing of dams in need of repair or reconstruction.

2. The probable degree of severity of the need of repair or reconstruction.

3. The hazard classification of the dam.

4. The priority ranking of the need for action to repair or reconstruct a dam based on evaluation of items 2. and 3. above.

5. Recommendations recommendations for action including any requests for state share of or matching funds for grants-in-aid to local governments as provided by Minn. Stat. § 105.482.

6 MCAR § 1.5033 Procedure for aNew dams or enlargements of Dams.

A. General outline of permit process. Class III dams, waivers.

1. Construction of a new dam or enlargement of an existing dam shall include the following sequence of events for Hazard Class I & II dams.

a. A permit application, preliminary report outlining the proposed project and filing fees.

b. Certification that a professional engineer has been assigned to the project.

c. A final design report.

d. Detailed plans and specifications.

e. Other essential supporting data which the Commissioner may request.

f. Payment of dam inspection fees, where applicable.

g. Commissioner's Approval and Issuance of Permit.

h. Work Inspection and Construction Reports.

i. As Built Plans and Data.

j. Statement of Completion, and the Affidavit of Cost, where applicable.

k. Receipt of Impoundment Approval by Commissioner, where applicable.

l. Performance Report.

2. For Hazard Class III dams the applicant (the owner or sponsoring agency where applicable) shall complete an application form and furnish a preliminary report, certification that a professional engineer has been assigned to the project, design data, plans and specifications, work inspection and construction reports and as built plans and data as specified in 6 MCAR § 1.5033 Sections B1, B2, B3, B4, B5, B6, (where applicable), B8, B9, and B10 (where applicable) with the following exception:

For Class III Hazard dams which are sponsored by an a governmental agency of the state, a political subdivision of the state or the federal government which has an agreement under which it will be responsible for operation and maintenance of the dam and also for Class III Hazard dams or for which the design, construction supervision, and inspection is performed by a federal agency in accordance with provisions of the National Dam Safety Act PL 92-367 and applicable federal guide lines standards and requirements related to that act, the Commissioner may waive certain details of the required submittals, provided that the federal agency will furnish the Commissioner with adequate facts on the design and construction inspection to allow the Commissioner to adequately evaluate the permit and approvals in respect to public health, safety and welfare.

B. Specific procedural requirements.

1. The permit application, preliminary report, and filing fees.

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a. The permit application. A separate application, including a preliminary report for each new dam ~~proposed to be constructed~~ or each ~~existing~~ dam proposed to be enlarged, shall be filed with the Commissioner upon forms provided by the Commissioner ~~and~~ which shall contain the following:

(1) ~~The~~ name and address of the owner(s) or prospective owner~~.~~;

(2) ~~The~~ purpose ~~for the dam.~~;

(3) ~~The~~ location, type, size and height of the dam ~~and any appurtenant structures.~~; and

(4) ~~The~~ storage capacity of the impoundment.

~~(5) Other pertinent information as may be required by the Commissioner.~~

For waste impoundment dams, the permit application shall include facts necessary for the issuance of a permit which extends throughout the life of the impoundment project.

b. The preliminary report. The preliminary report shall consist of:

(1) A general ~~description of the dam and all appurtenances. A statement of the purpose for which the dam is to be used and~~ a statement setting forth the effect on the environment ~~of such dam.~~

(2) Maps showing the location ~~of the proposed dam. the~~ County, Township and Section lines; the outline of the impoundments; the location of state, county and township roads; the locations of utilities, e.g. pipelines, transmission, telegraph and telephone lines; the topography; and other structure or ~~facility~~ facilities including ~~human habitations~~ dwellings affected by the proposed dam. State, county and U.S.G.S. maps and aerial photographs may be used for this purpose.

(3) A written report of surface conditions, i.e. geology, topography ~~and culture~~, which is based on a field examination by the applicant's engineer and other qualifed personnel.

(4) Typical cross-sections of the dam accurately showing elevations, proposed impoundment levels and top width.

(5) Logs of borings in the foundation and in the borrow areas, and results of seismic and resistivity subsurface investigations, when they are readily available.

(6) Preliminary design assumptions, operational aspects, tentative conclusions and references. The design assumptions shall pertain to such hydrologic features as drainage area, rainfall data, runoff, inflow, area-capacity-elevation data and flood routing, in addition to structural, geologic and geotechnical assumptions.

(7) A preliminary cost estimate ~~of the structure and appurtenances thereto~~.

(8) Where applicable, future plans on ultimate project size including dams and impoundments.

(9) A general description of all other activities and elements ~~which are~~ related to and part of the total dam project, such as operational plans and details of smaller dams, dikes, diversions, reclaim water facilities and other facility and utility lines including pipelines, roads and railroads. ~~Separate permit applications will be required for~~ The report shall identify each element or activity of ~~a~~ the total dam project ~~in accordance with appropriate~~ which would require a permit under the provisions of 6 MCAR §§ 1.5020-1.5026 ~~and will be submitted with the application for the dam~~.

c. Filing fees. Each application for a permit must include a $15.00 fee in the form of a check or money order payable to the State Treasurer.

2. Professional engineer's requirements. The applicant must engage professional engineer(s) registered in the State of Minnesota or ~~professional engineers~~ acting solely as officers or employees of the United States as provided in Minn. Stat. § 326.13(3), who are proficient in dam engineering to prepare the engineering documents, plans and specifications, ~~and~~ to inspect the construction, or enlargement, and to establish operation and maintenance procedures for the structure ~~of the dam~~.

~~All submitted material shall be certified for adequacy by a professional engineer, who shall not be an employee of the owner or of the construction contractor.~~

3. Final design requirements. Upon acceptance and agreement by the Commissioner of the preliminary report, the applicant shall submit ~~to the Commissioner~~, for his approval, a final design report, together with plans and specifications and the initial inspection fee ~~required~~ ~~fees~~. The final design report shall include, but not limited to, the following:

a. General description of the project, such as its ~~function and~~ service life, production rates, required storage and area(s); geological considerations such as physiography, topography, geology, seismicity, groundwater conditions and maps; hydrologic studies such as physical features, climatology, design, storm and design flood characteristics, flood routing, water-material balance, freeboard requirements, dam-break flood; geotechnical information, such as rock-soil sampling and logging, geophysical investigations, field and lab testing, instrumentation data; considerations of construction materials and their properties, such as quantities required, borrow and aggregate locations and volumes, field and lab work and investigations, concrete, waste materials generation and placement techniques, investigation of the stored waste materials such as generations, transportation, mechanical/chemical/special testing, disposal practice.

b. Analytical determinations, such as seepage and underseepage studies, stability, deformation and settlement analysis; analytical and design details of facilities, such as dam, foundation, impoundment, abutments, spillways (for the purpose of these rules, spillway means any facility appurtenant to the dam available to discharge excess water and/or waste from the impoundment) or decant facilities, diversions, outlet works, instrumentation; operational aspects, such as

impoundment operating criteria, initial filling criteria, responsibility and coordination, emergency procedures and warning systems; air, water and solid pollution controls, sedimentation and erosion controls; operational and post-operational maintenance and abandonment considerations; surveillance and inspection programs.

c. A detailed cost estimate ~~of the structure and appurtenances.~~

~~d. Waiver of requirements.~~

~~(1) In instances wherein the physical conditions involved and the size of the dam or reservoir are such as to render the requirements as to drainage areas, rainfall, streamflow and drilling or prospecting of site unnecessary, the Commissioner may waive any of the requirements.~~

~~(2) Based on discussions between the applicant and the Commissioner and on evaluation of the hazards and risks involved, the Commissioner may waive any of the design requirements if they are found to be unnecessary.~~

4. Plans and specifications.

a. ~~Plans.~~ ~~The~~ plans Plans shall consist of a bound portfolio of the drawings with all sheets being of the same size, and shall be of such scale that specifications can be drafted, and construction accomplished.

b. ~~Specifications.~~ ~~These~~ Specifications shall contain:

(1) ~~The~~ general provisions, specifying the rights, duties, responsibilities of the owner, designer, contractor; ~~and~~ the prescribed order of work~~.~~; and

(2) ~~The~~ technical provisions describing approved work methods, equipment materials and desired end results~~.~~; and

(3) special conditions.

~~5. Other information. The applicant shall also provide any other information or data concerning the dam, which is pertinent to the consideration of public health, safety and welfare, as may be required by the Commissioner.~~

~~6. Payment of dam inspection fees.~~

~~a. Fees required.~~

~~(1) Initial Dam Inspection fees:~~

~~(a) Payment of fees: An initial dam inspection fee shall accompany all applications for permits for dam construction, reconstruction, removal or any change in the dam with the following exception:~~

~~No initial dam inspection fee shall be charged to any state agencies, political subdivisions of the state and federal agencies nor to owners of any Class I, II, or III dams which are sponsored by a state agency, political subdivision of the state of federal agencies who are responsible for operation and maintenance of the dams or for any Class III Hazard dam for which the design, construction supervision, and inspection is provided by a federal agency in accordance with provisions of the National Dam Safety Act PL 92-367 and applicable federal guidelines, standards and requirements related to that act.~~

~~(b) The initial dam inspection fee shall be based on the formula and system established by these rules, and no field inspection fees for dams pursuant to 6 MCAR § 1.5000 shall be charged to the applicant, unless the actual cost of the field inspection of a dam as itemized and certified by the Commissioner, is greater than the amount of money collected under provisions of 6 MCAR § 1.5033 B.6.~~

~~(c) In the event that the actual costs of field inspection of a dam by the Commissioner exceeds the amount paid by the applicant under 6 MCAR § 1.5033 B.6.b., the Commissioner shall provide an itemized and certified listing of the costs of field inspection of the dam and may charge the applicant sufficient fees pursuant to provisions of 6 MCAR § 1.5000 for the additional costs incurred, but not compensated for by the initial dam inspection fees levied under 6 MCAR § 1.5033 B.6.b.~~

~~(2) Periodic inspection fees. Each owner of a dam, except those exempted under Section 1.5033 B.6.b.(1)(a) shall be charged periodic field inspection fees for each year an inspection is made pursuant to Section 1.5032 D.2.c., for the purpose of providing funds for periodic inspection of dams according to the following schedule:~~

~~(a) A minimum fee of $30.00 per dam plus an additional fee based on surface of the dam as follows:~~

~~(i) For the first 1,000 square feet of surface $0.01 per square foot.~~

~~(ii) For each square foot in excess of 1,000 square feet of surface $0.001 per square foot.~~

~~The periodic inspection fee, for each year in which an inspection is made, is payable at the end of each state fiscal year, beginning July 1 and ending the following June 30. The first fee is payable on or before June 30, 1980 for any periodic inspections made during July 1, 1979 and June 30, 1980.~~

~~b. Procedure for determining initial dam inspection fees.~~

~~(1) With the exception of the exemptions noted in Section 1.5033 B.6.a.1.(a), the following dam inspection fee shall accompany each application for a permit required under Chapter 105, for a new dam or for enlargement or repair of an existing dam.~~

KEY: RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language. PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material."

~~(a) For the first $100,000 of estimated cost, a fee of two and one-half percent.~~

~~(b) For the next $400,000 of estimated cost, a fee of one and one-half percent.~~

~~(c) For the next $500,000 of estimated cost, a fee of one percent.~~

~~(d) For all costs in excess of $1,000,000 a fee of one-half of one percent.~~

~~(2) For all dams, subject to initial dam inspection fees, which will be totally constructed to a maximum storage elevation within 5 years of the date construction begins the applicant shall submit a certified estimate of the cost with his application together with the appropriate fee based on cost. Upon completion of the project, the applicant shall file, with the Commissioner, an affidavit of the final total costs of construction. If the final total cost exceeds the estimate, the applicant shall pay the difference between the fee paid and the fee required based on the final total cost according to the schedule of 6 MCAR § 1.5033 B.6.b.(1) and 6 MCAR § 1.5033 B.6.c.~~

~~(3) For dams, subject to initial dam inspection fees, which will not be totally constructed to maximum storage elevation within 5 years of the date construction begins, such as dams for storage of mining waste materials, the applicant shall provide the Commissioner a work schedule outlining the proposed staging of dam construction and shall submit a certified estimate of costs based on staging of dam construction or based on an estimate of costs at construction intervals not exceeding 5 years in duration. At the end of each stage of dam construction, or at construction intervals not exceeding 5 years in duration, throughout the period of total construction until the maximum storage elevation is reached, the applicant shall file with the Commissioner an affidavit of costs for each stage or construction interval not exceeding 5 years in duration. If the actual cost, at the end of a stage or construction interval, exceeds the estimate the applicant shall the difference between the fee paid and the fee required, based on the actual cost, according to the schedule of 6 MCAR § 1.5033 B.6.b.(1).~~

~~Commissioner's approval and issuance of permits.~~

5. Permit standards.

~~a. In reviewing proposals for new dams, the Commissioner will evaluate~~ Approval or denial shall be based on the potential hazards ~~and risks~~ to the health, safety and welfare of the public and ~~to~~ the environment ~~in the vicinity of the proposed dam. Probable~~ including probable future development of the area downstream or upstream ~~from the dam will be considered in evaluating potential hazard and risks~~. The applicant may be required to take measures to reduce risks, and the Commissioner shall furnish information and recommendations to local governments for present and future land use controls to minimize risks to downstream areas.

The Commissioner shall determine if the proposal is adequate with respect to:

a. ~~(1) Permits to construct dams which would be in Hazard Class I shall not be approved unless there is justification for the construction of the dam at the proposed location. Such justification shall include but is not limited to.~~ For Class I, a showing of lack of other suitable feasible and practical alternative sites, and economic hardship which would have a major adverse effect on population and socio-economic base of the area ~~involved.~~ affected.

b. ~~(2) Permits to construct dams which would be in Hazard Class II shall not be approved unless there is justification for the construction of the dam at the proposed location. Such justification shall include, but is not limited to,~~ For Class II, a showing of lack of other suitable feasible and practical alternative sites and that the dam will benefit the population or socio-economic base of the area involved.

~~(3) In the event that justification is provided for construction of any Hazard Class dam, the applicant may be required by the Commissioner to take measures to reduce risks.~~

~~(4) The Commissioner shall furnish information to local governments which have legal authority to control land use, regarding the classification together with recommendations for present and future land use controls which should be implemented to insure that risks to downstream areas will be minimized.~~

~~b. In considering the issuance of a permit, the Commissioner shall determine if the proposal is adequate with respect to the following:~~

c. ~~(1)~~ The need in terms of quantifiable benefits.

d. ~~(2)~~ The stability of the dam, foundation, abutments and impoundment under all conditions of construction and operation:. ~~An adequate margin of safety must be provided against~~ including consideration of liquefaction, shear ~~failure~~, or seepage failure, overturning, sliding, overstressing and excessive deformation, under all loading conditions including earthquake. ~~These conditions~~ This determination must be based on current, prudent engineering practice, and the degree of conservatism employed must depend on hazards ~~and risks as outlined in 6 MCAR § 1.5021~~.

e. ~~(3) The discharge capacity~~ Discharge and/or storage capacity ~~of the dam, appurtenances and impoundment shall be~~ capable of handling the design flood ~~which must be~~ based on current, prudent engineering practice and the hazard ~~potential~~ classification ~~as provided in 6 MCAR § 1.5031~~.

f. ~~(4) The project in its totality must be in compliance~~ Compliance with prudent, current environmental practice throughout its existence. ~~In particular, the project must meet the State's pollution standards for ground water, surface water, and air quality throughout its existence. The Commissioner shall consider the effects and impacts on the natural environment based on state and federal environmental laws, rules and requirements.~~

(5) The cost of that portion of engineering evaluations and studies relating to the safety of dams which is also part of the final design report outlined in 6 MCAR § 1.5033, performed for the applicant by professional engineers, and which were included with Environmental Impact Statements required under applicable State and Federal Environmental Laws shall be subtracted from the total cost determined under 6 MCAR § 1.5033 B.6., provided that the applicant provides the Commissioner with a notarized statement which includes a detailed accounting of expenditures for such dam safety related professional engineering evaluations and studies.

(6) The Commissioner shall keep annual records of the costs incurred in inspection and monitoring of new or enlarged dams and repairs to existing dams before, during and after construction and such cost record shall be provided upon request of any applicant who paid inspection fees.

6. 8. Work inspection and construction reports.

a. Conformity with approved designs, plans and specifications.

(1) The permittee, in cooperation with its designer, shall be responsible for providing adequate controls of construction and operation activities and for the development of data in the ordinary course of those activities on and for verifying design, construction and operation assumptions. The owner may engage a registered professional engineer to operate and inspect the construction of the project, but the designer should also periodically inspect the said structures. monitor construction.

(2) All construction shall be carried out in accordance with the approved design, plans and specifications. No alteration, modification or addition to the approved designs, plans and specifications that could adversely affect the safety or environmental impact and adequacy of the dam shall be made by the permittee without prior permission of the Commissioner. Such approvals shall be provided, if a proper margin of safety is maintained, as rapidly as possible to preclude interference with construction work schedules. Emergency short term revisions may be made by the permittee followed by prompt notice to the Commissioner. Records of alterations, modifications, or additions to the approved design, plans and specifications, for which written approval of the Commissioner was not required shall be submitted with the Construction Report (Section 1.5023, B8d). 1.5033 B.6.c.).

(3) If the permittee finds at any time during construction or operation that, in order to adequately protect public health, safety or welfare or the environment alterations to the approved design, plans and specifications are required, the permittee shall promptly notify the Commissioner of such requirements and shall revise the designs, plans and specifications and submit the revisions to the Commissioner for approval. Emergency short term revisions may be made by the permittee followed by prompt notice to the Commissioner. If such short term revisions are to remain as permanent project features, they shall be subject to approval by the Commissioner.

(3) (4) During the construction or operation of a dam, the The Commissioner shall make inspections for the purpose of securing conformity with approved designs, plans and specifications and shall require the owner to perform, at the owner's permittee's expense, work or tests as found necessary to disclose sufficient information to enable the Commissioner to determine if there is conformity with approved designs, plans and specifications.

(4) (5) If, after any inspections, investigations or examinations or at any time as work progresses, the Commissioner finds that amendments, modifications or changes are necessary to protect health, safety, welfare and the environment, the Commissioner may he shall order the owner to revise designs, plans and specifications.

(6) In the event that conditions imposed by the Commissioner as part of the original designs, plans and specifications may be waived or made less burdensome without sacrificing a proper margin of adequacy and safety, the Commissioner may authorize an owner to revise designs, plans and specifications.

(7) If, at any time during construction, enlargement, repairs or alterations of a dam the Commissioner finds that the work is not being done in conformance with approved designs, plans and specifications, the Commissioner shall notify the owner and shall order immediate compliance.

(8) The Commissioner may order that no further work on a dam be done until such compliance has been effected and approved by the Commissioner.

(9) Failure to comply with the approved designs, plans and specifications shall render the approvals subject to revocation if compliance is not made.

(10) If conditions are revealed which will not permit the construction of a safe dam, the permit may be revoked.

(5) (11) At his discretion, the Commissioner may observe and approve foundation preparation and may approve construction material placement on an intermittent or continuing basis when field conditions dictate. The Commissioner shall be notified at least (3) days in advance of construction material placement. start of construction.

b. Acceptance of permit or approval. Initiating or undertaking any work or part thereof, by the permittee,

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~~authorized in an issued permit or approval. constitutes acceptance of all terms and conditions contained therein.~~

b. ~~c.~~ Permanent markers. At least one (1) permanent marker for vertical and horizontal control shall be established in the natural ground by the permittee in the vicinity of each dam ~~structure~~ so as to be accessible and protected against disturbance throughout its existence. The permanent marker for vertical control must be based upon datum and degree of accuracy based upon considerations of the hazards involved and the size of the dam, as specified by the Commissioner.

~~Each marker shall be located so as to be accessible and protected against disturbance throughout the existence of the dam.~~ The permittee shall submit ~~to the Commissioner~~ the locations of these permanent markers plotted on the best available maps or plans within time limits prescribed ~~by the Commissioner~~ in the permit.

c. ~~d.~~ Construction report. The permittee ~~shall~~ may be required to submit monthly ~~to the Commissioner a~~ reports on construction observation and quality control. ~~The report shall include. but is not limited to.~~ when construction is complex or hazardous, including: daily construction documentation; foundation preparation and treatment. ~~construction~~ quality control tests; ~~maintenance of~~ records and summaries of actual tests of foundation and construction materials, cut-off trench, grouting, etc; instrumentation installation and maintenance of ~~instrumentation~~ records and ~~instrumentation~~ readings; geologic mapping, if any, of exposed foundations; ~~preparation~~ of logs of drill holes and other exploration features, if any, completed during construction; review and evaluation of disclosed field conditions by the designer; and any other items which may be pertinent to a construction quality assurance program.

7. ~~9.~~ As-built plans and data. Immediately upon completion of construction ~~a new dam or reservoir or enlargement of a dam~~, the ~~owner~~ permittee shall file ~~with the Commissioner~~ supplementary drawings or ~~descriptive matter showing or describing~~ descriptions of the dam as actually constructed, or any other items which may be of permanent value ~~and have a~~ bearing on the adequacy and permanency of the dam.

In ~~connection with the~~ enlargements ~~of a dam. the supplementary drawings and descriptive matter~~ the data need apply only to the new work.

8. ~~10.~~ Statement of completion and affidavit of cost.

a. ~~Statement of completion. As soon as practicable~~ Within 90 days following ~~the~~ completion of construction, the permittee shall notify the Commissioner, by certified mail. ~~The notification shall include~~ including a statement ~~on the part~~ of the designer ~~of the~~ or professional engineer in charge of ~~the~~ construction inspection that to the best of knowledge, the dam was completed in accordance with the approved designs, plans and specifications and any ~~approved~~ revisions thereof.

b. ~~Affidavit of cost.~~

As soon as ~~possible after giving notice of completion, the~~ ~~owner~~ practicable thereafter, the permittee shall file an affidavit ~~with the Commissioner~~ stating the actual cost ~~of the dam~~ in detail. ~~In the event the owner of a new or enlarged dam~~ or that the permittee is unable to report the actual cost ~~of construction or enlargement, an affidavit to this effect shall be filed within thirty (30) days after written request by the Commissioner,~~ stating the reasons therefor. In the latter event ~~The~~ the Commissioner shall ~~then~~ make at the owner's expense an appraisal of the cost of construction or enlargement and determine what further fee, if any, is required. If a further fee is required, the Commissioner shall notify the owner by certified mail of the amount ~~of such fee~~ within fifteen (15) days including notice that permittee ~~and that the owner~~ may appear within sixty (60) days thereafter ~~before an authorized representative of the Commissioner~~ to protest the amount of the fee, in whole or in part and the sufficiency of the appraisal upon which such determination was based.

9. ~~11.~~ Issuance of impoundment approval ~~by the Commissioner~~. Impoundment approvals may be ~~are~~ necessary for Class I and Class II ~~Hazard Dams~~ dams ~~to provide assurances that the dam has been constructed as safely as possible in accordance with detailed plans and specifications and~~ to allow adequate time for inspection ~~of the completed dam and its foundations~~ before actual impoundment begins.

The type ~~of dam, the~~ location, ~~the~~ hazard involved, and the purpose served by the dam will be considered in respect to the degree and nature of impoundment approval needed. Certain waste disposal dams which will not be constructed to maximum storage elevation in five years ~~ever a considerable period of years and~~ will require a series of impoundment approvals for various stages of construction.

~~Upon request by the owner, an Impoundment Approval shall be issued upon a finding by the Commissioner that the dam is adequate to impound water and/or waste within the limitations prescribed.~~ Pending issuance of an Impoundment Approval (or reissuance in the event of termination) ~~by the Commissioner,~~ where required the owner of the dam shall not, through action or inaction, allow an impoundment ~~upstream of the dam.~~

a. ~~Each~~ The Impoundment Approval ~~issued by the department may~~ shall contain such terms and conditions as the Commissioner may prescribe.

b. The Commissioner may also revoke or ~~any Impoundment Approval if it is determined that the dam becomes a danger to public health, safety and welfare. When ever action is necessary to protect public health, safety and welfare. the Commissioner may also~~ amend the terms and conditions of any Approval ~~by issuing a new Approval containing revised terms and conditions.~~

c. ~~The owner of a dam for which an Impoundment Approval has been issued shall not. through action or inaction. cause the dam to impound water and/or waste after the Approval terminates unless a new Approval is issued for the dam. A new Approval shall be issued upon a finding by the~~

~~Commissioner that the dam is adequate to impound water and or waste within the limits preseribed in the Approval.~~

10. ~~12.~~ Performance reports. The permittee ~~shall~~ may be required in the case of complex or hazardous dams to submit yearly ~~to the Commissioner~~ a Performance Report detailing the instrumentation data and analysis and interpretation of these data as they relate to the safety of the dam and design assumptions. The frequency of submission ~~of this report~~ may be modified if field conditions so dictate.

6 MCAR § 1.5034 Miscellaneous provisions.

A. Limited State liabilities. The granting of a permit for a dam shall not impose any liability upon the State of Minnesota, for its ~~officers,~~ employees~~, agents~~ or consultants, for ~~any damage or injury to any persons or property resulting from~~ the activities of the permittee ~~under the permit~~. Any permit shall be permissive only and shall not be construed as estopping or limiting any legal claims of persons other than the State against the permittee, ~~its agents or contracters, for any damage or any injury to any persons or property, or to any public water supply resulting from such operations,~~ or as estopping or limiting any legal claims of the State against the permittee for violation of any of the terms or conditions ~~or~~ of the permit. No action shall be brought against the State or the Commissioner ~~for the recovery of damages caused by the partial or total failure of any dam or through the operation of any dam upon the ground that such defendant is liable~~ by virtue of ~~any of the following~~:

1. Any approval ~~of the dam or appurtenant facilities~~.

2. The issuance or enforcement of orders ~~relative to maintenance or operation of the dam~~.

3. Control and regulation ~~of the dam~~.

4. Measures taken to protect against failure during an emergency.

B. ~~Owner's responsibilities.~~ Liability of owner and permittee. Nothing in these rules shall be construed to relieve an owner of a dam or permittee of the legal duties, obligations or liabilities incident to the ownership or operation of the dam.

~~C. Liability of permittee.~~ The permittee and owner ~~shall~~ assume all ~~legal~~ risks and liabilities~~, including without limitation those for damages or any injury to persons or property, arising from the construction, operation, maintenance, alteration or abandonment of the dam and impoundments and other activities authorized under permit relating to dams.~~

C. ~~D.~~ Owner's rights. Nothing in these rules shall be construed to deprive any owner of such recourse to the courts ~~as he may be entitled to under the laws of this State.~~

D. ~~E.~~ Inspections. Owners of dams shall allow the Commissioner prompt access to and inspection of all records, plants, structures, facilities and operations at all reasonable times as ~~may be necessary to monitor compliance with the terms of existing permits and to insure protection of the public health, safety and welfare.~~ Entry ~~for the purposes indicated~~ is subject to reasonable compliance with the owner's safety rules and avoidance of unreasonable impairment of or interference with construction and operation ~~of the dam. The Commissioner's inspection~~ Inspection shall be limited to testing and observing, rather than supervising ~~the construction, operation, maintenance, alteration or abandonment of the dam. The Commissioner's inspections~~ and shall not relieve the owner~~, or the designer, or the professional engineer in charge of construction, operation, maintenance, alteration or abandonment,~~ from the full responsibility of providing adequate inspection and supervision.

E. ~~F.~~ Compliance with other laws. The owner of a dam shall comply with all other state and federal laws and regulations ~~relating to any structures, facilities or operations under the permit~~ and shall obtain such other permits ~~from federal authorities~~ as may be required ~~therefor. The owner shall comply with all state laws and regulations in effect now or adopted hereafter relating to such structures, facilities and operations,~~ including ~~but not limited to,~~ particularly any laws and rules regarding mineland reclamation ~~subject to the provisions of a permit.~~

~~G. Other permits and approvals. Although it is the intent of the Commissioner to maintain consistency with the permits of other agencies, nothing in any permit shall waive or abrogate any other state or federal approvals or permits which may be necessary for the project involved. Any permit conditions for dams shall not waive or abrogate any conditions, whether similar or more stringent, which may appear in any other permit or approval.~~

F. ~~H.~~ Acquisition of property. ~~In all cases where the~~ Where activities authorized by a permit ~~shall~~ involve the ~~taking, using or damaging of any property,~~ rights~~,~~ or interests of any other ~~persons or~~ persons, or of any ~~publicly owned lands or improvements thereon or~~ public interests ~~therein~~, the permittee, before proceeding, shall acquire all necessary ~~property, rights,~~ interests or permissions~~. In case the authorized activities shall include~~ including paying the costs of the alteration, relocation or replacement of any ~~public highway or other~~ publicly owned facility~~, the permittee shall pay the cost thereof as may be required by the appropriate public authority~~.

G. ~~I.~~ Assignment. Permits ~~for dams~~ may be assigned in whole or in part~~, but no assignment shall be effective until written notice thereof is filed in the office of the Commissioner,~~ only if the Commissioner is notified and ~~the Commissioner~~ approves the assignment in writing.

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~~J. Successors.~~ Provisions of the ~~issued~~ permit shall extend to and bind the successors in authority of the Commissioner and the legally assigned successors in interest of the permittee.

H. ~~K.~~ Warning systems and emergency procedures.

1. ~~In the event that an existing or new dam is classified as a~~ Class I ~~or II Hazard~~ dam~~. the owner~~ owners shall prepare and file ~~with the Commissioner.~~ for approval~~,~~ a contingency plan for notifying any persons whose lives, property or health may be endangered by failure, misoperation or other circumstances or occurrence affecting the dam~~. The contingency plan shall include:~~:

~~a. The~~ identifying most practical and expeditious means for warning ~~downstream property owners and residents.~~

~~b. Consideration of~~ considering the time factor involved ~~in providing warning~~ based on the proximity of the dam to affected parties ~~who may be affected~~.

2. ~~In the event~~ If there is no feasible or practical means to provide for adequate evacuation warning ~~due to~~ in sufficient time ~~before~~ if a catastrophe occurs ~~and downstream parties can be notified to evacuate~~, the owner shall be responsible for ~~giving appropriate notification to any~~ notifying affected downstream property owners ~~that there is no practical and feasible means for warning in emergency situations.~~ of that fact.

~~These rules. 6 MCAR §§ 1.5030-1.5034. are subject to the public hearing provisions of Minn. Stat. §§ 105.44-105.462.~~

I. Permit and hearing procedures. These rules, 6 MCAR §§ 1.5030-1.5034, are subject to the permit and public hearing provisions of Minn. Stat. §§ 105.44-105.462 and 105.64, including:

1. The Commissioner must act on permit applications within thirty (30) days of the time that all required data and fees are filed in his office.

2. The Commissioner may cancel or modify a permit at any time if the Commissioner deems it necessary for any cause for the protection of the public interests.

3. Whether or not a dam is under permit, if the Commissioner determines that it is unsafe or needs repair or alteration, he shall notify the owner to repair, alter or remove the dam as the exigencies of the case may require.

4. An order requiring immediate action is effective on the date thereof, but shall not be in effect for more than thirty (30) days from that date unless the permittee is on the same date mailed written notice of the order which includes notice of a Minn. Stat. § 105.44 public hearing on a date not more than thirty (30) days from the date of the notice.

5. If at any time during construction of a project, the Commissioner finds that the work is not being done in conformance with approved designs, plans and specifications, except as provided in 6 MCAR § 1.5033 B.6.a. (2), the Commissioner shall notify the permittee and shall order immediate compliance and may order that no further work be done until such compliance has been effected and approved.

6. If the permittee fails to comply with approved designs, plans and specifications or if conditions are revealed which will not permit the construction of a safe dam, the permit may be revoked.

7. Acceptance of permit or approval. Initiating any work by the permittee, authorized in an issued permit or approval, constitutes acceptance of all terms and conditions contained therein.

J. Required information and waivers. When necessary to assess the safety of a dam or proposed project, the applicant or owner may be required to submit additional information at his own expense. Whenever information or conditions required by these rules is unnecessary, the Commissioner shall waive those provisions and shall allow appropriate revisions to make the requirements less burdensome.

K. Inspection fees.

1. Exemption. No inspection fee shall be charged for dams owned or sponsored by a governmental agency or for any Class III dam for which the design, construction supervision, and inspection is provided by a federal agency.

2. The initial fee required by 6 MCAR § 1.5033 B.3. shall be based on the following formula and no fees pursuant to 6 MCAR § 1.5000 shall be charged.

a. For the first $100,000 of estimated cost (as defined in 6 MCAR § 1.5030 D., that portion of engineering evaluations and studies relating to safety which is also part of the final design report performed for the applicant which were included with environmental assessment worksheets and with Environmental Impact Statements required by law shall be subtracted provided that the applicant provides a notarized detailed accounting of expenditures), a rate of two and one-half percent.

b. For the next $400,000, one and one-half percent.

c. For the next $500,000, one percent.

d. One-half of one percent of all costs in excess of $1,000,000.

e. If the final total cost exceeds the estimate, the difference as provided in 6 MCAR § 1.5033 B.8.

For dams which will not be constructed to maximum storage elevation within five years of the date construction begins (such as dams for storage of mining waste materials) computation will be based on applicant's work schedule outlining proposed staging and a certified estimate of costs based on staging and a certified estimate of costs based on staging intervals not exceeding five years in duration. At the end of each stage, or at intervals not exceeding five years in duration, until completion, the applicant shall file an affidavit of actual costs for each stage or interval not exceeding five years. Whenever the actual cost exceeds the estimate the applicant shall pay the difference.

3. Periodic fees shall be charged to owners for each year an inspection is made pursuant to § 1.5032 B.2.b., of $30.00 per dam plus an additional fee based on surface (as defined in 6 MCAR § 1.5030 D.) of $0.01 per square foot for the first 1,000 and $0.001 for each square foot in excess of 1,000; payable on or before the end of the state fiscal year, June 30.

4. The Commissioner shall keep annual records of inspection costs which shall be provided upon request of any applicant who paid inspection fees.

Department of Public Safety
Safety Administration Division

Adopted Rules Governing Minimum Standards for Wheelchair Securement Devices

The rules proposed and published at *State Register*, Volume 3, Number 41, pp. 1901-1904, April 16, 1979 (3 S.R. 1901) are now adopted, with the following amendments:

Chapter 21: Standard for Wheelchair Securement Devices

11 MCAR 1.0188 Purpose, ~~and~~ authority and scope.

A. Purpose. The purpose of these rules is to establish minimum standards for approval of wheelchair securement devices in vehicles and approval of seat belt assemblies and anchorages used to protect persons in wheelchairs while transported in vehicles.

B. Authority. These rules are promulgated pursuant to the authority granted by Laws of 1978, ch. 752.

C. Scope.

1. These rules apply to the transportation by motor vehicle of any sick, injured, incapacitated or handicapped person while occupying a wheelchair, which transportation is offered or provided by an operator to the public or to its employees or in connection with any other service offered by the operator including schooling or nursing homes, convalescent or child care services.

2. These rules do not apply to any school bus subject to regular school bus inspection pursuant to Minn. Stat. 169.451 nor do they apply to incidental transportation of an occupied wheelchair under circumstances other than as provided in Paragraph (1) above.

11 MCAR § 1.0189 Definitions. For the purpose of these rules, the following terms shall have the meanings ascribed to them:

A. Anchorage. The provision for transferring wheelchair securement loads to the vehicle structure.

B. Commissioner. The Commissioner of Public Safety or his duly authorized agent.

C. Interior paneling. Material used to finish the interior of a vehicle, not including the floor.

D. Occupant restraint. A seat belt assembly and/or upper torso restraint intended to hold the occupant of a wheelchair in a generally seated position during transportation by motor vehicle.

E. Wheelchair. A chair mounted on wheels to facilitate the mobility of a sick, injured, invalid or handicapped person in a generally seated position. The term includes a device generally recognized as a wheelchair even though equipped with reclining backrest or special apparatus. The term does not include any device not equipped with wheels, nor does it include an ambulance stretcher or cot whether equipped with wheels or not.

F. Operator. Any person, firm, partnership, corporation, service club, public or private agency, city, town or county.

G. ~~D.~~ Wheelchair securement device or securement device. An apparatus installed in a motor vehicle for the purpose of securing an occupied wheelchair into a location in the vehicle.

11 MCAR § 1.0190 Wheelchair securement.

A. An occupied wheelchair transported in a vehicle shall be secured with a securement device of sufficient strength to prevent forward, backward, lateral or vertical movement of the wheelchair when the device is engaged and the vehicle is in motion, accelerating or braking.

B. Each wheelchair securement device shall attach to the frame of the wheelchair without damaging the frame. "Damage" includes effects harmful to the strength, integrity or serviceableness of the wheelchair, but does not include minor dents, scratches or other cosmetic blemishes not materially affecting serviceableness.

C. A wheelchair securement device shall not be attached to a wheel of a wheelchair.

11 MCAR § 1.0191 Minimum standards. Each wheelchair securement device shall:

A. Attach to the wheelchair frame on at least three (3) points. The three (3) points of contact shall be spaced to provide effective securement. Alternatively, a securement

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STATE OF MINNESOTA

DEPARTMENT OF NATURAL RESOURCES

In the Matter of Rules
for Dam Safety

CERTIFICATE
OF
COMPLIANCE

I am familiar with the subject rules, and with the proceedings leading to their adoption. Based on that and my knowledge of the laws and rules regarding rule-making, I believe these rules have been properly adopted.

Dated: December 20, 1979.

A. W. CLAPP, III
Special Assistant
Attorney General

STATE OF MINNESOTA

DEPARTMENT OF NATURAL RESOURCES

In the Matter of Proposed Rules for Dam Safety

SUPPLEMENTARY ORDER ADOPTING RULES

Subsequent to my Order of July 27, 1979 adopting rules for dam safety, the Office of Attorney General, by letter dated January 4, 1980, specified the need for certain technical corrections.

NOW THEREFORE IT IS ORDERED that the rule previously adopted is corrected as requested.

Dated February 12, 1980.

Joseph N. Alexander

JOSEPH N. ALEXANDER
Commissioner

STATE OF MINNESOTA

DEPARTMENT OF NATURAL RESOURCES

- - -

In the Matter of
Proposed Rules for
Dam Safety

Order
Adopting
Rule

- - -

Based on my Findings in the above entitled matter, and the determination of the Chief Hearing Examiner concerning substantial change, I adopt the rules as proposed, with the amendments recommended by the hearing examiner.

Dated July 27, 1979.

JOSEPH N. ALEXANDER
Commissioner of Natural Resources

ADMIN 1000 (Rev. 1/78)
SF-00006-01

STATE OF MINNESOTA

Office Memorandum

DEPARTMENT Attorney General
Natural Resources

TO : JOANNE HINDERAKER

DATE: 2-13-80

FROM : BILL CLAPP Bill
Special Assistant Attorney General

PHONE:

SUBJECT: Dam Safety Rules

Corrections have been made as requested by Lee, and have been ok'd by Harves.

enc.

5c

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OFFICE OF HEARING
EXAMINERS

Department of Natural Resources

Proposed Rules Concerning Dam Safety

Notice of Change of Hearing Date for
the Proposed Rules Concerning Dam Safety

Notice is hereby given that the public hearing on proposed rules concerning dam safety pursuant to Laws of Minnesota 1978, Ch. 779, scheduled for February 12, 1979, at 10:00 A. M. in the Minnesota Historical Society, Weyerhaeuser Room, has been re-scheduled for March 1, 1979, at 10:00 A. M. in the Minnesota Historical Society, Weyerhaeuser Room.

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EXAMINERS

AFFIDAVIT OF MAILING

STATE OF MINNESOTA

DEPARTMENT OF NATURAL RESOURCES

IN THE MATTER OF THE PROPOSED ADOPTION OF
RULES OF THE DEPARTMENT OF NATURAL RESOURCES) AFFIDAVIT OF MAILING
GOVERNING Dam Safety

Sheryl Ransom, being first duly sworn, deposes and says:

That on the 24th day of January, 1979, at the City of St. Paul, County of Ramsey, State of Minnesota, she served the attached Notice of Hearing by depositing in the United States mail at said City of St. Paul, a true and correct copy thereof on the attached certificate of the Secretary of State.

Sheryl Ransom

Subscribed and sworn to before me this 24th day of January 19, 79.

Karen L. Singer

KAREN L. SINGER
NOTARY PUBLIC — MINNESOTA
RAMSEY COUNTY
MY COMMISSION EXPIRES MAY 16, 1984

RECEIVED
FEB 2 1979
OFFICE OF HEARING
EXAMINERS

AFFIDAVIT OF RECEIPT OF THE SECRETARY OF STATE'S LIST

STATE OF MINNESOTA

DEPARTMENT OF NATURAL RESOURCES

IN THE MATTER OF THE PROPOSED ADOPTION OF)
RULES OF THE DEPARTMENT OF NATURAL RESOURCES)
GOVERNING Dam Safety

AFFIDAVIT OF RECEIPT OF
THE SECRETARY
OF STATE'S LIST

Jean Stinebaugh, being duly sworn on oath deposes and says:

1) That she is an employee of the Department of Natural Resources / Division of the State of Minnesota.

2) That on the 22nd day of January 1979, she went to the Secretary of State's Office for the State of Minnesota and requested a current list of all representatives of associations for other interested groups or persons who had registered their names with the Secretary of State for the purpose of obtaining notices of public hearings relating to the promulgation of rules pursuant to M. S. 15.0412.

3) That on the 22nd day of January, 1979, in response to the above request, the Secretary of State provided her with such a list, a copy of which is attached hereto and incorporated by reference.

Further affiant sayeth not.

Jean Stinebaugh

Subscribed and sworn to before me this
22nd day of January, 1979.
Notary Public, Karen L. Singer
Ramsey County, Minnesota
My commission expires May 16, 1984.

KAREN L. SINGER
NOTARY PUBLIC — MINNESOTA
RAMSEY COUNTY
MY COMMISSION EXPIRES MAY 16, 1984

STATE OF MINNESOTA
COUNTY OF RAMSEY

RECEIVED
FEB 2 1979
OFFICE OF HEARING EXAMINERS

CERTIFICATE

In the matter of the Proposed Adoption of Rules of Dept. of Natural Resources Governing Dam Safety

I hereby certify that the attached 585 labels 3 sheets constitute the complete list of persons, associations, and other interested groups who as of 11:15 o'clock A .M, this 22nd day of January, 1979, have requested pursuant to M.S. 1974, 15.0412, that their names be placed on file with the Secretary of State for the purpose of receiving notice of public hearing on proposed rules on the subject captioned above.

Secretary of State

Joan Anderson Growe

By Dennis Reatt

Statement Need Ex 4 D.

STATE OF MINNESOTA
DEPARTMENT OF NATURAL RESOURCES

STATEMENT OF NEED AND REASONABLENESS

REVISED 12-26-78

PROPOSED RULES FOR DAM SAFETY

6 MCAR § 1.5030

Purpose: These rules were drafted in response to legislative directives contained in Minn. Stats. Ch. 105 and 116 and pursuant to laws of 1978, Ch. 779. They are intended to provide maximum protection for public health, safety and welfare in regulation of all activities involving new and existing dams. The Minnesota laws further supplement and complement Federal laws contained in the National Dam Safety Act PL 92-367 and directive of the Federal Government of December 30, 1977, which provide for a national program for the inventory and inspection of non-federal dams in cooperation with each state. The rules are necessary to meet state laws and to provide a state dam safety program which meets federal standards.

Scope: The rules relate to existing dams and new dams and include provisions concerning:

1. Minimum standards for dam classification and identification of risks and hazards to public health, safety and welfare.

2. Minimum standards and criteria for the review, issuance and denial of permits for new and existing dam projects for water and waste impoundments in and adjacent to public waters.

3. A fee schedule to defray a part of the state's costs in inspecting dams.

The rules apply to dams used for impounding water and waste materials containing water such as taconite tailings and fly ash. It is important that dams for these activities be carefully monitored and regulated in order to provide maximum protection to the public in the event of failure which could release the water and waste materials and potentially could result in loss of life, major economic loss and serious environmental damage.

Jurisdiction: It is also important to note that the dam safety rules apply to dams constructed in and across public waters as defined by Minn. Stats. Ch. 105, as well as at sites adjacent to public waters. The need is to protect public health, safety and welfare in the event of dam failure or other occurrence regardless of the facts that public waters are directly or indirectly involved, which is consistent with the definition of a dam in the Public Law 92-367, and in compliance with previous regulatory authority exercised by the Department.

Although there are rules governing permits for changes in public waters (6 MCAR § 1.5020-1.5026) these rules deal more specifically with dams and are especially concerned with the safety aspects of dam construction, operation, removal, abandonment and maintenance.

If there is conflict with these rules and others, those which are more restrictive shall apply.

The section on water level controls in 6 MCAR § 1.5024 is not superceded by these rules since it is more specifically designed to address particular types of dam operation relating to control of lake levels and the content of 6 MCAR § 1.5024 is not in conflict with provisions of these rules.

Definitions: The definitions used in these rules are designed to apply to considerations concerning dams and their construction, operation and management.

The definition of "dam" is based primarily on the National Dam Safety definition contained in PL 92-367. Figure 1 attached, graphically shows the height-storage relationships of dams. The limiting definition is intended to exclude smaller structures, which because of their size and character, would not cause serious hazards to public health, safety and welfare in the event of failure or overtopping. In addition, the following shall not be considered as a dam for the purposes of these rules;

1. Earthen impoundment structures formed by construction of federal, state or local government state-aid roads which are primarily intended for transportation purposes;

2. Any artificial barrier constructed solely for the purpose of containment of sewage or biological treatment of wastewater which is under the jurisdiction of the Minnesota Pollution Control Agency.

6 MCAR § 1.5031 Classification of Dams

Dams are classified in order to provide a measure of the risk and hazard the dams pose in respect to public health, safety and welfare. The classification system consists of 3 classes ranging from Class I, which dams pose the highest degree of hazard to life, health and properties, to Class III which dams have the lowest potential hazard for life, health, and property.

Permits for a dam which is not classified as a Hazard Class I, II, or III dam, shall be subject only to applicable provisions of 6 MCAR §§ 1.5020 through 1.5026 and shall not be subject to these dam safety rules.

The 3 classes closely parallel the 3 existing National Dam Safety classes as contained in Appendix D of the directive of the Federal Government, December 30, 1977 except that the Class III hazard dam definition has been changed to reduce the need for dam safety control over many low hazard dams.

6 MCAR §§ 1.5032 Procedures for Existing Dams

This section is necessary to provide a system for dealing with dams which were constructed before these rules become effective. They are necessary in order to provide guidelines and controls over safety aspects relating to the existing dams. It should be noted that many dams in this category are quite old and often in a deteriorated condition. This section includes provisions which further amplify Minn. Stats. Ch. 105.42 Subd. 2, relating to emergency actions and to removal of dams, necessary to prevent danger to public health, safety and welfare.

Since a number of the existing dams were built before the laws requiring state permits under Minn. Stats. Ch. 105, it is necessary that these dams be carefully inspected and analyzed to determine the degree of hazard they may pose and the condition of the dam. The provisions relating to dam safety inspections under 6 MCAR § 1.5032 D are based on considerations of the provisions of the Ohio law and regulations (NRd-11) the California law and regulations (Chapter 4) and the Federal National Dam Safety guidelines contained in Appendix 1, "Recommended Guidelines for Safety Inspection of Dams", Appendix D, Department of Army, Office of Chief of Engineers. They are an orderly listing of the types of determinations necessary to provide for proper inspection of dams.

6 MCAR § 105.32 D.2.c. sets forth a time table for periodic inspections of dams in order to insure that dams having hazards to public health, safety and welfare are continuously maintained in a safe condition and in order to assure that any newly occurring structural problems can be dealt with in a timely manner. The timing of the inspections is directly related to the Hazard Class of the dam, the higher the class the more frequent the inspection, and the fact that with a limited staff, it is impossible to inspect all dams in the 3 classes each year.

Provision 6 MCAR § 1.5032 E. provides for control of transfer of dams and is also a restatement of Sec. 5, Ch. 779, laws of 1978. It is intended to prevent poorly constructed and maintained dams from being transferred by purchase or gift to a state or local governmental entity without certain examinations, reports and legislative considerations. Past experience has shown that privately-owned dams in poor condition have at times been transferred to government agencies and the government agency within a relatively short period of time has had to seek and expand considerable public funds for repair and reconstruction of the dam.

6 MCAR § 1.5032 F. Operation and Maintenance is essential to insure that dams are properly maintained in order to minimize risks to public health and safety.

6 MCAR § 1.5032 G. Termination of Operation and Perpetual Maintenance is designed to assure that owners of a dam keep the dam in proper repair and operation even if the dam will no longer be used for the original purpose for which it was constructed and is needed to address the inherent safety problems associated with dams after their operation is discontinued. This section is particularly important in respect to dams for waste disposal.

6 MCAR § 1.5032 I. and J. contain provisions which reiterate and amplify specific statutory conditions as noted therein relating to Permit Cancellation, Suspension or Alteration and Reports to the Legislature on Publicly-Owned dams.

6 MCAR § 1.5033. Procedure for new dams or enlargement of dams set forth criteria and standards for the construction of new dams and for any changes in or addition to existing dams which raises or may raise the storage and/or elevations of water or waste impounding dams. (See definition of enlargement.)

Each of the provisions of this section are intended to provide a systematic method for applying for permits, for reviewing permits and for insuring that the construction authorized at various stages under the permit process is accomplished in the best possible manner to provide for public health, safety and welfare in construction of a safe dam which will have minimized risks to the maximum possible extent. These provisions are based largely on the California Dam Safety law, and the Model law for State Supervision of Safety of Dams, published in 1970.

6 MCAR § 1.5033 B.1.b. The Preliminary Report is necessary to allow the DNR to properly evaluate the proposed dam in respect to its location and proximity to people and public and private facilities, its size and character, the purpose for the dam and a review of environmental aspects.

The filing fee provided for in 6 MCAR § 1.5033 B.1.c. is only to defray a part of the states costs of receiving, recording and processing the permit application as required by Minn. Stats. 105.42, Subd. 10.

6 MCAR § 1.5033 B.2. Professional Engineers Requirements, is necessary to insure that the construction of dams is accomplished in the most professional, experienced and qualified manner possible. This provision is a basic requirement of other recognized laws and rules including the California law, Ohio law, Pennsylvania law and National Dam Safety Guidelines.

6 MCAR § 1.5033 B.3. Final Design Requirements, is needed to provide the detailed facts which must be considered in constructing the dam. This requires considerable factual information to be supplied to the DNR by the applicant in order to allow the DNR to properly review and assess the proposal to determine if it will meet the best available dam engineering practice and will pose minimum risk to the public.

The section provides for relaxation of the requirements based on the size and character of the dam and tha hazards and risks involved so that applicants for permits for small hazard dams will not have to provide unnecessary data.

6 MCAR § 1.5033 B.6. Payment of Dam Inspection Fees is established to provide a continuing means for the state to defray a large part of the costs to the state for the dam safety inspection program. This provision is established to meet the requirements of Sec. 6, Ch. 779, laws of 1978 which requires a fee schedule to cover the cost of dam inspection, but also provides that no such fee shall be charged to any state or federal agency or political subdivision of the state. In addition, no dam inspection fee shall be charged to owners of any Class I, II, or III dams which are sponsored by a state agency, political subdivision of the state or federal agencies who are responsible for operation and maintenance of the dams or for any Class III Hazard dam for which the design, construction supervision, and inspection is provided by a federal agency in accordance with provisions of the National Dam Safety Act PL 92-367 and applicable federal guidelines, standards and requirements related to that act.

inspection fees may or will be charged to state or federal agencies or to local governmental subdivisions of the state nor for certain Class III Hazard dams.

6 MCAR § 1.5033 B.7. Commissioner's Approval and Issuance of Permits, which is a statutory authority vested to the Commissioner (Minn. Stats. Ch. 105), is necessary to explain the Commissioner's responsibilities in review and issuance of permits and to further relate to the requirement of Sec. 8, Ch. 779, laws of 1978 which requires, "Rules...shall classify structures to adequately define risks and hazards involved in relation to public health, safety and welfare." This section further addresses the relationships of risks and hazards as required and sets more restrictive considerations for High Hazard dams. The section includes advice to local governments regarding land use considerations in order to minimize risks and to prevent land developments which could increase the hazard class.

This section also stresses the engineering aspects of construction as well as the environmental hazard considerations which must be made.

6 MCAR § 1.5033 B.8. Work Inspection and Construction Reports. This section is necessary to insure that the construction of the dam is being carried out with the best quality control so that the structure is as safe as reasonably possible. These controls, during the construction, are necessary so that there is assurance that new factors revealed during foundation preparation and borrow area development are taken into consideration and the design accordingly modified, and also so that the construction be carried out in compliance with the approved design.

The requirement of 6 MCAR § 1.5033 B.8.b. regarding acceptance of Permit or Approval, is needed to insure that once an applicant accepts a permit he will be bound by the provisions of the permit. Alternatively, the applicant may demand a contested case hearing in the manner specified by law in Minn. Stats. 105.44, if he so choses.

6 MCAR § 1.5033 B.8.c. requires establishment of permanent markers for surveying control elevations and distances. These control markers prove very valuable during future inspections of the structure and also during emergencies. Additionally, these markers would be used during the construction of the structure.

6 MCAR § 1.5033 B.8.d. Construction Report is necessary to provide a continuing record of construction facts which can provide evidence of engineering reliability and adherence to the design and the construction plans and specifications in the event such facts become necessary in a future question of dam safety involving the dam.

6 MCAR § 1.5033 B.9. As-Built Plans and Data are needed so there is a factual record to show the construction details and facts of the dam as it was actually built, because by the time the construction is complete, the original design and plans will have, in all probability, changed several times due to new factors revealed subsequent to the submission of the final design and the issuance of the permit.

6 MCAR § 1.5033 B.10. Statement of Completion and Affidavit of Cost is needed to substantiate that the dam was built as required, and to provide facts on the actual costs of construction which are considered in the schedule of fees required under 6 MCAR § 1.5033 B.6.

6 MCAR § 1.5033 B.11. Issuance of Impoundment Approval is needed to insure that the dam and its reservoir are capable of impounding water and/or waste materials before the actual impoundment takes place. This section is particularly important in regard to waste impoundments due to the environmental restrictions associated with them.

Sections A, B, C and D of 6 MCAR § 1.5034, Miscellaneous Provisions, are all directed at addressing the state's liabilities, and the liabilities, responsibilities and rights of dam owners and permittees. Most of these provisions have been established over a number of years through the statutes and laws and in conditions

of permits issued by the DNR.

6 MCAR § 1.5034 E. Inspections further explains the provisions of Sec. 4, Ch. 779, laws of 1978 relating to access for inspection of dams.

6 MCAR § 1.5034 F. and G. provide that owners of dams and permittees must also meet conditions and requirements of other laws and approvals.

6 MCAR § 1.5034 K. is necessary to insure that owners of high hazard dams will take all feasible and practical steps to provide warnings to parties who may be adversely affected in an emergency situation involving the dam.

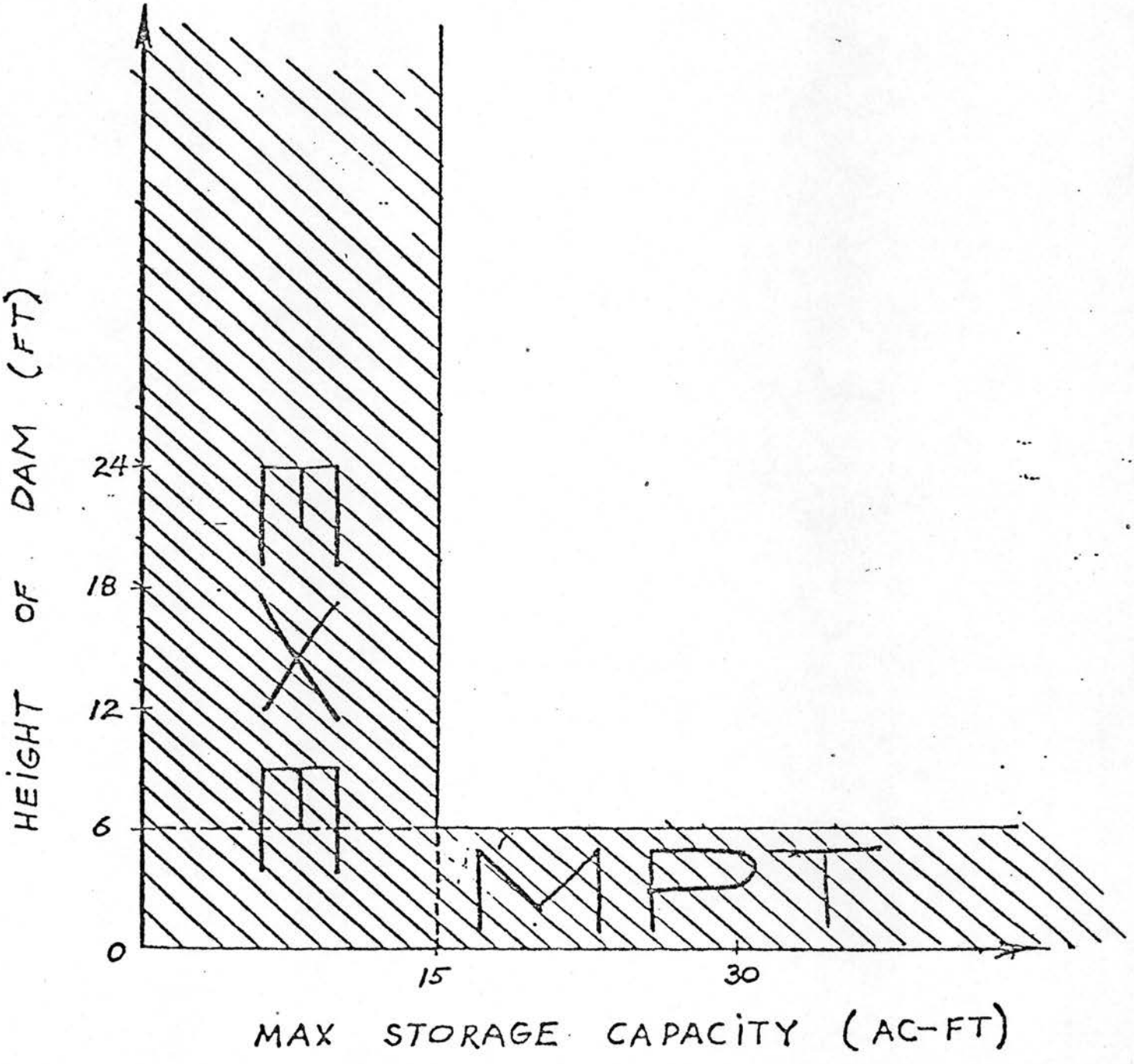

FIG. 1

DEPARTMENT OF NATURAL RESOURCES

- - - - - - - - - - -

In the Matter of
Proposed Rules for
Dam Safety.

ORDER FOR HEARING

- - - - - - - - - - -

Laws of Minnesota 1978, Chapter 779, Section 8, authorizes and requires the Commissioner of Natural Resources to promulgate rules for dams. The rules have been drafted and are ready for hearing.

NOW THEREFORE IT IS ORDERED, that a public hearing to consider the proposed rules be held on Wednesday, December 20, 1978, beginning at 9:30 a.m. in Room 57 of the State Office Building, which is in the Capitol complex at St. Paul, Minnesota. The hearing shall be conducted according to the rule-making provisions of Minnesota Statutes, Chapter 15 and the rules of the office of Hearing Examinrss.

Dated this 3 day of November, 1978.

Joseph N. Alexander,
Acting Commissioner

STATE OF MINNESOTA

DEPARTMENT OF NATURAL RESOURCES

- - -

In the Matter of
Proposed Rules for
Dam Safety

Findings
of the
Commissioner

- - -

I have read the Report of the Hearing Examiner, and concurring with his findings and conclusions, adopt them as mine.

Dated July, 27 , 1979.

JOSEPH N. ALEXANDER
Commissioner of Natural Resources

Department of Natural Resources

Proposed Rules Concerning Dam Safety

Notice of Cancellation of Hearing

RECEIVED
DEC 15 1978
OFFICE OF HEARING
EXAMINERS

Notice is hereby given that the public hearing on proposed rules concerning dam safety pursuant to Laws of Minnesota 1978, Chapter 779 scheduled for December 20, 1978, published at 3 SR 1047, November 20, 1978, is hereby cancelled. Details on rescheduling a public hearing will be published within 30 days.

Department of Natural Resources

Proposed Rules Concerning Dam Safety

Notice of Hearing

A public hearing on the above captioned rules will be held on Wednesday, December 20, 1978, beginning at 9:30 a.m., in Room 57 of the State Office Building, which is located in the State Capitol complex at St. Paul, Minnesota.

The proposed rules are authorized and required by Laws of 1978 ch. 779 § 8. They make specific the manner in which the Commissioner of Natural Resources exercises his authority over the construction, enlargement, repair, alteration, maintenance, operation, transfer of ownership, and abandonment of dams.

The proposed rule defines "dam" to mean any artificial barrier, together with appurtenant works, which does or may impound water and/or waste materials containing water and which is greater than six (6) feet in height and has a storage capacity of more than fifteen (15) acre-feet at maximum storage elevation; any artificial barrier which is not in excess of six (6) feet in height regardless of storage capacity or which has a storage capacity not in excess of fifteen (15) acre-feet regardless of height, shall not be considered a dam. No circular tank or tank elevated above the ground to store water and/or waste shall be considered a dam.

The contents of the rule is as follows:

6 MCAR 1.5030 GENERAL PROVISIONS

A. Purpose

B. Scope

C. Jurisdiction

D. Definitions

E. Severability

6 MCAR 1.5031 CLASSIFICATION OF DAMS

6 MCAR 1.5032 PROCEDURE FOR EXISTING DAMS

A. Applicant's Responsibilities

B. Emergency Work

C. Removal of Dams

D. Inspections of Existing Dams by the Commissioner

E. Transfer of Dams

F. Operation and Maintenance

G. Termination of Operations and Perpetual Maintenance

H. Investigations and Studies

I. Permit Cancellation, Suspension or Alteration

J. Reports to the Legislature on Publicly Owned Dams

6 MCAR 1.5033 PROCEDURE FOR NEW DAMS OR ENLARGEMENT OF DAMS

A. General Outline of Permit Process

B. Specific Procedural Requirements

1. The Permit Application, Preliminary Report and Filing Fees

2. Registered Professional Engineer's Requirements

3. Final Design Requirements

4. Plans and Specifications

5. Other Information

6. Payment of Dam Inspection Fees

7. Commissioner's Approval and Issuance of Permits

8. Work Inspection and Construction Reports

9. As-Built Plans and Data

10. Statement of Completion and Affidavit of Cost

11. Issuance of Impoundment Approval by the Commissioner

12. Performance Report

6 MCAR 1.5034 MISCELLANEOUS PROVISIONS

A. Limited Liabilities

B. Owner's Responsibilities

C. Liability of Permittee

D. Owner's Rights

E. Inspections

F. Compliance With Other Laws

G. Other Permits and Approvals

H. Acquisition of Property

I. Assignment

J. Successors

K. Warning Systems and Emergency Procedures

All representatives of associations or other interested groups and all interested or affected persons will have an opportunity to be heard concerning the adoption of the proposed rules by submitting either oral or written data, statements or arguments. Statements or briefs may be submitted without personally appearing at the hearing.

Twenty-five days prior to the hearing a statement of need and reasonableness will be available for review at the agency and at the Office of Hearing Examiners. This statement of need and reasonableness will include a summary of all of the evidence which will be presented by the agency at the hearing justifying both the need for and the reasonableness of the proposed rules. Copies of the statement of need and reasonableness may be obtained from the Office of Hearing Examiners at a minimal charge.

After the public hearing, written material may be submitted and recorded in the hearing record for five working days, or for a longer period not to exceed 20 calendar days if so ordered by the hearing examiner.

Notice: Any person may request notification of the date on which the hearing examiner's report will be available after which date the agency may not take any final action on the rules for a period of five working days. Any person may request notification of the date on which the hearing record has been submitted (or resubmitted) to the

Attorney General by the agency. If you desire to be so notified, you may so indiciate at the hearing. After the hearing you may request notification by sending a written request to the hearing examiner (in the case of the hearing examiner's report) or to the agency (in the case of the agency's submission or resubmission to the Attorney General).

One free copy of the proposed rules may be obtained by writing to Department of Natural Rssources, Division of Waters, Box #32, Centennial Office Building, Saint Paul, Minnesota, 55155. Additional copies will be available at the door on the date of the hearing.

Under Minn. Stat. § 10A.01, subd. 11 (1976), a lobbyist must register with the State Ethical Practices Board within five (5) days after he commences lobbying. According to the statute, "lobbyist" means any individual engaged for pay or other consideration or authorized by another individual or association to spend money who spends more than five hours of any month or more than $250 not including travel expenses and membership dues, in any year for the purpose of attempting to influence legsilative or administrative action by communicating or urging others to communicate with public officials; or who spends more than $250, not including travel expenses and membership dues, in any year for the purpose of attempting to influence legislative or administrative action by communicating or urging others to communicate with public officials. "Lobbyist" does not include

any: (a) public official or employee of the state or any of its political subdivisions or public bodies acting in his official capacity; (b) party or his representative appearing in a proceeding before a state board, commission or agency of the executive branch unless the board, commission or agency is taking administrative action; (c) individual in the course of selling goods or services to be paid for by public funds; (d) news media or their employees or agents acting in the ordinary course of business of publishing or broadcasting news items, editorials or other comments or paid advertisements which directly or indirectly urge official action; (e) paid expert witness whose testimony is requested either by the body before which he is appearing or one of the parties to a proceeding, but only to the extent of preparing or delivering testimony; or (f) stockholder of a family farm corporation as defined in § 500.24, Subd. 1, who does not spend over $250, excluding travel expenses, in any year in communicating with public officials.

Questions regarding lobbying should be directed to the State Ethical Practices Board, Room 41, State Office Building, Wabasha Street, St. Paul, Minnesota, 55155; telephone (612) 296-1720.

Dated this 3 day of November, 1978.

Joseph N. Alexander,
Acting Commissioner

STATE OF MINNESOTA
OFFICE OF HEARING EXAMINERS

FOR THE DEPARTMENT OF NATURAL RESOURCES

IN THE MATTER OF PROPOSED)
RULES FOR DAM SAFETY.)

REPORT OF THE
CHIEF HEARING EXAMINER

WHEREAS, a hearing was held on March 30, 1979, before Howard L. Kaibel, Jr., a Hearing Examiner of the State Office of Hearing Examiners, on the above-entitled matter in compliance with Minn. Stat. § 15.0412, Subd. 4; and

WHEREAS, the Report of Hearing Examiner made pursuant to Minn. Stat. § 15.052, Subd. 3, was issued to the Department of Natural Resources on May 18, 1979; and

WHEREAS, the Department of Natural Resources has now determined to adopt rules pursuant to Minn. Stat. § 15.0412, Subd. 4; and

WHEREAS, the Department of Natural Resources has submitted said rules to the Chief Hearing Examiner for review pursuant to Minn. Stat. § 15.052, Subd. 4, and 9 MCAR § 2.110; and

WHEREAS, the Chief Hearing Examiner finds that the final proposed rules are not substantially different from those proposed at the public hearing and that the Department of Natural Resources has met all requirements of Minn. Stat. § 15.0412, Subd. 4.

NOW, THEREFORE, upon receipt of this Report, the Department of Natural Resources has the responsibility of submitting the complete hearing record and the rules as adopted by the Department to the Attorney General, notifying all persons who requested to be informed that the hearing record has been submitted to the Attorney General, and publishing in the State Register, all pursuant to Minn. Stat. § 15.0412, Subd. 4.

Dated this 7th day
of August, 1979.

DUANE R. HARVES
Chief Hearing Examiner

Department of Natural Resources

Proposed Rules Concerning Dam Safety

Notice of Hearing

A public hearing on the above captioned rules will be held on Monday, February 12, 1979, beginning at 10:00 a.m., in the Historical Building, 690 Cedar Street, Weyerhaeuser Room - Ground Floor, St. Paul, Minnesota.

The proposed rules are authorized and required by Laws of 1978 ch. 779 § 8. They make specific the manner in which the Commissioner of Natural Resources exercises his authority over the construction, enlargement, repair, alteration, maintenance, operation, transfer of ownership, and abandonment of dams.

The proposed rule defines "dam" to mean any artificial barrier, together with appurtenant works, which does or may impound water and/or waste materials containing water and which is greater than six (6) feet in height and has a storage capacity of more than fifteen (15) acre-feet at maximum storage elevation; any artificial barrier which is not in excess of six (6) feet in height regardless of storage capacity or which has a storage capacity not in excess of fifteen (15) acre-feet regardless of height, shall not be considered a dam. No circular tank or tank elevated above the ground to store water and/or waste shall be considered a dam.

The contents of the rule is as follows:

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A. Purpose

B. Scope

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G. Termination of Operations and Perpetual Maintenance

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A. General Outline of Permit Process

B. Specific Procedural Requirements

1. The Permit Application, Preliminary Report and Filing Fees

2. Registered Professional Engineer's Requirements
3. Final Design Requirements
4. Plans and Specifications
5. Other Information
6. Payment of Dam Inspection Fees
7. Commissioner's Approval and Issuance of Permits
8. Work Inspection and Construction Reports
9. As-Built Plans and Data
10. Statement of Completion and Affidavit of Cost
11. Issuance of Impoundment Approval by the Commissioner
12. Performance Report

6 MCAR 1.5034 MISCELLANEOUS PROVISIONS

A. Limited Liabilities
B. Owner's Responsibilities
C. Liability of Permittee
D. Owner's Rights
E. Inspections
F. Compliance With Other Laws
G. Other Permits and Approvals
H. Acquisition of Property
I. Assignment
J. Successors
K. Warning Systems and Emergency Procedures

All representatives of associations or other interested groups and all interested or affected persons will have an opportunity to be heard concerning the adoption of the proposed rules by submitting either oral or written data, statements or arguments. Statements or briefs may be submitted without personally appearing at the hearing.

Twenty-five days prior to the hearing a statement of need and reasonableness will be available for review at the agency and at the Office of Hearing Examiners. This statement of need and reasonableness will include a summary of all of the evidence which will be presented by the agency at the hearing justifying both the need for and the reasonableness of the proposed rules. Copies of the statement of need and reasonableness may be obtained from the Office of Hearing Examiners at a minimal charge.

After the public hearing, written material may be submitted and recorded in the hearing record for five working days, or for a longer period not to exceed 20 calendar days if so ordered by the hearing examiner.

Notice: Any person may request notification of the date on which the hearing examiner's report will be available after which date the agency may not take any final action on the rules for a period of five working days. Any person may request notification of the date on which the hearing record has been submitted (or resubmitted) to the

Attorney General by the agency. If you desire to be so notified, you may so indiciate at the hearing. After the hearing you may request notification by sending a written request to the hearing examiner (in the case of the hearing examiner's report) or to the agency (in the case of the agency's submission or resubmission to the Attorney General).

One free copy of the proposed rules may be obtained by writing to Department of Natural Rssources, Division of Waters, Box #32, Centennial Office Building, Saint Paul, Minnesota, 55155. Additional copies will be available at the door on the date of the hearing.

Under Minn. Stat. § 10A.01, subd. 11 (1976), a lobbyist must register with the State Ethical Practices Board within five (5) days after he commences lobbying. According to the statute, "lobbyist" means any individual engaged for pay or other consideration or authorized by another individual or association to spend money who spends more than five hours of any month or more than $250 not including travel expenses and membership dues, in any year for the purpose of attempting to influence legsilative or administrative action by communicating or urging others to communicate with public officials; or who spends more than $250, not including travel expenses and membership dues, in any year for the purpose of attempting to influence legislative or administrative action by communicating or urging others to communicate with public officials. "Lobbyist" does not include

any: (a) public official or employee of the state or any of its political subdivisions or public bodies acting in his official capacity; (b) party or his representative appearing in a proceeding before a state board, commission or agency of the executive branch unless the board, commission or agency is taking administrative action; (c) individual in the course of selling goods or services to be paid for by public funds; (d) news media or their employees or agents acting in the ordinary course of business of publishing or broadcasting news items, editorials or other comments or paid advertisements which directly or indirectly urge official action; (e) paid expert witness whose testimony is requested either by the body before which he is appearing or one of the parties to a proceeding, but only to the extent of preparing or delivering testimony; or (f) stockholder of a family farm corporation as defined in § 500.24, Subd. 1, who does not spend over $250, excluding travel expenses, in any year in communicating with public officials.

Questions regarding lobbying should be directed to the State Ethical Practices Board, Room 41, State Office Building, Wabasha Street, St. Paul, Minnesota, 55155; telephone (612) 296-1720.

Dated this 9 day of January, 1979.

Joseph N. Alexander,
Acting Commissioner

RECEIVED
FEB 2 1979
OFFICE OF HEARING
EXAMINERS

AFFIDAVIT OF MAILING

STATE OF MINNESOTA

DEPARTMENT OF NATURAL RESOURCES

IN THE MATTER OF THE PROPOSED ADOPTION OF
RULES OF THE DEPARTMENT OF NATURAL RESOURCES) AFFIDAVIT OF MAILING
GOVERNING Dam Safety

Stacey DeKalb, being first duly sworn, deposes and says:

That on the 10th day of January, 1979, at the City of St. Paul, County of Ramsey, State of Minnesota, she served the attached Notice of Hearing by depositing in the United States mail at said City of St. Paul, a true and correct copy thereof on the attached certificate of the Secretary of State.

Stacey DeKalb

Subscribed and sworn to before me this
10th day of January 19, 79.
Karen L. Singer

KAREN L. SINGER
NOTARY PUBLIC — MINNESOTA
RAMSEY COUNTY
MY COMMISSION EXPIRES MAY 16, 1984

RECEIVED
FEB 2 1979
OFFICE OF HEARING
EXAMINERS

AFFIDAVIT OF RECEIPT OF THE SECRETARY OF STATE'S LIST

STATE OF MINNESOTA

DEPARTMENT OF NATURAL RESOURCES

IN THE MATTER OF THE PROPOSED ADOPTION OF)
RULES OF THE DEPARTMENT OF NATURAL RESOURCES)
GOVERNING Dam Safety

AFFIDAVIT OF RECEIPT OF
THE SECRETARY
OF STATE'S LIST

Stacey DeKalb, being duly sworn on oath deposes and says:

1) That she is an employee of the Regulations Division of the State of Minnesota.

2) That on the 4th day of January, she went to the Secretary of State's Office for the State of Minnesota and requested a current list of all representatives of associations for other interested groups or persons who had registered their names with the Secretary of State for the purpose of obtaining notices of public hearings relating to the promulgation of rules pursuant to M. S. 15.0412.

3) That on the 4th day of January, in response to the above request, the Secretary of State provided her with such a list, a copy of which is attached hereto and incorporated by reference.

Further affiant sayeth not.

Stacey DeKalb

Subscribed and sworn to before me this
4th day of January, 1979.
Notary Public, Karen L. Singer
Ramsey County, Minnesota
My commission expires May 16, 1984.

KAREN L. SINGER
NOTARY PUBLIC — MINNESOTA
RAMSEY COUNTY
MY COMMISSION EXPIRES MAY 16, 1984

RECEIVED
FEB 2 1979
OFFICE OF HEARING
EXAMINERS

STATE OF MINNESOTA
COUNTY OF RAMSEY

CERTIFICATE

In the matter of the Proposed Adoption
of Rules of Waters Division
Governing Dam Safety

I hereby certify that the attached 58 labels 3 sheets constitute the complete list of persons, associations, and other interested groups who as of 9:20 o'clock A.M, this 1st day of January, 1979, have requested pursuant to M.S. 1974, 15.0412 Subd 2, that their names be placed on file with the Secretary of State for the purpose of receiving notice of public hearing on proposed rules on the subject captioned above.

Secretary of State

Joan Anderson Growe

By Donna Scott

STATE OF MINNESOTA

DEPARTMENT OF NATURAL RESOURCES

In the Matter of Rules
for Dam Safety

CERTIFICATE
OF
COMPLIANCE

I am familiar with the subject rules, and with the proceedings leading to their adoption. Based on that and my knowledge of the laws and rules regarding rule-making, I believe these rules have been properly adopted.

Dated: December 20, 1979.

A. W. CLAPP, III
Special Assistant
Attorney General

ATTORNEY GENERAL

A. WILLIAM CLAPP
Special Assistant
Attorney General

September 10, 1979

LEE E. SHEEHY
Special Assistant
Attorney General

296-1288

Dam Safety Rules

Enclosed herewith is a legal memorandum submitted on behalf of Bosie-Cascade Corporation by their attorney, John Knapp, in the above-captioned matter. While these rules have not yet been submitted to this office, it is my understanding that they will be forthcoming shortly. At that time or shortly thereafter, please inform this office if the agency wishes to respond to the matters raised in the letter by Mr. Knapp.

If you have any questions, do not hesitate to contact me.

LES/bw
cc: John A. Knapp

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WAYZATA, MINNESOTA 55391
(612) 473-2546

July 25, 1979

Mr. J. Michael Miles
Office of the Attorney General
Room 102
Capitol
St. Paul, Minnesota 55155

Re: Proposed Dam Safety Rules

Dear Mr. Miles:

On March 8, 1979, this firm, on behalf of Boise Cascade Corporation, submitted a letter to Hearing Examiner Howard Kaibel regarding certain rules relating to dam safety which have been proposed by the Department of Natural Resources. We requested that he recommend an exemption in the proposed rules for those dams located on the United States - Canada border which are under the jurisdiction of the International Joint Commission. In his Report, Mr. Kaibel declined to recommend such an exception stating that this argument had been rejected in the case of State v. Kulvar, 266 Minn. 408, 123 N.W.2d 699 (1963). Because we believe Mr. Kaibel's conclusion is erroneous, we are hereby requesting that you, in reviewing the proposed rules for legality, disapprove the Dam Safety Rules insofar as they do not contain an exemption for those dams which are governed by a treaty between the United States and Canada and are under the jurisdiction of the International Joint Commission.

The dams owned by Boise Cascade are, we believe, uniquely situated and so raise special problems. Although Boise Cascade owns and operates three dams, two of the dams (one at International Falls and one at Kettle Falls) lie partially within the United States and partly within Canada. It is for these dams that an exemption is requested.

The dam between International Falls and Fort Francis was authorized by an Act of Congress in 1898. 30 Stat. p. 398, c. 238 (1898). That Act empowered the Koochiching Company and its successors and assigns to construct across the Rainy Lake River a "dam, canal and works necessarily incident thereto, for water power purposes." The Act further provided that the dam be constructed so that a lock for navigation purposes can be installed, that the United States could at any time purchase the dam from the Koochiching Company, and that the Koochiching Company would make any modification in the dam which the Secretary of War might require.

Evidence of Congressional intent to preempt State regulation of the dam is further found in a provision of the act permitting any cases arising in connection with construction or operation of the dam to be tried in Federal Court.

By subsequent Congressional action, the water level behind the dam was first set by Congress (32 Stat. p. 485, c. 1305 (1902)) and later delegated to the discretion of the Secretary of War (33 Stat. p. 814, c. 797 (1905)). In the 1902 Act, Congress further required the Koochiching Company to construct and maintain the dam "upon the plans now on file with the Secretary of War, or any modification of said plans which the Secretary of War may approve."

Concern over the international ramifications of the International Falls and Kettle Falls dams led the United States and Great Britain to proclaim a treaty on the subject. 36 Stat. 2448 (1909). The treaty created an International Joint Commission (IJC) to regulate the "construction or maintenance ... of any dams or other obstructions in waters flowing from boundary waters" if the effect of the dams is to raise water levels. (Article III). Further, the IJC is given "jurisdiction over and shall pass upon all cases involving the use or obstruction or diversion of waters with respect to which under Article III and Article IV of this treaty the approval of the Commission is required." (Article VIII). A copy of this treaty is herewith enclosed.

The 1909 Treaty was subsequently amended by another treaty (54 Stat. 1800 (1938)) which authorized the IJC "to adopt such measures of control as to it may seem proper with respect to existing dams at Kettle Falls and International Falls." (Article I). A copy of this treaty is also enclosed.

Congress, by delegating responsibility for the "operation" of these dams first to the Executive Branch of the Federal Government and later to a commission created by treaty clearly evidenced its intent to preempt the State of Minnesota from regulating these dams. The rules relating to dam safety which the Department of Natural Resources has proposed directly conflict with the International Joint Commission's authority and duties. The proposed rules in 6 MCAR 1.5032(f) provide that "regulation of the maintenance and of the operation of the dam throughout its existence ... is vested with the Commissioner." This provision directly and unarguably conflicts with the responsibility and authority of the International Joint Commission. The Supremacy Clause of the United States Constitution prohibits the state from exercising the powers of the IJC.

The United States Constitution (Article 6) specifically provides that "all treaties made, or which shall be made under the authority of the United States shall be the supreme law of the land." Where there is a conflict between a treaty and state statute, the treaty must control. Missouri v. Holland, 252 U.S. 416 ( ); Baker v. Carr, 369 U.S. 186 ( ). The power of the federal government to regulate international

commerce and foreign affairs vests it with the authority to make a treaty governing these international boundary waters. Wisconsin v. Duluth, 96 U.S. 379 ( ).

Mr. Kaibel, in his Report, cited the following language from the Minnesota Supreme Court as justification for his decision not to exempt these dams:

> The international boundary waters of Rainy Lake are subject to concurrent regulation by the state and the International Joint Commission created by the 1909 Treaty of Ghent between the United States and Great Britain; but the mere fact of overlapping jurisdiction over such waters does not forbid state regulation of them in the absence of proof that such regulation conflicts with the exercise of jurisdiction by the dominant federal authority. State v. Kuluvar, 266 Minn. 408, 123 N.W.2d 699 (1963) at 701.

However, a closer examination reveals that this case is not really pertinent to the situation here presented. Kuluvar involved a criminal prosecution of an individual who had dredged portions of Rainy Lake for the purpose of installing a wharf for his own use. Mr. Kuluvar had argued that the state had no authority to regulate his conduct on international boundary waters because of the 1909 Treaty which created the International Joint Commission. The Court rejected this contention finding that the state has concurrent jurisdiction with the federal government to regulate these boundary waters "in the absence of proof that such regulation conflicts with the exercise of jurisdiction by the dominant federal authority." [Emphasis added] State v. Kuluvar, supra, at 704. While Kuluvar involved a situation where the state was attempting to regulate dredging in the lake in the absence of any similar regulation by the IJC, we are here confronted with a situation where the IJC regulates, under the authority of two treaties, the operation of the two dams (indeed, that is the very reason why the IJC was created) and the state proposes also to regulate the operation of those dams. In this case, the state's proposed regulation directly conflicts with the dominant federal authority. The state is proposing to regulate dams which are already regulated by the IJC. Because of this direct conflict, Kuluvar requires that the state yield to "the dominant federal authority."

Indeed, further reading of the Kuluvar case provides additional support for our argument:

> "It has long been recognized that Congress can constitutionally exclude the state in regulating these boundary waters under the commerce clause and the treaty making power. It is also well established that in the absence of any action the power to regulate reposes in the state. Congress may also elect to occupy the field concurrently with the state and in such instances state regulations

> are valid and effective except when they conflict with Federal authority. Where the conflict claimed is not clear, any doubts must be resolved in favor of the dominant federal authority." [Empahsis added]. Kuluvar, supra, at 704.

Congress has acted to exclude the state from regulating these dams and the state must yield to that federal action with any uncertainty being resolved in favor of a finding of preemption.

We hope that in view of the information here presented you will disapprove that definition of a dam found in 6 MCAR 1.5030 (D) insofar as it does not specifically except those dams under the jurisdiction of the International Joint Commission. If we can provide you with any other information, please do not hesitate to contact us.

Sincerely,

John A. Knapp

JAK:wm
Enclosures

January 11, 1909. *Treaty between the United States and Great Britain relating to boundary waters between the United States and Canada. Signed at Washington, January 11, 1909; ratification advised by the Senate, March 3, 1909; ratified by the President, April 1, 1910; ratified by Great Britain, March 31, 1910; ratifications exchanged at Washington, May 5, 1910; proclaimed, May 13, 1910.*

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA.

A PROCLAMATION.

Water boundary with Canada. Preamble.

Whereas a Treaty between the United States of America and His Majesty the King of the United Kingdom of Great Britain and Ireland and of the British Dominions beyond the Seas, Emperor of India, to prevent disputes regarding the use of boundary waters and to settle all questions which are now pending between the United States and the Dominion of Canada involving the rights, obligations, or interests of either in relation to the other or to the inhabitants of the other, along their common frontier, and to make provision for the adjustment and settlement of all such questions as may hereafter arise, was concluded and signed by their respective Plenipotentiaries at Washington on the eleventh day of January, one thousand nine hundred and nine, the original of which Treaty is word for word as follows:

Contracting Powers.

The United States of America and His Majesty the King of the United Kingdom of Great Britain and Ireland and of the British Dominions beyond the Seas, Emperor of India, being equally desirous to prevent disputes regarding the use of boundary waters and to settle all questions which are now pending between the United States and the Dominion of Canada involving the rights, obligations, or interests of either in relation to the other or to the inhabitants of the other, along their common frontier, and to make provision for the adjustment and settlement of all such questions as may hereafter arise, have resolved to conclude a treaty in furtherance of these ends, and for that purpose have appointed as their respective plenipotentiaries:

Plenipotentiaries.

The President of the United States of America, Elihu Root, Secretary of State of the United States; and

His Britannic Majesty, the Right Honorable James Bryce, O. M., his Ambassador Extraordinary and Plenipotentiary at Washington;

Who, after having communicated to one another their full powers, found in good and due form, have agreed upon the following articles:

PRELIMINARY ARTICLE.

Boundary waters defined.

For the purposes of this treaty boundary waters are defined as the waters from main shore to main shore of the lakes and rivers and connecting waterways, or the portions thereof, along which the international boundary between the United States and the Dominion of Canada passes, including all bays, arms, and inlets thereof, but not

including tributary waters which in their natural channels would flow into such lakes, rivers, and waterways, or waters flowing from such lakes, rivers, and waterways, or the waters of rivers flowing across the boundary.

ARTICLE I.

Navigation free to both countries.

The High Contracting Parties agree that the navigation of all navigable boundary waters shall forever continue free and open for the purposes of commerce to the inhabitants and to the ships, vessels, and boats of both countries equally, subject, however, to any laws and regulations of either country, within its own territory, not inconsistent with such privilege of free navigation and applying equally and without discrimination to the inhabitants, ships, vessels, and boats of both countries.

Lake Michigan and all connecting canals included.

It is further agreed that so long as this treaty shall remain in force, this same right of navigation shall extend to the waters of Lake Michigan and to all canals connecting boundary waters, and now existing or which may hereafter be constructed on either side of the line. Either of the High Contracting Parties may adopt rules and regulations governing the use of such canals within its own territory and may charge tolls for the use thereof, but all such rules and regulations and all tolls charged shall apply alike to the subjects or citizens of the High Contracting Parties and the ships, vessels, and boats of both of the High Contracting Parties, and they shall be placed on terms of equality in the use thereof.

ARTICLE II.

Control over waters crossing boundary, etc., retained.

Each of the High Contracting Parties reserves to itself or to the several State Governments on the one side and the Dominion or Provincial Governments on the other as the case may be, subject to any treaty provisions now existing with respect thereto, the exclusive jurisdiction and control over the use and diversion, whether temporary or permanent, of all waters on its own side of the line which in their natural channels would flow across the boundary or into boundary waters; but it is agreed that any interference with or diversion from their natural channel of such waters on either side of the boundary, resulting in any injury on the other side of the boundary, shall give rise to the same rights and entitle the injured parties to the same legal remedies as if such injury took place in the country where such diversion or interference occurs; but this provision shall not apply to cases already existing or to cases expressly covered by special agreement between the parties hereto.

Navigation not to be injured.

It is understood, however, that neither of the High Contracting Parties intends by the foregoing provision to surrender any right, which it may have, to object to any interference with or diversions of waters on the other side of the boundary the effect of which would be productive of material injury to the navigation interests on its own side of the boundary.

ARTICLE III.

Further diversions, etc., subject to special agreement.

It is agreed that, in addition to the uses, obstructions, and diversions heretofore permitted or hereafter provided for by special agreement between the Parties hereto, no further or other uses or obstructions or diversions, whether temporary or permanent, of boundary waters on either side of the line, affecting the natural level or flow of boundary waters on the other side of the line, shall be made except by authority of the United States or the Dominion of Canada within their respective jurisdictions and with the approval, as hereinafter

Post, p. 2451.

provided, of a joint commission, to be known as the International Joint Commission.

Government works for harbors, etc.

The foregoing provisions are not intended to limit or interfere with the existing rights of the Government of the United States on the one side and the Government of the Dominion of Canada on the other, to undertake and carry on governmental works in boundary waters for the deepening of channels, the construction of breakwaters, the improvement of harbors, and other governmental works for the benefit of commerce and navigation, provided that such works are wholly on its own side of the line and do not materially affect the level or flow of the boundary waters on the other, nor are such provisions intended to interfere with the ordinary use of such waters for domestic and sanitary purposes.

ARTICLE IV.

Consent for dams, etc., altering water levels.

The High Contracting Parties agree that, except in cases provided for by special agreement between them, they will not permit the construction or maintenance on their respective sides of the boundary of any remedial or protective works or any dams or other obstructions in waters flowing from boundary waters or in waters at a lower level than the boundary in rivers flowing across the boundary, the effect of which is to raise the natural level of waters on the other side of the boundary unless the construction or maintenance thereof is approved by the aforesaid International Joint Commission.

Polluting boundary waters forbidden.

It is further agreed that the waters herein defined as boundary waters and waters flowing across the boundary shall not be polluted on either side to the injury of health or property on the other.

ARTICLE V.

Niagara River. Diversion of waters limited.

The High Contracting Parties agree that it is expedient to limit the diversion of waters from the Niagara River so that the level of Lake Erie and the flow of the stream shall not be appreciably affected. It is the desire of both Parties to accomplish this object with the least possible injury to investments which have already been made in the construction of power plants on the United States side of the river under grants of authority from the State of New York, and on the Canadian side of the river under licenses authorized by the Dominion of Canada and the Province of Ontario.

Use above the Falls.

So long as this treaty shall remain in force, no diversion of the waters of the Niagara River above the Falls from the natural course and stream thereof shall be permitted except for the purposes and to the extent hereinafter provided.

By United States.

The United States may authorize and permit the diversion within the State of New York of the waters of said river above the Falls of Niagara, for power purposes, not exceeding in the aggregate a daily diversion at the rate of twenty thousand cubic feet of water per second.

By Canada.

The United Kingdom, by the Dominion of Canada, or the Province of Ontario, may authorize and permit the diversion within the Province of Ontario of the waters of said river above the Falls of Niagara, for power purposes, not exceeding in the aggregate a daily diversion at the rate of thirty-six thousand cubic feet of water per second.

Use for navigation, etc., not affected.

The prohibitions of this article shall not apply to the diversion of water for sanitary or domestic purposes, or for the service of canals for the purposes of navigation.

ARTICLE VI.

St. Mary and Milk rivers.
Apportionment of waters for irrigation.

The High Contracting Parties agree that the St. Mary and Milk Rivers and their tributaries (in the State of Montana and the Provinces of Alberta and Saskatchewan) are to be treated as one stream for the purposes of irrigation and power, and the waters thereof shall be apportioned equally between the two countries, but in making such equal apportionment more than half may be taken from one river and less than half from the other by either country so as to afford a more beneficial use to each. It is further agreed that in the division of such waters during the irrigation season, between the 1st of April and 31st of October, inclusive, annually, the United States is entitled to a prior appropriation of 500 cubic feet per second of the waters of the Milk River, or so much of such amount as constitutes three-fourths of its natural flow, and that Canada is entitled to a prior appropriation of 500 cubic feet per second of the flow of St. Mary River, or so much of such amount as constitutes three-fourths of its natural flow.

By United States.

By Canada.

Diversion of St. Mary River.

The channel of the Milk River in Canada may be used at the convenience of the United States for the conveyance, while passing through Canadian territory, of waters diverted from the St. Mary River. The provisions of Article II of this treaty shall apply to any injury resulting to property in Canada from the conveyance of such waters through the Milk River.

Ante, p. 2449.

Measurement by reclamation and irrigation officers.

The measurement and apportionment of the water to be used by each country shall from time to time be made jointly by the properly constituted reclamation officers of the United States and the properly constituted irrigation officers of His Majesty under the direction of the International Joint Commission.

ARTICLE VII.

International Joint Commission established.
Ante, p. 766.

The High Contracting Parties agree to establish and maintain an International Joint Commission of the United States and Canada composed of six commissioners, three on the part of the United States appointed by the President thereof, and three on the part of the United Kingdom appointed by His Majesty on the recommendation of the Governor in Council of the Dominion of Canada.

ARTICLE VIII.

Jurisdiction, etc.
Ante, pp. 2449, 2450.

This International Joint Commission shall have jurisdiction over and shall pass upon all cases involving the use or obstruction or diversion of the waters with respect to which under Articles III and IV of this treaty the approval of this Commission is required, and in passing upon such cases the Commission shall be governed by the following rules or principles which are adopted by the High Contracting Parties for this purpose:

Principles declared.

Mutual rights.

The High Contracting Parties shall have, each on its own side of the boundary, equal and similar rights in the use of the waters hereinbefore defined as boundary waters.

Precedence of uses.

The following order of precedence shall be observed among the various uses enumerated hereinafter for these waters, and no use shall be permitted which tends materially to conflict with or restrain any other use which is given preference over it in this order of precedence:

(1) Uses for domestic and sanitary purposes;

(2) Uses for navigation, including the service of canals for the purposes of navigation;

(3) Uses for power and for irrigation purposes.

The foregoing provisions shall not apply to or disturb any existing uses of boundary waters on either side of the boundary.

Temporary diversions.

The requirement for an equal division may in the discretion of the Commission be suspended in cases of temporary diversions along boundary waters at points where such equal division can not be made advantageously on account of local conditions, and where such diversion does not diminish elsewhere the amount available for use on the other side.

Compensating remedial works.

The Commission in its discretion may make its approval in any case conditional upon the construction of remedial or protective works to compensate so far as possible for the particular use or diversion proposed, and in such cases may require that suitable and adequate provision, approved by the Commission, be made for the protection and indemnity against injury of any interests on either side of the boundary.

Changes in water levels.

In cases involving the elevation of the natural level of waters on either side of the line as a result of the construction or maintenance on the other side of remedial or protective works or dams or other obstructions in boundary waters or in waters flowing therefrom or in waters below the boundary in rivers flowing across the boundary, the Commission shall require, as a condition of its approval thereof, that suitable and adequate provision, approved by it, be made for the protection and indemnity of all interests on the other side of the line which may be injured thereby.

Decisions of Commission.

The majority of the Commissioners shall have power to render a decision. In case the Commission is evenly divided upon any question or matter presented to it for decision, separate reports shall be made by the Commissioners on each side to their own Government. The High Contracting Parties shall thereupon endeavor to agree upon an adjustment of the question or matter of difference, and if an agreement is reached between them, it shall be reduced to writing in the form of a protocol, and shall be communicated to the Commissioners, who shall take such further proceedings as may be necessary to carry out such agreement.

ARTICLE IX.

Reference of future questions.

The High Contracting Parties further agree that any other questions or matters of difference arising between them involving the rights, obligations, or interests of either in relation to the other or to the inhabitants of the other, along the common frontier between the United States and the Dominion of Canada, shall be referred from time to time to the International Joint Commission for examination and report, whenever either the Government of the United States or the Government of the Dominion of Canada shall request that such questions or matters of difference be so referred.

Reports by Commission.

The International Joint Commission is authorized in each case so referred to examine into and report upon the facts and circumstances of the particular questions and matters referred, together with such conclusions and recommendations as may be appropriate, subject, however, to any restrictions or exceptions which may be imposed with respect thereto by the terms of the reference.

Effect of reports.

Such reports of the Commission shall not be regarded as decisions of the questions or matters so submitted either on the facts or the law, and shall in no way have the character of an arbitral award.

Submission of reports.

The Commission shall make a joint report to both Governments in all cases in which all or a majority of the Commissioners agree, and in case of disagreement the minority may make a joint report to both Governments, or separate reports to their respective Governments.

Divided decisions.

In case the Commission is evenly divided upon any question or matter referred to it for report, separate reports shall be made by the Commissioners on each side to their own Government.

ARTICLE X.

Any questions or matters of difference arising between the High Contracting Parties involving the rights, obligations, or interests of the United States or of the Dominion of Canada either in relation to each other or to their respective inhabitants, may be referred for decision to the International Joint Commission by the consent of the two Parties, it being understood that on the part of the United States any such action will be by and with the advice and consent of the Senate, and on the part of His Majesty's Government with the consent of the Governor General in Council. In each case so referred, the said Commission is authorized to examine into and report upon the facts and circumstances of the particular questions and matters referred, together with such conclusions and recommendations as may be appropriate, subject, however, to any restrictions or exceptions which may be imposed with respect thereto by the terms of the reference.

Submission of disputes to Commission.

Authority of Commission.

A majority of the said Commission shall have power to render a decision or finding upon any of the questions or matters so referred.

Decisions.

If the said Commission is equally divided or otherwise unable to render a decision or finding as to any questions or matters so referred, it shall be the duty of the Commissioners to make a joint report to both Governments, or separate reports to their respective Governments, showing the different conclusions arrived at with regard to the matters or questions so referred, which questions or matters shall thereupon be referred for decision by the High Contracting Parties to an umpire chosen in accordance with the procedure prescribed in the fourth, fifth, and sixth paragraphs of Article XLV of The Hague Convention for the pacific settlement of international disputes, dated October 18, 1907. Such umpire shall have power to render a final decision with respect to those matters and questions so referred on which the Commission failed to agree.

Reference to umpire of undecided questions.

Ante, p. 2223.

ARTICLE XI.

A duplicate original of all decisions rendered and joint reports made by the Commission shall be transmitted to and filed with the Secretary of State of the United States and the Governor General of the Dominion of Canada, and to them shall be addressed all communications of the Commission.

Transmission of decisions and reports.

ARTICLE XII.

The International Joint Commission shall meet and organize at Washington promptly after the members thereof are appointed, and when organized the Commission may fix such times and places for its meetings as may be necessary, subject at all times to special call or direction by the two Governments. Each Commissioner, upon the first joint meeting of the Commission after his appointment, shall, before proceeding with the work of the Commission, make and subscribe a solemn declaration in writing that he will faithfully and impartially perform the duties imposed upon him under this treaty, and such declaration shall be entered on the records of the proceedings of the Commission.

Organization and meetings of Commission.

The United States and Canadian sections of the Commission may each appoint a secretary, and these shall act as joint secretaries of the Commission at its joint sessions, and the Commission may employ engineers and clerical assistants from time to time as it may deem advisable. The salaries and personal expenses of the Commission and of the secretaries shall be paid by their respective Govern-

Personnel.

Payment of expenses.

Ante, pp. 766, 1364.

ments, and all reasonable and necessary joint expenses of the Commission, incurred by it, shall be paid in equal moieties by the High Contracting Parties.

Extent of authority.

The Commission shall have power to administer oaths to witnesses, and to take evidence on oath whenever deemed necessary in any proceeding, or inquiry, or matter within its jurisdiction under this treaty, and all parties interested therein shall be given convenient opportunity to be heard, and the High Contracting Parties agree to adopt such legislation as may be appropriate and necessary to give the Commission the powers above mentioned on each side of the boundary, and to provide for the issue of subpœnas and for compelling the attendance of witnesses in proceedings before the Commission. The Commission may adopt such rules of procedure as shall be in accordance with justice and equity, and may make such examination in person and through agents or employees as may be deemed advisable.

ARTICLE XIII.

Special agreements described.

In all cases where special agreements between the High Contracting Parties hereto are referred to in the foregoing articles, such agreements are understood and intended to include not only direct agreements between the High Contracting Parties, but also any mutual arrangement between the United States and the Dominion of Canada expressed by concurrent or reciprocal legislation on the part of Congress and the Parliament of the Dominion.

ARTICLE XIV.

Exchange of ratifications.

The present treaty shall be ratified by the President of the United States of America, by and with the advice and consent of the Senate thereof, and by His Britannic Majesty. The ratifications shall be exchanged at Washington as soon as possible and the treaty shall take

Duration

effect on the date of the exchange of its ratifications. It shall remain in force for five years, dating from the day of exchange of ratifications, and thereafter until terminated by twelve months' written notice given by either High Contracting Party to the other.

Signatures

In faith whereof the respective plenipotentiaries have signed this treaty in duplicate and have hereunto affixed their seals.

Done at Washington the 11th day of January, in the year of our Lord one thousand nine hundred and nine.

ELIHU ROOT [SEAL]
JAMES BRYCE [SEAL]

Consent of United States Senate.

And whereas the Senate of the United States by their resolution of March 3, 1909, (two-thirds of the Senators present concurring therein) did advise and consent to the ratification of the said Treaty with the following understanding, to wit:

Resolution.
Post, p. 2455.

"Resolved further, as a part of this ratification, That the United States approves this treaty with the understanding that nothing in this treaty shall be construed as affecting, or changing, any existing territorial or riparian rights in the water, or rights of the owners of lands under water, on either side of the international boundary at the rapids of the St. Mary's river at Sault Ste. Marie, in the use of the waters flowing over such lands, subject to the requirements of navigation in boundary waters and of navigation canals, and without prejudice to the existing right of the United States and Canada, each to use the waters of the St. Mary's river, within its own territory, and further, that nothing in this treaty shall be construed to interfere with the drainage of wet swamp and overflowed lands into streams flowing into boundary waters, and that this interpretation will be

mentioned in the ratification of this treaty as conveying the true meaning of the treaty, and will, in effect, form part of the treaty;"

And whereas the said understanding has been accepted by the Government of Great Britain, and the ratifications of the two Governments of the said treaty were exchanged in the City of Washington, on the 5th day of May, one thousand nine hundred and ten; Ratification.

Now, therefore, be it known that I, William Howard Taft, President of the United States of America, have caused the said treaty and the said understanding, as forming a part thereof, to be made public, to the end that the same and every article and clause thereof may be observed and fulfilled with good faith by the United States and the citizens thereof. Proclamation.

In testimony whereof, I have hereunto set my hand and caused the seal of the United States to be affixed.

Done at the City of Washington this thirteenth day of May, in the year of our Lord one thousand nine hundred and ten, [SEAL] and of the Independence of the United States of America the one hundred and thirty-fourth.

WM H TAFT

By the President:
P C KNOX
Secretary of State.

PROTOCOL OF EXCHANGE

On proceeding to the exchange of the ratifications of the treaty signed at Washington on January 11, 1909, between the United States and Great Britain, relating to boundary waters and questions arising along the boundary between the United States and the Dominion of Canada, the undersigned plenipotentiaries, duly authorized thereto by their respective Governments, hereby declare that nothing in this treaty shall be construed as affecting, or changing, any existing territorial, or riparian rights in the water, or rights of the owners of lands under water, on either side of the international boundary at the rapids of the St. Mary's River at Sault Ste. Marie, in the use of the waters flowing over such lands, subject to the requirements of navigation in boundary waters and of navigation canals, and without prejudice to the existing right of the United States and Canada, each to use the waters of the St. Mary's River, within its own territory; and further, that nothing in this treaty shall be construed to interfere with the drainage of wet, swamp, and overflowed lands into streams flowing into boundary waters, and also that this declaration shall be deemed to have equal force and effect as the treaty itself and to form an integral part thereto. Protocol of exchange of ratifications. *Ante*, p. 2454.

The exchange of ratifications then took place in the usual form.

IN WITNESS WHEREOF, they have signed the present Protocol of Exchange and have affixed their seals thereto.

DONE at Washington this 5th day of May, one thousand nine hundred and ten.

PHILANDER C KNOX [SEAL]
JAMES BRYCE [SEAL]

September 15, 1938
[T. S. No. 961]

Convention between the United States of America and Canada respecting emergency regulation of level of Rainy Lake and of other boundary waters in the Rainy Lake watershed. Signed at Ottawa September 15, 1938; ratification advised by the Senate of the United States August 30, 1940; ratified by the President of the United States September 10, 1940; ratified by His Majesty in respect of Canada May 19, 1939; ratifications exchanged at Ottawa October 3, 1940; proclaimed by the President of the United States October 18, 1940.

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA.

A PROCLAMATION.

Preamble.

WHEREAS, a convention between the United States of America and Canada, providing for emergency regulation of the level of Rainy Lake and of other boundary waters in the Rainy Lake watershed, as recommended by the International Joint Commission established pursuant to the provisions of the treaty signed at Washington on January 11, 1909, relating to questions arising between the United States of America and Canada, was signed by their respective plenipotentiaries at Ottawa on the 15th day of September, one thousand nine hundred and thirty-eight, the original of which convention is word for word as follows:

36 Stat. 2448.

Text.

The United States of America and His Majesty the King of Great Britain, Ireland and the British dominions beyond the Seas, Emperor of India, in respect of Canada,

Desirous of providing for emergency regulation of the level of Rainy Lake and of the level of other boundary waters in the Rainy Lake watershed, in such a way as to protect the interests of the inhabitants of the United States of America and Canada, and,

Accepting as a basis of agreement the following recommendations made by the International Joint Commission in its Final Report dated May 1, 1934, on the Reference concerning Rainy Lake and the boundary waters flowing into and from that lake, and particularly in answer to Question 2 of that Reference, namely,

> that it would be wise and in the public interest that the Commission be clothed with power to determine when unusual or extraordinary conditions exist throughout the watershed, whether by reason of high or low water, and that it be empowered to adopt such measures of control as to it may seem proper with respect to existing dams at Kettle Falls and International Falls, as well as any future dams or works, in the event of the Commission determining that such unusual or extraordinary conditions exist.

Have resolved to conclude a convention for that purpose and have accordingly named as their plenipotentiaries:—

Plenipotentiaries.

The President of the United States of America:
JOHN FARR SIMMONS, Charge d'Affaires ad interim of the United States of America at Ottawa;
His Majesty the King of Great Britain, Ireland and the British dominions beyond the Seas, Emperor of India, for Canada:
The Right Honourable WILLIAM LYON MACKENZIE KING, Prime Minister, President of the Privy Council and Secretary of State for External Affairs;

Who, after having communicated to each other their full powers, found in good and due form, have agreed as follows:

ARTICLE I

Powers, etc., of International Joint Commission.

The International Joint Commission, established pursuant to the provisions of the treaty signed at Washington on the 11th day of January, 1909, relating to questions arising between the United States of America and Canada, is hereby clothed with power to determine when emergency conditions exist in the Rainy Lake watershed, whether by reason of high or low water, and the Commission is hereby empowered to adopt such measures of control as to it may seem proper with respect to existing dams at Kettle Falls and International Falls, as well as with respect to any existing or future dams or works in boundary waters of the Rainy Lake watershed, in the event the Commission shall determine that such emergency conditions exist.

ARTICLE II

Ratification; effective date.

This convention shall be ratified in accordance with the constitutional forms of the Contracting Parties and shall take effect immediately upon the exchange of ratifications which shall take place at Ottawa as soon as possible.

IN WITNESS WHEREOF, the undersigned plenipotentiaries have signed the present convention and have hereunto affixed their seals.

Done in duplicate at Ottawa this fifteenth day of September, A. D., 1938.

JOHN FARR SIMMONS [SEAL] W. L. MACKENZIE KING [SEAL]

Ratifications exchanged.

AND WHEREAS, the said convention has been duly ratified on both parts and the ratifications of the two Governments were exchanged at Ottawa on October 3, 1940;

Proclamation.

NOW, THEREFORE, be it known that I, Franklin D. Roosevelt, President of the United States of America, have caused the said convention to be made public to the end that the same and every article and clause thereof may be observed and fulfilled with good faith by the United States of America and the citizens thereof.