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DEPARTMENT OF ENVIRONMENTAL QUALITY

LAND AND WATER MANAGEMENT

DAM SAFETY

(By authority conferred on the department of natural resources by section 57 of Act No. 300 of the Public Acts of 1989, being S281.1357 of the Michigan Compiled Laws)

R 281.1301 Definitions.

Rule 1. (1) As used in these rules, "Act" means Act No. 300 of the Public Acts of 1989, being S281.1301 et seq. of the Michigan Compiled Laws.

(2) Terms defined in the act have the same meanings when used in these rules.

History: 1993 ACS.

R 281.1302 Permit applications and procedures.

Rule 2. (1) An application for a permit for a proposed project shall be made on a form that is prescribed and provided by the department. The application form shall be the same form that is used for other department-administered statutes that require permits at the land-water interface. Application forms may be obtained from the land and water management division or from any district or regional office of the department.

(2) An application fee for a permit to repair, alter, remove, or abandon a dam shall be submitted with the application form. Submission of an application fee for a permit to construct, reconstruct, or enlarge a dam may be deferred until plans and specifications are submitted. The fee for enlargement of a dam that is part of a mine tailings basin system shall be based on the height of the new embankment section as measured by the vertical distance from the lowest point of the embankment crest to the lowest tailings foundation elevation. The fee shall be paid by check, money order, or draft made payable to: "State of Michigan".

(3) When the proposed project includes related multiple impoundments, an applicant may apply for a single permit, but an appropriate fee shall be required for each impoundment.

(4) An application for a permit to construct a new dam, enlarge an existing dam, or reconstruct a failed dam shall be reviewed by the department in a 2-step process. The first step shall be a review of the conceptual plans to determine if the proposed project may have a significant adverse effect on public health, safety, welfare, property, or natural resources or the public trust in those natural resources. The second step shall be the review of plans and specifications to determine if the engineering design is acceptable.

(5) An application for a permit to construct a new dam, enlarge an existing dam, or reconstruct a failed dam shall include all of the following:

(a) A description and evaluation of the loss of natural resources that are associated with the project.

(b) A description of the natural resources that are associated with or created by the impoundment and how they offset the natural resources lost by the creation of the impoundment.

(c) The project assessment required pursuant to the provisions of R 281.1304. However, an assessment is not required for a permit to enlarge an

existing dam when the purpose of the impoundment will remain the same as the original impoundment and the surface area of the impoundment will be increased by 10% or less.

(d) Conceptual plans that are adequate to evaluate the project's impacts on public health, safety, welfare, property, or natural resources or the public trust in those natural resources. Conceptual plans shall include, at a minimum, all of the following:

(i) A site plan that shows all of the following:

- (A) The location of the dam.
- (B) The existing stream channel.
- (C) The normal shoreline of the proposed impoundment.
- (D) Property lines.
- (E) Dimensions or proper scale.

(ii) Transverse and longitudinal cross-sections through the dam that show all of the following:

- (A) The spillway or spillways.
- (B) Upstream and downstream water levels.
- (C) The stream channel bottom.

(iii) The location of all occupied dwellings within 1/4 of a mile of the proposed impoundment if the dam is new or if the impoundment elevation is changed. Projects that do not propose an impoundment elevation change are excluded from this requirement.

(iv) Ingress and egress routes for construction activities.

(6) The first step of the review shall commence once the department has received all of the following:

(a) The application form with all necessary information filled in.

(b) All additional information requested by the department that is required to evaluate the proposed activity's effects on the public health, safety, welfare, property, or natural resources or the public trust in those natural resources. Requests by the department for additional information shall be made in writing.

(c) All appropriate application fees, except as noted in subrule (2) of this rule.

(d) The assessment described in R 281.1304 when required pursuant to the provisions of subrules (5) and (7) of this rule.

(e) Conceptual plans for the project as described in this subrule and subrules (5), (7), and (8) of this rule.

Engineering plans and specifications are not required for the department to complete the first step of the review.

(7) An application for a permit to abandon or remove a dam shall include all of the following:

(a) A site plan that shows all of the following:

- (i) The location of the dam.
- (ii) The impoundment.
- (iii) The existing stream channel.
- (iv) The proposed location of the stream channel.

(b) A description of the method to be employed in removing or abandoning the dam.

(c) An evaluation of the capacity of the remaining structure to pass flood flows after the proposed work is completed, including hydraulic computations to support the evaluation.

(d) An evaluation of the quantity and quality characteristics of the sediments that have accumulated in the dam impoundment.

(e) A description of the methods to be employed to control sediments during and after removing or abandoning the dam.

(f) The project assessment required pursuant to the provisions of R 281.1304.

(8) An application for a permit to repair or alter a dam shall include both of the following:

(a) A description of the proposed work, including the volumes of materials to be dredged or filled.

(b) Engineering plans and specifications for the proposed work.

(9) After receipt of an application, the department may request, in writing, from the applicant, such additional information, assessment, design calculations, records, or documents as are determined to be necessary to evaluate the proposed project.

(10) Based in part on the information provided by the applicant and in part on comments received by the department during the 20-day comment period as provided by section 23 of the act, the department shall conduct the first step of the review to determine the effects of the proposed project on public health, safety, welfare, property, or natural resources or the public trust in those natural resources and riparian rights. The department shall make 1 of the following determinations:

(a) The proposed activity is permissible as submitted.

(b) The proposed activity is permissible if certain described modifications are made.

(c) The proposed activity is not permissible and cannot be modified to result in the granting of a permit.

(11) An application for a permit shall not be considered complete until the assessment required in R 281.1304 has been completed and the department has received all of the following:

(a) All information that is requested on the application form.

(b) Any other information that is required by written notice from the department.

(c) The application fee, unless the fee is deferrable pursuant to the provisions of subrule (2) of this rule.

(d) Acceptable conceptual plans and specifications.

The department shall grant or deny a permit within 60 days after the submission of a complete application or within 120 days after the submission of a complete application if a public hearing is held.

(12) An application shall be considered to be withdrawn and the file for the application shall be closed if an applicant fails to respond to any written inquiry or request from the department within 30 days of the request. If the applicant cannot provide the specific information that the department requests within the 30-day period, the applicant may keep the application open by advising the department, in writing, within the 30-day period, of when the information can be submitted. The applicant's proposed deadline shall be reasonable. If the information is not provided by the applicant's deadline, the application shall then be closed.

(13) The department shall advise an applicant of its determination. If an activity is permissible as submitted or is permissible if modified, the department shall then review engineering plans and specifications. If the department has not yet received required application fees or engineering plans and specifications, the department shall request the fees or plans and specifications at the time an applicant is advised of the department's determination.

(14) When the department determines that engineering plans and specifications are acceptable, a permit shall be issued or, if a permit has already been issued, the applicant shall be notified, in writing, that plans and specifications are acceptable and the project may commence. If the engineering plans and specifications are determined to be unacceptable, the department shall advise the applicant of why the plans and specifications are unacceptable and provide a concise written statement explaining how the plans and specifications may be corrected.

History: 1993 AACCS.

R 281.1303 Permit conditions.

Rule 3. (1) A permit shall provide that the work authorized by the permit shall be completed within a specified time period, which shall not be more than 2 years after the date that the permit is issued. Extensions of time of up to 2 years each may be granted by the department for good cause shown by the applicant. An administrative fee shall not be required for an application for extensions of time.

(2) A permit does not obviate the necessity of receiving approval from the United States army corps of engineers, when applicable, the state department of public health, or a local unit of government, when applicable, including a local unit of government that is responsible for administering the provisions of Act No. 245 of the Public Acts of 1970, as amended, being S281.631 et seq. of the Michigan Compiled Laws, and Act No. 347 of the Public Acts of 1972, as amended, being S282.101 et seq. of the

Michigan Compiled Laws.

(3) The department shall not issue a permit, except for a permit pursuant to the provisions of section 25(2) of the act or a permit under a minor project category, until 20 days after the mailing of the list to each eligible subscriber as provided for in sections 21(1) to (3) and 23(1) of the act.

(4) Upon request, the department shall provide any person with a copy of a permit application and supporting documents pursuant to the provisions of Act No. 442 of the Public Acts of 1976, as amended, being S15.231 et seq. of the Michigan Compiled Laws.

(5) If the mitigation proposed in a mitigation plan that is submitted by an applicant is approved by the department, the department may incorporate the mitigation actions as permit conditions for the improvement of the existing resources or the creation of a new resource to offset resource losses that result from the proposed project.

(6) A temporary emergency action plan may be required by permit condition which would be effective during, and applicable to, the construction period.

History: 1993 AACS.

R 281.1304 Project assessment.

Rule 4. (1) In each application for a permit as required pursuant to the provisions of R 281.1302, (5) and (7), an assessment of all known existing and potential adverse effects within the scope of the project shall be provided by the applicant and reviewed by the department to determine whether the project will have a significant adverse effect on public health, safety, welfare, property, or natural resources or the public trust in those resources. This assessment shall include evaluations of both positive and negative impacts of the project commensurate with the scope of the project and mitigating measures to minimize impacts on all of the following:

- (a) Wetlands.
- (b) Fisheries.
- (c) Wildlife.
- (d) Threatened and endangered species.
- (e) Water quality.
- (f) Streamflows.
- (g) Sediment transport.
- (h) Turbidity.
- (i) Water chemistry.
- (j) Water temperature.
- (k) Riparian rights.

The assessment shall include impacts of the impoundment on the stream below the impoundment and shall address impacts both during construction and after completion of the project.

(2) If the department determines that more detailed study is needed, it may require the applicant to provide the additional information or cause such a study to be made. The department shall state, with specificity, in writing, the requirements or criteria for such additional information or study. All available data shall be evaluated by the department in its review of an application for a permit.

History: 1993 AACS.

R 281.1305 Engineering plans and specifications.

Rule 5. (1) Engineering plans and specifications for the construction of new dams, the reconstruction of failed dams, or the enlargement of dams shall be prepared by a licensed professional engineer, be submitted to the department, be approved by the department before the commencement of construction, and include, at a minimum, all of the following:

(a) A map that shows the location of the project and a topographic map of the dam site and impoundment area. Mapping shall show all of the following:

- (i) Maximum flood storage elevations of the impoundment.
- (ii) Property boundaries of the site, including flowage easements.
- (iii) Borrow area or areas.
- (iv) Ingress and egress routes.
- (v) Work limits.
- (b) Detailed design plans that show all of the following:
 - (i) A profile along the centerline of the embankment and the spillway or spillways.
 - (ii) Cross-sections of the dam at representative locations that show suitable detail of the upstream and downstream slopes and crest.
 - (iii) The findings of investigations and analyses of embankment and foundation materials, including the locations of soil borings, soil boring logs, and proposed foundation treatment.
 - (iv) Other drawings that are necessary to fully depict the project as determined by the department upon consultation with the applicant.
 - (v) Other analyses that are necessary to document the adequacy of the design of the structure and protection of natural resources, public safety, and public trust as determined by the department upon consultation with the applicant.
- (c) An operation plan that describes how the streamflows will be maintained under various conditions.
- (d) Technical specifications related to the scope of work for the dam and appurtenant structures. Specifications shall reference nationally recognized and acceptable engineering specifications.
- (2) Engineering plans and specifications for the repair, alteration, removal, or abandonment of a dam, with the exception of minor alteration or repair projects, shall be prepared by a licensed professional engineer, be submitted to the department, and be approved by the department before commencement of construction. Plans and specifications for repair and alteration shall include sufficient detail and analyses for the department to determine whether the proposed activity adequately protects the structural integrity of the dam. Plans and specifications for removal and abandonment of a dam shall include sufficient detail and analyses for the department to determine whether the proposed activity adequately protects natural resources, public safety, and the public trust.
- (3) The hazard potential classification and spillway design flood determination of a dam site shall be determined by the department. The department may require the applicant to provide additional information for the department's use in these determinations. Spillway capacity requirements are fulfilled if the specified design flood is stored in the impoundment, attenuated in the impoundment system, or passed through the spillway.
- (4) When mitigation for the loss of natural resources is required for a proposed activity, plans and specifications for the mitigation may be required.

History: 1993 AACs.

R 281.1306 Minor project categories.

- Rule 6. (1) The department shall grant or deny an application for a minor project after all of the following steps have been completed:
- (a) Submission of a complete application.
 - (b) An on-site inspection by a department representative.
 - (c) A review of all appropriate information by the department.
- (2) A review of a minor project does not require any of the following:
- (a) Submission of the application materials by the department to any of the individuals or agencies listed in section 23(1) of the act.
 - (b) A 20-day comment period as provided for in section 23 of the act.
 - (c) A public hearing.
- (3) Required plans and specifications for a minor project do not need to be prepared by a licensed professional engineer.
- (4) The following alterations and repairs shall be considered minor projects pursuant to section 27 of the act if the activity involves a temporary drawdown of 2 feet or less or involves a temporary drawdown where the dam owner is the sole riparian to the lands surrounding the

impoundment:

(a) Dredging or filling of more than 25 cubic yards, but less than 300 cubic yards, as a single and complete project. For dredging projects, the project will not be considered minor unless evidence is provided with the application that the materials to be dredged are not contaminated pursuant to the provisions of Act No. 64 of the Public Acts of 1979, as amended, being S299.501 et seq. of the Michigan Compiled Laws.

(b) Erosion protection measures that fulfill an identifiable need for erosion protection, bank stabilization, or the protection or improvement of the dam and its inlet and outlet channels. The fill material that is associated with erosion protection measures shall be in compliance with any of the following provisions:

(i) It shall have a volume of more than 25 cubic yards, but shall not have a volume of more than 300 cubic yards.

(ii) It shall not have a surface area of more than 10,000 square feet.

(iii) There shall not be more than 2 cubic yards per lineal foot.

(c) Other repairs and alterations that have a minimal effect on the structural integrity of the dam.

(5) Dredging or filling in volumes of less than 25 cubic yards shall be considered maintenance and does not require a permit pursuant to the provisions of the act.

History: 1993 AACS.

R 281.1307 Performance bonds.

Rule 7. (1) As authorized by the provisions of section 31(5) of the act, a permit to construct a new dam or reconstruct a failed dam may require a performance bond. A performance bond may be in the form of any of the following:

(a) A surety bond.

(b) A secured trust fund.

(c) A letter of credit.

(d) Insurance.

(e) A financial test.

(f) A corporate guarantee.

(g) Another suitable instrument or mechanism.

(h) A combination of the items listed in subdivisions (a) to (g) of this subrule as approved by the department.

The department shall consider an applicant's past performance in determining if a performance bond shall be required.

(2) The performance bond shall be secured and documentation shall be submitted to the department before the commencement of construction. The bond, instrument, mechanism, or fund or combination of these methods of assurance shall be in the amount equal to a reasonable estimate of the cost, adjusted for inflation, that is required to adequately complete a project or remove a completed or partially completed dam and to provide for complete or partial restoration of a project site. Performance bonds may be required in the following instances if there is a reasonable possibility that the permittee may not complete the project:

(a) Where total project completion is essential for the protection of public health, welfare, or safety or to protect natural resources and the public trust in those natural resources.

(b) For temporary dams or dams that are constructed or reconstructed for a specific purpose and period of time after which removal is planned.

(c) For phased construction projects where dam construction or reconstruction is an integral and necessary part of the total project and is to be phased in over a number of years.

(d) Projects to be constructed in the future to mitigate the loss of natural resources or environmental degradation.

History: 1993 AACS.

R 281.1308 Project completion explained.

Rule 8. Pursuant to the provisions of section 35(1)(a) of the act,

completion of a new, reconstructed, enlarged, repaired, or altered dam occurs when all the work depicted on all approved drawings and all specification requirements have been accomplished and all permit conditions have been implemented before the expiration of a permit.

History: 1993 AACs.

R 281.1309 Inspection schedule.

Rule 9. Inspection reports that are prepared pursuant to the provisions of R 281.1310 are due on a calendar year basis. The department shall notify the dam owner of the due date, by certified mail, not later than January 31 of the year in which the inspection report is due. In establishing an inspection schedule, as authorized pursuant to the provisions of section 37(2) of the act, the department shall compile an alphabetical listing of dams in each hazard potential classification of high, significant, and low. The inspection schedule shall be established based on the following provisions:

(a) For high hazard potential dams, every third dam in the alphabetical listing of these dams shall be inspected each year as follows:

(i) The first, fourth, seventh, tenth, and so on dam in the alphabetical listing will be due for inspection the first year.

(ii) The second, fifth, eighth, eleventh, and so on dam in the alphabetical listing will be due for inspection the second year.

(iii) The third, sixth, ninth, twelfth, and so on dam in the alphabetical listing will be due for inspection the third year.

(iv) The cycle shall be repeated every 3 years.

(b) For significant hazard potential dams, every fourth dam in the alphabetical listing of these dams shall be inspected each year as follows:

(i) The first, fifth, ninth, thirteenth, and so on dam in the alphabetical listing shall be due for inspection the first year.

(ii) The second, sixth, tenth, fourteenth, and so on dam in the alphabetical listing shall be due for inspection the second year.

(iii) The third, seventh, eleventh, fifteenth, and so on dam in the alphabetical listing shall be due for inspection the third year.

(iv) The fourth, eighth, twelfth, sixteenth, and so on dam in the alphabetical listing shall be due for inspection the fourth year.

(v) The cycle shall be repeated every 4 years.

(c) For low hazard potential dams, every fifth dam in the alphabetical listing of these dams shall be inspected each year as follows:

(i) The first, sixth, eleventh, sixteenth, and so on dam in the alphabetical listing shall be due for inspection the first year.

(ii) The second, seventh, twelfth, seventeenth, and so on dam in the alphabetical listing shall be due for inspection the second year.

(iii) The third, eighth, thirteenth, eighteenth, and so on dam in the alphabetical listing shall be due for inspection the third year.

(iv) The fourth, ninth, fourteenth, nineteenth, and so on dam in the alphabetical listing shall be due for inspection the fourth year.

(v) The fifth, tenth, fifteenth, twentieth, and so on dam in the alphabetical listing shall be due for inspection the fifth year.

(vi) The cycle shall be repeated every 5 years.

(d) Depending on its hazard potential classification, a new, reconstructed, or enlarged dam shall be scheduled for inspection 3, 4, or 5 years after the date of written notice of final project approval as required pursuant to the provisions of section 35(2) of the act or 3, 4, or 5 years after the expiration date of the permit if final approval cannot be granted. The cycle shall be repeated every 3, 4, or 5 years according to the dam's hazard potential classification.

(e) If the hazard potential classification of a dam changes, its next inspection shall be scheduled based on the date of its previous inspection and the cycle of inspections required for the new hazard potential rating.

(f) If an existing dam is discovered that falls under the authority of the act, it shall be added to the end of the appropriate alphabetical listing, and its first inspection shall be scheduled based on the system described in subdivisions (a) to (c) of this rule. If the department

determines that a condition may exist that endangers the dam, an inspection shall be required immediately.

(g) The department may alter the inspection schedule in consideration of the dates of recent inspections and department-permitted and approved repairs and alterations.

(h) Owners of more than 1 dam may request that the department schedule their inspection reports to be due the same year if the dams have the same hazard potential classification.

History: 1993 AACs.

R 281.1310 Inspection reports.

Rule 10. (1) Inspection reports shall include all of the information required in section 37(3) of the act.

(2) An inspection report shall include all of the following parts:

(a) A title sheet that includes all of the following information:

(i) The name of the dam.

(ii) The inventory identification number.

(iii) The county and river or stream where the dam is located.

(iv) The owner's and operator's names, addresses, and telephone numbers.

(v) The hazard potential classification.

(vi) The names of inspectors.

(vii) The date of inspection.

(viii) The name, address, registration number, and signature of the licensed professional engineer who is in charge of the inspection report.

(b) A conclusions and recommendations section that includes all of the following information:

(i) An evaluation of the dam's overall condition and a summary of the findings of the field inspection and analyses contained in the report.

(ii) Identification of any deficiencies that, if left uncorrected, could lead to the failure of the dam.

(iii) Prioritization of recommendations to correct observed deficiencies or operation and maintenance items for the dam.

(iv) Recommendations for further detailed studies or investigations, including an assessment of the adequacy of the current hazard potential classification if appropriate.

(c) A project information section that includes all of the following information:

(i) A description of the dam, outlet, spillway, and other principal features, together with pertinent data.

(ii) The purpose of the dam.

(iii) A summary of available design, geotechnical, maintenance, construction, repair, and alteration information and operating history.

(iv) A reference to past inspection reports.

(v) The date of construction, if known.

(d) A field inspection section that briefly describes the physical condition of the principal features of the dam and appurtenant structures, including the impoundment level, as they were observed during the field inspection.

(e) A structural stability section that includes a visual assessment of the stability of the dam on the basis of available data, together with the observations of the field inspection and the results of any calculations performed.

(f) A hydrologic and hydraulic section that includes an evaluation of spillway adequacy, including a description of pertinent available information, such as any of the following:

(i) Hydrologic design data provided by the department.

(ii) Drainage area.

(iii) Floods of record.

(iv) Previous evaluations.

(g) An operation and maintenance section that includes all of the following:

(i) An assessment of operating equipment and procedures.

(ii) Evaluation of the current maintenance plan.

(h) Appendices that include all of the following:

(i) A map that shows the location of the dam.

(ii) Engineering plans of the dam, if available, or sketches of the dam and its principal parts, including a plan view and cross sectional views of pertinent features. If there have been changes to the dam since the submittal of previous plans or sketches, supplemental plans or sketches that depict the changes shall be submitted. If engineering plans or sketches have been submitted in a previous inspection report and if there have been no changes to the dam, it is not necessary to submit duplicate plans or sketches in subsequent reports.

(iii) Photographs of the dam, downstream channel, and deficiencies cited in the report.

History: 1993 AACS.

R 281.1311 Emergency action plans.

Rule 11. (1) An emergency action plan for a high or significant hazard potential dam shall be submitted to the county or local emergency management coordinator for review for consistency with county or local emergency operations plans and the Michigan emergency preparedness plan. An emergency action plan for an existing dam shall be submitted to the department with documentation that the plan has been submitted to the county or local emergency management coordinator not later than the time that the first inspection report for the dam is due or at another time agreed to by the department. An emergency action plan for a newly constructed dam shall be submitted to the department with documentation that the plan has been submitted to the county or local emergency management coordinator not later than the date of expiration of the permit for construction of the dam, including any extensions of time for completion.

(2) At the time subsequent inspection reports are due, the owner shall determine if the plan is up to date. The owner shall advise the department of the findings of this review and shall submit any revisions to the department and to the county or local emergency management coordinator.

(3) The emergency action plan shall include a description of the circumstances under which it shall be activated, what actions shall be taken, and who shall be responsible to take those actions when the plan is activated.

(4) The emergency action plan shall include the name, address, and telephone number of all of the following entities:

(a) The person who is responsible for the operation of the dam.

(b) The alternate person who is responsible for the operation of the dam.

(c) The local emergency management coordinator or coordinators.

(5) The emergency action plan shall include either of the following:

(a) A listing of occupied facilities, buildings, and residences that may be threatened with flooding due to the failure of the dam.

(b) Mapping that is adequate to clearly delineate the areas of potential inundation resulting from a failure of the dam.

The degree of detail for mapping or listings shall be determined through consultations between the dam owner and the appropriate emergency services agencies that are responsible for implementing the emergency action plan.

History: 1993 AACS.

R 281.1312 Administrative monetary penalties.

Rule 12. (1) As authorized pursuant to the provisions of section 51(8) of the act, an administrative penalty of not more than \$500.00 per day may be assessed to a person as set forth in the schedule in subrule (2) of this rule for any of the following reasons:

(a) Violation of any or all of the conditions of a minor project permit that is issued pursuant to the provisions of section 27 of the act.

(b) Failure to submit an inspection report as required pursuant to the provisions of section 37 of the act.

(c) Failure to provide a more detailed investigation or evaluation of

certain dam features as required by section 37(5) of the act.

(d) Failure to comply with a first department order to limit dam operations as authorized pursuant to the provisions of section 39(1) of the act where significant impairment of resources has not resulted.

(e) Failure to notify the department and affected off-site public authorities and safety agencies, pursuant to the provisions of section 41(1) of the act, of any flood or unusual circumstance or occurrence, within 24 hours of the circumstance or occurrence, that endangers the safety of a dam, but where significant damage to property or natural resources does not occur.

(f) Failure to notify the department of actions taken in response to emergency conditions pursuant to the provisions of section 41(2) of the act.

(g) Failure to comply with the provisions of an emergency order that relates to any of the following as authorized pursuant to the provisions of section 43(2) of the act:

(i) Maximum drawdown levels and discharge rates.

(ii) Conducting required sediment surveys, water quality sampling, or monitoring.

(iii) Any other requirement where significant impairment of resources has not resulted.

(h) Failure to prepare, keep current, and submit to the department an emergency action plan as required pursuant to the provisions of section 47 of the act.

(i) Failure to comply with a first order to comply with permit conditions or to restore the site affected to its original condition pursuant to the provisions of section 49(1) of the act.

(j) Violation of any of the following permit conditions:

(i) Failure to supply data or information.

(ii) Failure to provide required minimum flow releases where significant impairment of resources has not resulted.

(iii) Violation of any permit condition where significant impairment of resources has not occurred.

Each violation and act of noncompliance and each day such a violation or act occurs or continues to occur will be considered a separate violation.

(2) The following administrative penalty schedule shall apply for noncompliance or violations as set forth in subrule (1) of this rule:

(a) First through the fifth day the violation occurs - not more than \$100.00 per day.

(b) Sixth through the tenth day the violation occurs - not more than \$200.00 per day.

(c) Eleventh through the fifteenth day the violation occurs - not more than \$300.00 per day.

(d) Sixteenth through the twentieth day the violation occurs - not more than \$400.00 per day.

(e) Twenty-first day until the violation is resolved - not more than \$500.00 per day.

(3) All administrative penalties will be assessed by written notice from the department. The notice shall state the specific reasons for the penalty, the number of days the department considers the person in violation, and the total amount due based on the schedule in subrule (2) of this rule.

(4) If so requested, the department shall provide a person, subject to the administrative penalty provisions of section 51(8) of the act, an opportunity for a hearing pursuant to the provisions of Act No. 306 of the Public Acts of 1969, as amended, being S24.201 et seq. of the Michigan Compiled Laws.

(5) Notice of intent to assess administrative penalties pursuant to section 51(8) of the act shall be given either through written notice by certified mail or personal service on the person by the director, his or her designated representative, or a peace officer.

(6) Penalties that are administered pursuant to the provisions of section 51(8) of the act may be in addition to any other penalties or remedies authorized by the act or its rules.

History: 1993 AACCS.

R 281.1313 Dams exempt from rules.

Rule 13. A dam is exempt from these rules if it is exempt from the act pursuant to the provisions of section 13(2) and (3) of the act.

History: 1993 AACs.

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NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT (EXCERPT)
Act 451 of 1994

PART 315
DAM SAFETY

324.31501 Meanings of words and phrases.

Sec. 31501. For purposes of this part, the words and phrases defined in sections 31502 to 31505 have the meanings ascribed to them in those sections.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

324.31502 Definitions; A to D.

Sec. 31502. (1) "Abandonment" means an affirmative act on the part of an owner to discontinue maintenance or operation of a dam.

(2) "Administrative procedures act of 1969" means Act No. 306 of the Public Acts of 1969, being sections 24.201 to 24.328 of the Michigan Compiled Laws.

(3) "Alteration" means a change in the design of an existing dam that directly affects or may directly affect the structural integrity of a dam.

(4) "Appurtenant works" means the structure or machinery incident to or annexed to a dam that is built to operate and maintain a dam, including spillways, either in a dam or separate from the dam; low level outlet works; and water conduits such as tunnels, pipelines, or penstocks, located either through the dam or through the abutments of the dam.

(5) "Auxiliary spillway" means a secondary spillway which is operational at all times and does not require stoplog removal or gate manipulation.

(6) "Dam" means an artificial barrier, including dikes, embankments, and appurtenant works, that impounds, diverts, or is designed to impound or divert water or a combination of water and any other liquid or material in the water; that is or will be when complete 6 feet or more in height; and that has or will have an impounding capacity at design flood elevation of 5 surface acres or more. Dam does not include a storage or processing tank or standpipe constructed of steel or concrete, a roadway embankment not designed to impound water, or a dug pond where there is no impoundment of water or waste materials containing water at levels above adjacent natural grade levels.

(7) "Days" means calendar days, including Sundays and holidays.

(8) "Design flood" means the design flow rate for spillway capacity and dam height design.

(9) "Design flood elevation" means the maximum flood elevation that is considered in the design of the spillway capacity and freeboard for a dam.

(10) "Downstream toe elevation" means the elevation of the lowest point of intersection between the downstream slope of an earthen embankment and the natural ground.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

324.31503 Definitions; E to H.

Sec. 31503. (1) "Emergency action plan" means a plan developed by the owner that establishes procedures for notification of the department, public off-site authorities, and other agencies of the emergency actions to be taken prior to and following an impending or actual failure of a dam.

(2) "Enlargement" means any change in or addition to an existing dam which raises or may raise the design flood elevation of the water impounded by the dam.

(3) "Failed dam" means a dam not capable of impounding water at its intended level due to a structural deficiency.

(4) "Failure" means an incident resulting in an unplanned or uncontrolled release of water from a dam.

(5) "Flood of record" means the greatest flow rate determined by the department to have occurred at a particular location.

(6) "Freeboard" means the vertical distance between the design flood elevation and the lowest point of the top of the dam.

(7) "Half probable maximum flood" means the largest flood that may reasonably occur over a watershed, and is derived from the combination of hydrologic runoff parameters and the half probable maximum storm

that produces the maximum runoff.

(8) "Half probable maximum storm" means the spatial and temporal distribution of the probable maximum precipitation, divided by 2, that produces the maximum volume of precipitation over a watershed.

(9) "Hazard potential classification" means a reference to the potential for loss of life, property damage, and environmental damage in the area downstream of a dam in the event of failure of the dam or appurtenant works.

(10) "Height" means the difference in elevation measured vertically between the natural bed of a stream or watercourse at the downstream toe of the dam, or, if it is not across a stream channel or watercourse, from the lowest elevation of the downstream toe of the dam, to the design flood elevation or to the lowest point of the top of the dam, whichever is less.

(11) "High hazard potential dam" means a dam located in an area where a failure may cause serious damage to inhabited homes, agricultural buildings, campgrounds, recreational facilities, industrial or commercial buildings, public utilities, main highways, or class I carrier railroads, or where environmental degradation would be significant, or where danger to individuals exists with the potential for loss of life.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

324.31504 Definitions; I to P.

Sec. 31504. (1) "Impoundment" means the water held back by a dam.

(2) "Low hazard potential dam" means a dam located in an area where failure may cause damage limited to agriculture, uninhabited buildings, structures, or township or county roads, where environmental degradation would be minimal, and where danger to individuals is slight or nonexistent.

(3) "Maintenance" means the upkeep of a dam and its appurtenant works but does not include alterations or repairs.

(4) "One-hundred year flood" means a flood that has a 1% chance of being equaled or exceeded in any given year.

(5) "Owner" means a person who owns, leases, controls, operates, maintains, manages, or proposes to construct a dam.

(6) "Probable maximum precipitation" means the theoretically greatest depth of precipitation for a given duration that is physically possible over a given size storm area at a particular geographic location at a certain time of year.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

324.31505 Definitions; R to T.

Sec. 31505. (1) "Removal" means the physical elimination of a dam or impoundment.

(2) "Repair" means to substantially restore a dam to its original condition and includes only such restoration as may directly affect the structural integrity of the dam.

(3) "Riparian owner" means a person who has riparian rights.

(4) "Riparian rights" means rights which accrue by operation of law to a landowner on the banks of an inland lake or stream.

(5) "Significant hazard potential dam" means a dam located in an area where its failure may cause damage limited to isolated inhabited homes, agricultural buildings, structures, secondary highways, short line railroads, or public utilities, where environmental degradation may be significant, or where danger to individuals exists.

(6) "Spillway" means a waterway in or about a dam designed for the discharge of water.

(7) "Spillway capacity" means the maximum rate of discharge that will pass through a spillway at design flood elevation.

(8) "Two-hundred year flood" means a flood that has a 0.5% chance of being equaled or exceeded in any given year.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

324.31506 Jurisdiction of dams and impoundments; exemptions.

Sec. 31506. (1) Except as otherwise provided in subsections (2) and (3), dams and impoundments in the

state are under the jurisdiction of the department.

(2) The following are exempt from this part:

(a) Projects licensed, projects that have preliminary permits, or projects for which an application for licensure has been filed under the federal power act, chapter 285, 41 Stat. 1063, 16 U.S.C. 791a to 793, 796 to 797, 798 to 818, 820 to 824a, and 824b to 825r, if federal dam safety inspection provisions apply during the license period and the inspection reports are provided to the department.

(b) Projects located on boundary waters under the jurisdiction and supervision of the United States army corps of engineers.

(c) Impoundments licensed pursuant to part 115 that contain or are designed to contain type III wastes as defined in rules promulgated under that part.

(3) Until January 1, 1998, a permit shall not be required under this part for the repair, reconstruction, or improvement of a dam, a portion of which is at least 75 years old, was damaged or destroyed by an act of God and is located in a county that has a per capita income of less than \$8,500.00. However, a person who is performing a project for the repair, reconstruction, or improvement of a dam that is exempt from obtaining a permit under this subsection shall submit to the department and the joint capital outlay committee plans and specifications for the project. These plans and specifications shall be prepared by a licensed professional engineer and shall meet acceptable standards in the industry in order for a dam to be repaired, reconstructed, or improved. In reviewing plans and specifications for the project, the joint capital outlay committee may recommend environmental considerations to protect water quality such as underspill devices, minimum flow releases and removal of contaminated sediments that may be resuspended in the water column upon impoundment. Such contaminated sediments shall be disposed of in accordance with state law.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995;—Am. 1995, Act 100, Imd. Eff. June 22, 1995.

Popular name: Act 451

Popular name: NREPA

324.31507 Prohibited conduct; exception.

Sec. 31507. (1) A person shall not construct, enlarge, repair, reconstruct, alter, remove, or abandon any dam except in a manner provided for in this part.

(2) This section does not apply to maintenance performed on a dam that does not affect the structural integrity of the dam.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

324.31508 Preparation of plans and specifications; licensed professional engineer required; exceptions.

Sec. 31508. (1) Except as otherwise provided in subsection (2), a licensed professional engineer shall prepare all plans and specifications, except for minor projects undertaken pursuant to section 31513.

(2) A person who is not a licensed professional engineer may prepare plans and specifications only for repairs or alterations to a dam where the application is made by a nonprofit organization under the following circumstances:

(a) The nonprofit organization has assets of less than \$30,000.00, is exempt from taxation under section 501(c)(3) of the internal revenue code of 1986, 26 U.S.C. 501, and is not composed primarily of the owners of property adjacent to or contiguous to an impoundment.

(b) The proposed repairs or alterations have a projected total cost of less than \$25,000.00.

(c) The impoundment is open to the public and a notice of public access is posted.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

324.31509 Activities requiring permit; application for permit; fees; waiver and disposition of fees.

Sec. 31509. (1) Except as otherwise provided in this part or as authorized by a permit issued by the department pursuant to part 13, a person shall not undertake any of the following activities:

(a) Construction of a new dam.

(b) Enlargement of a dam or an impoundment.

(c) Repair of a dam.

- (d) Alteration of a dam.
- (e) Removal of a dam.
- (f) Abandonment of a dam.
- (g) Reconstruction of a failed dam.

(2) An application for a permit shall include information that the department determines is necessary for the administration of this part. If a project includes activities at multiple locations, 1 application may be filed for the combined activities.

(3) An application for a permit for construction of a new dam, reconstruction of a failed dam, or enlargement of a dam shall be accompanied by the following fees:

- (a) For a dam with a height of 6 feet or more but less than 10 feet, \$500.00.
- (b) For a dam with a height of 10 feet or more but less than 20 feet, \$1,000.00.
- (c) For a dam with a height of 20 feet or more, \$3,000.00.

(4) An application for a permit for the repair, alteration, removal, or abandonment of a dam shall be accompanied by a fee of \$200.00, and an application for a permit for a minor project pursuant to section 31513(1) shall be accompanied by a fee of \$100.00.

(5) The department shall waive the fees under this section for applications from state agencies, department sponsored projects located on public lands, and organizations of the type described in section 31508(2)(a) through (c).

(6) The department shall forward fees collected under this section to the state treasurer for deposit in the land and water management permit fee fund created in section 30113.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995;—Am. 2004, Act 325, Imd. Eff. Sept. 10, 2004.

Popular name: Act 451

Popular name: NREPA

324.31510 Request for notification of pending applications for permits; annual fee; biweekly list of applications; copies; contents.

Sec. 31510. (1) A person who wants to be notified of pending applications for permits issued under this part may make a written request to the department, accompanied by an annual fee of \$25.00. The fee shall be deposited in the state treasury and credited to the general fund.

(2) The department shall prepare a biweekly list of the applications made during the previous biweekly period and shall promptly mail copies of the list for the remainder of the calendar year to the persons who have requested notice and paid the fee under this section.

(3) The biweekly list shall state the name and address of each applicant, the legal description of the lands included in the applicant's project, and a summary statement of the purpose of the project.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

324.31511 Copies of application and statement; submission; public hearing; notice.

Sec. 31511. (1) Upon receipt of an application for a permit under this part, the department shall submit copies of the application accompanied by a statement indicating that the department may act upon the application without a public hearing unless a written request is filed with the department within 20 days after the submission for review. The department shall submit copies of the application to all of the following:

- (a) The local unit of government where the project is to be located.
- (b) The adjacent riparian owners.
- (c) Any person considered appropriate by the department.
- (d) Any person who requests copies.
- (e) A watershed council, organized pursuant to part 311, of the watershed within which the project is located or is to be located.

(2) The department may hold a public hearing upon the written request of any of the following:

- (a) An applicant.
- (b) A riparian owner.
- (c) A person or local unit of government that is entitled to receive a copy of the application pursuant to subsection (1).

(3) A public hearing held pursuant to this section shall be held in compliance with the open meetings act, Act No. 267 of the Public Acts of 1976, being sections 15.261 to 15.275 of the Michigan Compiled Laws. Public notice of the time, date, and place of the hearing shall be given in the manner provided by that act.

Additionally, the department shall mail copies of the public notice to the persons who have requested the biweekly list pursuant to section 31510, the person requesting the hearing, and the persons and local units of government that are entitled to receive a copy of the application pursuant to subsection (1).

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

324.31512 Necessity for immediate action; emergency conditions; application for permit to reconstruct failed dam.

Sec. 31512. (1) When immediate action is necessary to protect the structural integrity of a dam, the department may issue a permit before the expiration of the 20-day period referred to in section 31511(1). This subsection does not prohibit an owner from taking action necessary to mitigate emergency conditions if imminent danger of failure exists.

(2) A person applying for a permit to reconstruct a failed dam shall file a complete application not less than 1 year after the date of the failure. If such an application is filed more than 1 year after the date of the failure, the department shall consider the application to be an application to construct a new dam.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995;—Am. 2004, Act 325, Imd. Eff. Sept. 10, 2004.

Popular name: Act 451

Popular name: NREPA

324.31513 Minor project categories; rules.

Sec. 31513. (1) The department shall promulgate rules to establish minor project categories for alterations and repairs that have minimal effect on the structural integrity of a dam. The department may act upon an application and grant a permit for an activity or project within a minor project category, after an on-site inspection of the dam, without providing public notice.

(2) All other provisions of this part shall be applicable to minor projects, except that a final inspection by the department or certification of the project by a licensed professional engineer shall not be required for a project completed under a permit granted pursuant to subsection (1).

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

324.31514 Effect of proposed activity on public health, safety, welfare, property, or natural resources.

Sec. 31514. The department shall not issue a permit to construct a new dam, reconstruct a failed dam for which a complete application to reconstruct has been submitted more than 1 year after the date of the failure, or enlarge the surface area of an impoundment by more than 10% unless it determines, after a review of the application submitted, that the proposed activity for which a permit is requested will not have a significant adverse effect on public health, safety, welfare, property, or natural resources or the public trust in those natural resources.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

324.31515 Approval of plans and specifications; completion of permitted activity; time; extension; approval of changes; duration and renewal of permit; terms and conditions; mitigating measures; recommendations; performance bond; suspension, revocation, annulment, withdrawal, recall, cancellation, or amendment of permit; hearings.

Sec. 31515. (1) Except as otherwise provided in this section, a permit issued by the department under this part shall require that plans and specifications be approved by the department before construction begins. The department shall approve or reject complete plans and specifications within 60 days after their receipt. The permitted activity shall be completed within a specified time not to exceed 2 years after the date of issuance of the permit. Upon the written application of the permittee, and for good cause shown, the department may extend the time for completing construction. The permittee shall notify the department at least 10 days before beginning construction and shall otherwise notify the department as the department may require.

(2) A change in approved plans and specifications shall not be implemented unless the department gives its prior approval. The department shall approve or reject changes in plans and specifications within 30 days after

the request for the changes.

(3) A permit is effective for the length of time specified in the permit unless it is revoked pursuant to this part. The department may renew a permit.

(4) A permit to alter, repair, or construct a new dam, reconstruct a failed dam, or enlarge the surface area of an impoundment by more than 10% may specify the terms and conditions including, but not limited to, requirements for minimum flows, cold water release, impoundment fluctuations, portage, contingency plans, and conditions under which the work is to be performed. The terms and conditions of a permit shall be effective for the life of the project. The department may consider, in issuing a permit, any mitigating measures in conjunction with the permitted activities and may make recommendations as to fish passage that may be required by part 483.

(5) A permit to construct a new dam or reconstruct a failed dam may require a performance bond to assure completion of the project or to provide for complete or partial restoration of the project site, as determined by the department in rules promulgated by the department.

(6) A permit may be suspended, revoked, annulled, withdrawn, recalled, canceled, or amended after a hearing for a violation of any of its provisions, a violation of this part, a violation of a rule promulgated under this part, or any misrepresentation contained in the application. Hearings shall be conducted by the department in accordance with the provisions for contested cases in the administrative procedures act of 1969.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

324.31516 Spillway capacity; minimum criteria; freeboard; auxiliary spillway; duty of owner.

Sec. 31516. (1) Spillway capacity shall meet the following minimum criteria:

(a) Low hazard potential dams shall be capable of passing the 100-year flood, or the flood of record, whichever is greater.

(b) Significant hazard potential dams shall be capable of passing the 200-year flood, or the flood of record, whichever is greater.

(c) High hazard potential dams, less than 40 feet in height, as measured from the 200-year design flood elevation to the lowest downstream toe elevation, shall be capable of passing the 200-year flood, or the flood of record, whichever is greater.

(d) High hazard potential dams, 40 feet or greater in height, as measured from the 200-year design flood elevation to the lowest downstream toe elevation, shall be capable of passing the half probable maximum flood. The half probable maximum flood criterion may be reduced to not less than the 200-year flood, with proper documentation evidencing a failure of a dam under half probable maximum flood conditions will not cause additional flood damage or loss of life.

(e) Spillway design capacity shall not be less than the flood of record.

(2) Freeboard shall be considered when determining spillway capacity.

(3) If a dam cannot pass the design flood, an auxiliary spillway must be provided. The owner must document, to the satisfaction of the department, that the dam has sufficient spillway capacity, and that proper means are available to operate the spillway or spillways during the design flood.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

324.31517 Duties of owner; inspection; notice of final approval; notice of project not completed in accordance with plans, specifications, or conditions; enforcement action.

Sec. 31517. (1) Except for minor projects authorized pursuant to section 31513, the owner shall do both of the following:

(a) Within 10 days after the completion of a new, reconstructed, enlarged, repaired, or altered dam, notify the department of its completion.

(b) Within 20 days after submitting the notice of completion, file with the department as-built plans and a statement signed by a licensed professional engineer certifying that the project was constructed in conformance with plans and specifications approved by the department.

(2) The department shall inspect the project and shall provide the owner with written notice of final approval if the project is determined to have been completed in accordance with approved plans, specifications, and permit conditions.

(3) If the project is determined not to be completed in accordance with plans and specifications approved by the department and permit conditions, the department shall provide notice to the permittee as to the

specific reasons the department determines the project not to be completed in accordance with those plans, specifications, or conditions. The department may then take enforcement action as provided in this part.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

324.31518 Inspection reports; determination of hazard potential classification; inspection schedule; notice; additional inspection reports; contents of inspection report; visual inspection and report; detailed investigation or evaluation; life or property threatened by breach of dam; cause of action; ordering actions to alleviate danger.

Sec. 31518. (1) An owner shall submit to the department inspection reports prepared by a licensed professional engineer that evaluate the condition of the dam. The inspection report shall be submitted as follows:

- (a) Not less than once every 3 years for high hazard potential dams.
- (b) Not less than once every 4 years for significant hazard potential dams.
- (c) Not less than once every 5 years for low hazard potential dams.

(2) The department shall determine the hazard potential classification of all dams and shall establish an inspection schedule. The inspection schedule shall require annual submission of inspection reports for approximately 1/3 of all high hazard potential dams, 1/4 of all significant hazard potential dams, and 1/5 of all low hazard potential dams. The department shall notify owners in writing when inspection reports are due. The department may order additional inspection reports following an event or change in condition that could threaten a dam.

(3) An inspection report required by this section shall include, at a minimum, all of the following:

- (a) An evaluation of the dam's condition, spillway capacity, operational adequacy, and structural integrity.
- (b) A determination of whether deficiencies exist that could lead to the failure of the dam.
- (c) Recommendations for maintenance, repair, and alterations of a dam as are necessary to eliminate any deficiencies.

(4) Instead of engaging a licensed professional engineer to prepare an inspection report, local units of government or an organization of the type described in section 31508(2)(a) through (c) may request the department to conduct a visual inspection of a dam owned by that local unit of government and prepare a report on the condition of the dam in accordance with subsection (3). The department shall notify a requesting local unit of government as to when the inspection is to occur.

(5) If an inspection report discloses the need for a more detailed investigation or evaluation of certain dam features for the purpose of determining the condition of the dam, the department may order the completion and submission of that detailed investigation or evaluation at the expense of the owner. An investigation or evaluation required under this subsection shall be conducted under the supervision of a licensed professional engineer.

(6) If an owner does not submit an inspection report as required by subsection (1) or conduct additional investigations if required by subsection (5), the department or any person who would have life or property threatened by a breach of the dam may have a report prepared and recover the costs of preparing the report in a civil action commenced in a court of competent jurisdiction. This subsection does not limit the right of any person to bring a cause of action in a court of proper jurisdiction to compel an owner to comply with the requirements of this part.

(7) If, based on the findings and recommendations of the inspection report and an inspection by the department, the department finds that a condition exists which endangers a dam, it shall order the owner to take actions that the department considers necessary to alleviate the danger.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

324.31519 Order to limit dam operations; order to remove dam; hearing.

Sec. 31519. (1) Where significant damage to the public health, safety, welfare, property, and natural resources or the public trust in those natural resources or damage to persons or property occurs or is anticipated to occur due to the operation of a dam, the department may order the owner to limit dam operations. These orders may include, but are not limited to, cold water release, minimum flow releases from dams, impoundment fluctuation restrictions, or requirements for run-of-the-river operation. In issuing these orders, the department shall take into account social, economic, and public trust values.

(2) Where significant damage to persons, property, or natural resources or the public trust in those natural resources occurs as a result of the condition or existence of a dam, the department may order the removal of the dam following a determination by the department that, due to the continued condition or existence of the dam, the dam is likely to continue to cause significant damage. In issuing a removal order, the department shall take into account social and economic values, the natural resources, and the public trust in those natural resources and shall not issue a removal order when those factors exceed adverse impacts on natural resources or present danger to persons or property. The department shall not issue a removal order involving a dam subject to the regulatory authority of the Michigan public service commission or the federal energy regulatory commission unless that commission has concurred in writing with the order.

(3) Prior to finalizing an order under this section, the department shall provide an owner an opportunity for a hearing pursuant to the administrative procedures act of 1969.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

324.31520 Sudden or unprecedented flood; unusual or alarming circumstance or occurrence; emergency drawdowns, repairs, breaching, or other action; notice.

Sec. 31520. (1) The owner or his or her agent shall advise the department and the affected off-site public authorities and safety agencies of any sudden or unprecedented flood or unusual or alarming circumstance or occurrence existing or anticipated that may affect the safety of the dam within 24 hours of the flood, circumstance, or occurrence.

(2) The owner shall notify the department as soon as possible of any necessary emergency drawdowns, repairs, breaching, or other action being taken in response to an emergency condition.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

324.31521 Emergency orders.

Sec. 31521. (1) The department may issue emergency orders as provided in this section. The department may, by written notice, order an owner to immediately repair, draw down, breach, or cease operation of a dam where a dam is in imminent danger of failure and is causing or threatening to cause harm to public health, safety, welfare, property, or the natural resources or the public trust in those natural resources. If an owner fails to comply with an order, or is unavailable or unable to be contacted, then the department may undertake immediate repair, drawdown, breaching, or cessation of operation, as may be necessary to alleviate the danger, and may recover from the owner the costs incurred in a civil action commenced in a court of competent jurisdiction. The department may terminate an emergency order upon a determination in writing that all necessary emergency actions have been complied with by the owner and that an emergency no longer exists.

(2) When ordering emergency actions under subsection (1), the department may specify maximum drawdown level and discharge rates and require sediment surveys, water quality sampling, monitoring, or any other action determined necessary by the department to ensure adequate protection of the public health, safety, welfare, property, or natural resources or the public trust in those natural resources. The department may modify the requirements of an emergency order if, during the conduct of ordered actions, it determines that the modification is necessary to protect the public health, safety, welfare, property, or natural resources or the public trust in those natural resources.

(3) Upon the issuance of an emergency order, the department shall provide the owner with an opportunity for a hearing pursuant to the administrative procedures act of 1969 within 15 days of the date of its issuance. At the hearing, the department shall determine, based on information and fact, if the emergency order shall be continued, modified, or suspended as necessary to protect public health, safety, welfare, property, or natural resources or the public trust in those natural resources.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

324.31522 Structural integrity and operation of dam; investigations and studies.

Sec. 31522. The department may make, or cause to be made, hydrologic or other investigations and studies as may be required to facilitate its decisions regarding the structural integrity and operation of a dam.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

324.31523 Emergency action plans; submissions; review; consistency with other plans; contents of plans.

Sec. 31523. (1) An owner shall prepare, and keep current, emergency action plans for all high and significant hazard potential dams owned by that person.

(2) Emergency action plans shall be submitted to the department.

(3) The applicable county or local emergency management coordinators shall review for consistency emergency action plans with the county or local emergency operations plan prior to submission of those plans to the department.

(4) An emergency action plan shall be consistent with the applicable provisions of the affected county or local emergency operations plans and the Michigan emergency preparedness plan as developed pursuant to the emergency preparedness act, Act No. 390 of the Public Acts of 1976, being sections 30.401 to 30.420 of the Michigan Compiled Laws.

(5) Emergency action plans shall include, but not be limited to, the name, address, and telephone number of the person, and of an alternate person, responsible for operation of the dam; the name and telephone number of local emergency management coordinators; and a listing of occupied facilities, buildings, and residences that may be threatened with flooding due to a failure of the dam.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

324.31524 Violation; order; suspension, modification, or revocation of permit; remedies cumulative; civil action.

Sec. 31524. (1) If the department determines that a person is in violation of this part, a rule promulgated under this part, or a condition set forth in a permit issued under this part, the department may issue an order requiring the person to comply with the conditions or to restore the site affected by the violation as nearly as practicable to its original condition. Restoration may include, but is not limited to, removing fill material deposited or replacing soil, sand, or minerals.

(2) An order shall state the nature of the violation and the required remedial action, and shall specify a time for compliance that the department determines is reasonable, taking into account the seriousness of the violation and the nature of any threat to public health, safety, welfare, property, or natural resources, or the public trust in those natural resources, that may be involved.

(3) If the department determines that a person is in violation of this part, a rule promulgated under this part, an order issued by the department, or a permit, the department, after notice and opportunity for hearing pursuant to the administrative procedures act of 1969, may suspend, modify, or revoke a permit. The remedies under this section and section 31525 are cumulative and do not prevent the department from imposing other penalties available under this part, a rule promulgated under this part, or an order of the department.

(4) If the department determines that a person is in violation of this part, a rule promulgated under this part, an order issued by the department pursuant to this part, or a permit issued pursuant to this part, the department may bring a civil action in the circuit court.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

324.31525 Commencement of civil action; request; place; civil fine; contempt; willful or reckless violation as misdemeanor; penalty; subsequent violations; fine for failure to obtain permit; restoration of site; schedule of administrative monetary penalties for minor violations.

Sec. 31525. (1) The attorney general may commence a civil action for appropriate relief, including injunctive relief, upon request of the department under section 31524.

(2) Any civil action under this section may be brought in the circuit court for the county of Ingham or for the county in which the dam is located.

(3) In addition to any other relief granted under this section, the court may impose a civil fine of not more than \$10,000.00 for each day of violation of this part, a rule promulgated under this part, or a permit issued under this part.

(4) A person found guilty of contempt of court for the violation of an order of the court shall be subject to a civil fine not to exceed \$10,000.00 for each day of violation.

(5) A person who willfully or recklessly violates this part, a rule promulgated under this part, an order issued by the department, or a condition in a permit issued under this part, which violation places or may place a person in imminent danger of death or serious bodily injury or may cause serious property damage or serious damage to natural resources, or a person who has knowledge of or is responsible for such a violation, is guilty of a misdemeanor, punishable by imprisonment for not more than 1 year or a fine of not less than \$2,500.00 or more than \$25,000.00 for each day of violation, or both. A person who violates this section a second or subsequent time is guilty of a felony, punishable by imprisonment for not more than 2 years or a fine of not less than \$10,000.00 for each day of violation, or both.

(6) A person required to obtain a permit for activity regulated under this part who does not obtain that permit shall be fined not less than twice the fee charged for the appropriate permit application.

(7) In addition to the orders of compliance and penalties provided under this part, the court may order a person who violates this part, a rule promulgated under this part, or a permit issued under this part to restore the site affected by the violation as nearly as practicable to its original condition. Restoration may include, but is not limited to, removing fill material deposited or replacing soil, sand, or minerals.

(8) The department may establish, by rule, a schedule of administrative monetary penalties for minor violations of this part, a rule promulgated under this part, a permit issued pursuant to this part, or an order issued by the department pursuant to this part.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

324.31526 Person aggrieved by action or inaction of department; hearing; determination; judicial review.

Sec. 31526. (1) A person aggrieved by any action or inaction of the department under this part or rules promulgated under this part may request a hearing on the matter involved. The hearing shall be conducted by the department in accordance with the provisions for contested cases in the administrative procedures act of 1969.

(2) A determination of action or inaction by the department following the hearing may be subject to judicial review as provided in the administrative procedures act of 1969.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

324.31527 Entering private or public property; time; purpose.

Sec. 31527. The department may enter in or upon any private or public property anytime where the public safety may be in danger and at all reasonable times, after attempting to contact the owner before entering the site and having shown proper identification, for the purpose of inspecting or investigating conditions relating to the construction, operation, or safety of a dam and for the purpose of determining compliance with the terms, conditions, and requirements of permits, orders, or notices of approval issued under this part and rules promulgated under this part.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

324.31528 Rules.

Sec. 31528. The department shall promulgate rules as necessary to implement and enforce this part.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

324.31529 Construction of part.

Sec. 31529. (1) This part does not abrogate requirements of parts 31, 91, 301, 303, 305, 307, and 483 or other applicable law.

(2) This part does not relieve an owner of any legal duty, obligation, or liability incident to the ownership or operation of a dam or impoundment.

(3) This part does not deprive an owner of any legal remedy to which he or she may be entitled under the

laws of this state.

History: Add. 1995, Act 59, Imd. Eff. May 24, 1995.

Popular name: Act 451

Popular name: NREPA

E.22. Minnesota



FEMA

CHAPTER 6115
DEPARTMENT OF NATURAL RESOURCES
PUBLIC WATER RESOURCES

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PERMIT, INSPECTION, AND MONITORING FEES

6115.0010 STATUTORY AUTHORITY.

The commissioner of natural resources is authorized by Minnesota Statutes, sections 103G.301, subdivision 2 to 5, and 103G.315, subdivision 12, to establish fee schedules for permit applications, field inspections, and monitoring, with regard to permits required by Minnesota Statutes, chapter 103G.

Statutory Authority: *MS s 105.44; 103G.301; 103G.315*

History: *10 SR 236*

Posted: *June 11, 2008*

6115.0020 SCOPE.

The fees established in parts 6115.0010 to 6115.0100 shall not be imposed on any state or federal agency.

Statutory Authority: *MS s 105.44*

History: *10 SR 236*

Posted: *June 11, 2008*

6115.0030 DEFINITIONS.

Words used in parts 6115.0010 to 6115.0100 have the meanings normally ascribed to them except:

- A. "Appropriation of water," "waters of the state," and "public waters" have the meanings given by Minnesota Statutes, section 103G.005.
- B. "Field inspection" means an on-site determination of relevant characteristics of the area involved in or affected by the proposed or permitted project.
- C. "Monitoring" means checking on the status or progress of activities authorized by permit, and checking and inspecting special aspects of proposed permit applications, during construction, implementation, or after completion of permitted activities.
- D. "Division" means the Division of Waters, Department of Natural Resources.
- E. "Commissioner" means the commissioner of natural resources or the commissioner's authorized representative.
- F. "Project cost" means the total cost of all materials, services, equipment purchase or rental, and labor expended for the portion of the project proposed in the permit application which are directly governed by protected waters permit rules, parts 6115.0150 to 6115.0280.
- G. "Protected waters" means those waters of the state identified as public waters or wetlands under Minnesota Statutes, sections 103G.005, subdivisions 15 and 15a, and 103G.201.
- H. "Ordinary high water mark" means the boundary of protected waters as defined in Minnesota Statutes, section 103G.005, subdivision 14.

I. "Shoreline" means:

(1) for water bodies other than watercourses, the lateral measurement along the contour of the ordinary high water mark; and

(2) for watercourses, the top of the bank of the channel (coincides with ordinary high water mark as defined in Minnesota Statutes, section 103G.005, subdivision 14).

J. "State agency" has the meaning given in Minnesota Statutes, section 16B.01, subdivision 2.

Statutory Authority: *MS s 105.44; 103G.301; 103G.315*

History: *10 SR 236*

Posted: *June 11, 2008*

6115.0040 [Repealed, 10 SR 236]

Posted: *June 11, 2008*

6115.0050 [Repealed, 10 SR 236]

Posted: *June 11, 2008*

6115.0060 PERMIT FEES APPLICATIONS.

Subpart 1. **Fee.** A permit application fee of \$75 shall accompany permit applications submitted under Minnesota Statutes, section 103G.271, appropriation and use of water, Minnesota Statutes, section 103G.531, subdivision 2, relating to dams, and Minnesota Statutes, section 105.391, relating to water bank.

Subp. 2. **Protected waters; fee.** The permit application fee for works affecting protected waters, authorized under Minnesota Statutes, sections 103G.245 and 103G.297, shall be based on estimated project cost, the amount of material deposited in or removed from the protected waters, and the amount of shoreline affected by the project. The commissioner shall make the final determination of project costs used to calculate the permit application fee. The permit application fee shall be the greater of the fees calculated from the following parameter schedules, but not less than \$75 nor more than \$500:

A. Project cost parameter. If the project cost is greater than \$7,500, the fee shall be one percent of the project cost. If a dispute arises between the commissioner and a permit applicant over project cost, the commissioner may require the permit applicant to submit a project cost estimate prepared by a registered professional engineer, contractor, planning consultant, or other qualified professional entity.

B. Shoreline affected parameter. If the project affects more than 100 feet of shoreline, the fee shall be 75 cents per foot of shoreline affected. For channel excavation projects, the shoreline affected is the difference in length in feet between the existing channel and the proposed channel.

C. Fill-excavation parameter. If the project requires more than 100 cubic yards of fill or excavation, the fee shall be 75 cents per cubic yard of material filled or excavated. For channel excavation projects, the volume in cubic yards is only that material filled or excavated in existing protected waters.

D. The permit application fee for protection of shoreline from erosion by placement of riprap and to recover shoreland lost by erosion or other natural forces, shall be limited to \$75.

Subp. 3. **Failure to remit.** If the permit application fee does not accompany the application, the applicant will be so notified. If no fee is received within 30 days from mailing of the written notice, the commissioner shall consider the application withdrawn and no further action shall be taken on it unless the applicant submits a new application accompanied by the minimum fee.

Subp. 4. **Multiple applications.** If a project requires several permit applications, the permit application fee must accompany each application. Projects that involve a combination of work that results in both the alteration of protected waters and the use of waters of the state, shall be required to submit only one permit application and one set of fees. The type of permit application to be used and the fees to be charged shall be determined by the ultimate purpose of the project.

Subp. 5. **Nonrefundable.** The permit application fee is not returnable, whether the application is permitted, modified, or denied, unless the commissioner determines the activity does not require a permit.

Subp. 6. **Applications after commencement.** The permit application fee for permit applications filed after the work applied for has been partially or wholly completed, except for emergency work provided for in existing permit rules and policies, shall be double the amount that would have been charged if a timely application had been filed. In the case of a belated permit application, the permit application fee shall accompany the application or the commissioner shall proceed to issue a restoration order under Minnesota Statutes, section 103G.315, subdivision 7.

Subp. 7. **Fees following a hearing.** If a hearing is demanded, and if the outcome of the hearing is a decision to issue a permit, payment of all required fees must precede issuance. The fee charged will be based on the schedules contained in this part regardless of whether a permit application has been filed.

Subp. 8. **Form of payment.** Payment of all fees covered by parts 6115.0010 to 6115.0030, 6115.0060, 6115.0080 to 6115.0100, and 6115.0130 shall be made by check or money order payable to the Minnesota Department of Natural Resources. Cash cannot be accepted.

Statutory Authority: *MS s 105.44; 103G.301; 103G.315*

History: *10 SR 236; 13 SR 2825*

Posted: *June 11, 2008*

6115.0065 AMENDMENT AND TRANSFER FEE.

Each request by a permittee to amend or transfer an existing permit shall be accompanied by a \$75 fee, unless exempted under part 6115.0120. Any amendment initiated by the department is exempt from fees. Projects that involve a combination of transfer and amendment requests shall only be required to pay the \$75 fee.

Statutory Authority: *MS s 105.44*

History: *10 SR 236; 13 SR 2825*

Posted: *June 11, 2008*

6115.0070 [Repealed, 10 SR 236]

Posted: *June 11, 2008*

6115.0080 FIELD INSPECTION FEES.

Subpart 1. [Repealed, 13 SR 2825]

Subp. 2. **Computation.** If a field inspection is conducted, field inspection fees shall be charged only for: (1) projects requiring an environmental assessment worksheet (EAW) or environmental impact statement (EIS) pursuant to Minnesota Statutes, chapter 116D and the environmental review program rules, parts 4410.0200 to 4410.6500. Projects that do not require a mandatory environmental assessment worksheet (EAW) or environmental impact statement (EIS) under parts 4410.4300 and 4410.4400, at the time the permit application is made, shall not be charged field inspection fees; (2) projects undertaken without a permit or application as required by Minnesota Statutes, section 84.083, and chapters 103A, 103B, and 103E to 103G; or (3) projects undertaken in excess of limitations established in an issued permit.

The fee charged will be the actual cost of the field inspection, but shall not be less than \$100.

Examples of field inspection costs are:

- A. state salaries, including fringe benefits and overhead, (travel and inspection time of state employees multiplied by actual hourly rates);
- B. transportation to and from inspection site, laboratories and other documented travel sites, based on current Department of Administration rates or rates specified in applicable bargaining unit agreements;
- C. expense of purchase, rental, or repair of special equipment and supplies;
- D. living expenses away from home, based on current Department of Administration rates or rates specified in applicable bargaining unit agreements;
- E. inspection and consultant services contracted for by the state; and
- F. laboratory expenses and analysis of data.

Subp. 2a. **Dams and water level controls.** Field inspection fees shall not be charged for any dam subject to parts 6115.0300 to 6115.0520. Such dams are subject to the inspection fee requirements of part 6115.0520. Field inspection fees for all other water level control structures shall be charged pursuant to parts 6115.0010 to 6115.0130.

Subp. 3. [Repealed by amendment, 10 SR 236]

Statutory Authority: *MS s 105.44; 103G.301; 103G.315*

History: *10 SR 236; 13 SR 2825*

Posted: *June 11, 2008*

6115.0090 FEES FOR MONITORING ACTIVITIES.

If the project requires an environmental assessment worksheet (EAW) or environmental impact statement (EIS) pursuant to Minnesota Statutes, chapter 116D, and parts 4410.0200 to 4410.6500, the commissioner shall charge an additional fee for monitoring subject to the following:

A. Where the commissioner determines that a permitted activity requires monitoring of water or related land resources, the permit shall specify the procedures and scope of such monitoring. Actual costs of the monitoring shall be paid by the permittee in accordance with procedures set forth in the permit.

B. When the commissioner determines after the permit is issued, that there is a need for monitoring, the commissioner shall notify the permittee in writing of the nature of and reasons for the monitoring, and after opportunity for hearing, shall modify the permit accordingly. The actual costs of the monitoring shall be paid by the permittee.

Actual costs incurred and charged by the state are determined in the same manner as prescribed for field inspections.

The commissioner may allow the permittee to provide the monitoring service or employ a consultant for that purpose, subject to the right of the commissioner to charge for state costs related to private monitoring, including the costs of periodically monitoring the monitor.

Fees for monitoring activities shall not be charged for any dam subject to parts 6115.0300 to 6115.0520.

Statutory Authority: *MS s 105.44*

History: *10 SR 236*

Posted: *June 11, 2008*

6115.0100 [Repealed, 10 SR 236]

Posted: *June 11, 2008*

6115.0110 ANNUAL WATER APPROPRIATION PROCESSING FEE.

Subpart 1. **In general.** An annual water appropriation processing fee shall be submitted for each water appropriation permit in force at any time during the year. The fees are required whether or not the permittee appropriated or used any water as authorized by permit during the year.

Subp. 2. **Fee schedule.** The fee shall be based on the following schedule:

A. for irrigation permits, \$15 for the first permitted 160 acres or portion thereof, and \$25 for each additional permitted 160 acres or portion thereof;

B. for all other permits, \$5 for each permitted 10,000,000 gallons or portion thereof;

C. the annual water appropriation processing fee shall not exceed a total fee of \$500 per permit.

Subp. 3. **Billing and payment.** A notice of the fees owed will be mailed to the permittee, with the reporting forms, by the commissioner.

The fee, with accompanying report, for the calendar year's appropriation or use of water, shall be sent to the commissioner no later than February 15 of the following year.

Failure to pay the fee shall be sufficient cause for terminating a permit 30 days following written notice by the commissioner.

The effective date of this part is August 1, 1985.

Statutory Authority: *MS s 105.44*

History: *10 SR 236*

Posted: *June 11, 2008*

6115.0120 WATER APPROPRIATION PROCESSING FEE EXEMPTIONS.

The following water appropriation permit actions are exempt from amendment or transfer fees:

- A. a change in mailing address;
- B. a change of authorized agent when land ownership has not changed;
- C. an assignment of a permit within the immediate family;
- D. a change in pump location on surface water sources for the same operation;
- E. an addition of a new well that replaces an old well for the same permitted operation and is completed at a similar depth in the same aquifer;
- F. a decrease in the permitted pumping rate, amount of water authorized, or irrigated acreage;
- G. an increase in the permitted pumping rate within ten percent;
- H. an increase in the permitted appropriation within ten percent of the annual authorization for nonirrigation permits; or
- I. an increase of less than 30 acres in the number of permitted irrigated acres.

Any amendments or transfers that exceed the exemptions in items A to I require a processing fee under part 6115.0065.

Statutory Authority: *MS s 105.44*

History: *13 SR 2825*

Posted: *June 11, 2008*

FEEES FOR UNDERGROUND GAS OR LIQUID STORAGE**6115.0130 FEE SCHEDULE FOR UNDERGROUND STORAGE OF GAS OR LIQUID IN NATURAL FORMATIONS.**

Subpart 1. **In general.** This schedule is established pursuant to Minnesota Statutes, section 103I.681, subdivision 11. It provides for payment of permit application fees and additional fees for processing and analyzing the application, and issuing the permit. It also includes fees for the inspection and monitoring of activities authorized by the permit.

Subp. 2. **Permit application fee.** A permit application fee of \$30, check or money order, payable to the commissioner of management and budget, shall accompany each permit application for underground storage of gas or liquid.

If the fee does not accompany the application, the applicant will be so notified, and there will be no further action taken on the application until the fee is submitted.

Subp. 3. **Additional fees.** The applicant or permittee shall pay the actual costs of field inspection and monitoring as follows.

A. When a field inspection is conducted, the costs charged will be the sum of: salaries (inspection time of state employees multiplied by actual hourly rates); transportation to and from inspection site, based on current state Department of Administration rates; fair rental for any special equipment and supplies; and inspection and consultant services contracted for by the state.

B. When the commissioner determines that a permitted activity requires monitoring of water or related land resources, the permit shall specify the procedures and scope of such monitoring. Actual costs of the monitoring, whether conducted by state personnel or by consultants hired by the state, shall be paid by the permittee in accordance with procedures in the permit.

When the commissioner determines after the permit is issued that there is a need for monitoring, the commissioner shall notify the permittee in writing of the nature of and reasons for the monitoring, and after opportunity for hearing, shall modify the permit accordingly. The actual costs of monitoring shall be paid by the permittee.

The commissioner may allow the permittee to provide monitoring services, or employ a consultant for that purpose, subject to the right of the commissioner to charge for state costs related to private monitoring, including the costs of periodically monitoring the monitor.

Subp. 4. **Refund of fees.** The permit application fee for a permit application shall not be refunded for any reason, even if the application is denied or withdrawn.

Subp. 5. **Billing and payment of fees.** The commissioner shall submit an itemized bill to the applicant or permittee for all additional fees. Fees are payable within 30 days of receipt; failure to pay

is grounds for suspending the permit or for taking other legal actions as required. In the case of an applicant, a permit shall not be issued until all fees owed have been paid.

Statutory Authority: *MS s 105.44; 103G.301; 103G.315*

History: *10 SR 236; L 2003 c 112 art 2 s 50; L 2009 c 101 art 2 s 109*

Posted: *August 7, 2009*

**STANDARDS AND CRITERIA FOR GRANTING PERMITS TO CHANGE THE
COURSE, CURRENT, OR CROSS-SECTION OF PUBLIC WATERS**

6115.0150 PURPOSE AND STATUTORY AUTHORITY.

The purpose of parts 6115.0150 to 6115.0280 is to provide for the orderly and consistent review of permit applications in order to conserve and utilize the water resources of the state in the best interest of its people. In deciding whether to issue permits, the department is guided by the policies and requirements declared in Minnesota Statutes, sections 103A.201, 103A.208, 103F.101, 103F.105, 103F.205, 103F.351, 103G.297, 103G.305, and 116D.04.

The proposed development must also be consistent with the goals and objectives of applicable federal, state, and local environmental quality programs and policies, including but not limited to shoreland management, floodplain management, water surface use management, boat and water safety, wild and scenic rivers management, water quality management, recreational or wilderness management, critical areas management, scientific and natural areas management, and protected species management.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*

Posted: *June 11, 2008*

6115.0160 SCOPE.

To achieve the purpose declared in part 6115.0150, parts 6115.0160 to 6115.0280 set forth minimum standards and criteria for the review, issuance, and denial of permits for proposed projects affecting public waters. Permits are required for any activity affecting the course, current, or cross-section of public waters unless specifically exempted within parts 6115.0160 to 6115.0280.

These standards and criteria apply to the public waterbasins, public watercourses, and public water wetlands identified on public water inventory maps authorized by Minnesota Statutes, section 103G.201. The designation of waters of the state as public waters does not grant the public additional rights or grant right of access to the waters, diminish the right of ownership or usage of the beds underlying the designated public waters, affect state law forbidding trespass on private lands, or require the commissioner to acquire access to the designated public waters under Minnesota Statutes, section 97A.141.

These standards and criteria apply to any and all work that will cause or result in the alteration of the course, current, or cross-section of public waters except for the following:

- A. utility crossings of public waters that are regulated under Minnesota Statutes, section 84.415, and rules adopted thereunder;

B. planting, destruction, and control of aquatic vegetation that is regulated under Minnesota Statutes, section 103G.615, and rules adopted thereunder;

C. water aeration systems that are regulated under Minnesota Statutes, section 103G.611, and rules adopted thereunder;

D. watercraft, buoys, or other structures that are regulated under Minnesota Statutes, section 86B.111, 86B.211, or 86B.401, and rules adopted thereunder; or

E. water appropriations that are regulated under Minnesota Statutes, section 103G.271, and rules adopted thereunder.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; L 1986 c 386 art 4 s 11; 25 SR 143; 27 SR 529*

Posted: *June 11, 2008*

6115.0170 DEFINITIONS.

Subpart 1. **Certain terms.** For the purposes of parts 6115.0150 to 6115.0280, certain terms or words used are interpreted as follows: the word "shall" is mandatory, not permissive. All distances unless otherwise specified are measured horizontally.

Subp. 2. **Alteration.** "Alteration" means any activity that will change or diminish the course, current, or cross-section of public waters.

Subp. 3. **Beds of public waters.** "Beds of public waters" means all portions of public waters located below the ordinary high water level.

Subp. 3a. **Boat storage structure.** "Boat storage structure" means a structure that is supported on the bed of a public water and has walls, a roof, and either an open well for boats or a floor from wall to wall.

Subp. 3b. **Boathouse.** "Boathouse" means a floating structure that is moored by spuds, cables, ropes, anchors, or chains; may be intended for habitation; and has walls, a roof, and either an open well for boats or a floor from wall to wall. Boathouse does not include a houseboat or boat storage structure.

Subp. 4. **Breakwater.** "Breakwater" means an offshore structure intended to protect a shore area, harbor, or marina from wave and current action, erosion, or sedimentation.

Subp. 5. **Commissioner.** "Commissioner" means the commissioner of natural resources.

Subp. 6. **Department.** "Department" means the Department of Natural Resources.

Subp. 7. **Dock.** "Dock" means a narrow platform or structure extending waterward from the shoreline intended for ingress and egress for moored watercraft or seaplanes or to provide access to deeper water for swimming, fishing, or other water-oriented recreational activities.

Subp. 8. **Drainage.** "Drainage" means any method for removing or diverting waters from public waterbasins or public water wetlands. The methods include, but are not limited to, excavation of an open ditch, installation of subsurface drainage tile, filling, diking, or pumping.

Subp. 9. **Drawdown.** "Drawdown" means a temporary lowering of water levels, for a maximum duration of two years.

Subp. 9a. **Ecology of the waters.** "Ecology of the waters" means the natural aquatic environment, including organisms, physical characteristics, and interactions between and among the organisms and their surroundings.

Subp. 9b. **Energy exchanger.** "Energy exchanger" means a structure designed for placement on the bed or excavated into the bed of public waters for the purpose of exchanging energy for heating or cooling and includes accompanying hoses or lines connecting the energy exchange components.

Subp. 10. **Excavation.** "Excavation" means the displacement or removal of the sediment or other materials from the beds of public waters by means of hydraulic suction or mechanical operations.

Subp. 11. **Fill.** "Fill" means any material placed or intended to be placed on the bed or bank of any public water.

Subp. 12. **Filter.** "Filter" means a transitional layer of gravel, small stone, or fabric between the fine material of an embankment and riprap shore protection materials.

Subp. 13. **Floating structure.** "Floating structure" means any structure, except for boathouses, watercraft, and seaplanes, that is supported entirely by its own buoyancy and can be removed from public waters before winter freeze-up by skidding intact or by disassembly with hand tools.

Subp. 14. **Floodplain.** "Floodplain" means the areas adjoining a watercourse which has been or hereafter may be covered by the regional flood.

Subp. 15. **Floodway.** "Floodway" means the channel of the watercourse and those portions of the adjoining floodplains which are reasonably required to carry and discharge the regional flood.

Subp. 16. **Harbor.** "Harbor" means either an inland or offshore area protected from waves which is intended for the mooring of watercraft.

Subp. 16a. **Houseboat.** "Houseboat" means a motorboat that has either a pontoon or a flat-bottomed hull configuration and a permanent enclosed superstructure that houses, at a minimum, built-in sleeping, cooking, and toilet facilities.

Subp. 16b. **Ice ridge.** "Ice ridge" means a linear mound of lakebed materials pushed up onto the lakeshore by the action of ice.

Subp. 17. **Inland boat slip.** "Inland boat slip" means an inland excavation generally having a uniform width which serves as a protective area for launching and mooring of a single watercraft.

Subp. 18. **Inland excavation.** "Inland excavation" means any excavation intended to extend the cross-section of public waters landward of the natural or preexisting shoreline.

Subp. 18a. **Local government unit.** "Local government unit" has the meaning given in part 8420.0111, subpart 38.

Subp. 18b. **Local origin.** "Local origin" means a source for live plant materials and their propagules that is limited to areas of the same region where the plant materials are proposed to be planted, not to exceed 200 miles from where the plant materials are proposed to be planted.

Subp. 19. **Low-water ford type crossing.** "Low-water ford type crossing" means a stream crossing which conforms to the natural cross-section of the stream and utilizes the placement of a suitable substrate to allow vehicular passage without confining the stream flow within culverts or other hydraulic enclosures.

Subp. 20. **Marina.** "Marina" means either an inland or offshore commercial mooring facility for the concentrated mooring of seven or more watercraft or seaplanes wherein commercial ancillary services common to marinas are provided.

Subp. 21. **Maximum.** "Maximum," with respect to storage capacity, refers to the most severe design condition, including surcharge (floodwater storage).

Subp. 22. **Mining activity.** "Mining activity" means the construction, reconstruction, repair, relocation, expansion, or removal of any facility for the extraction, stockpiling, storage, disposal, or reclamation of metallic or nonmetallic minerals. Facilities include all mine pits, quarries, stockpiles, tailings basins, and any structures which drain or divert public waters to allow mining. Ancillary facilities such as access roads, bridges, culverts, and water level control structures are not mining activities.

Subp. 23. **Mooring.** "Mooring" means any containment of free-floating watercraft that provides a fixed fastening for the craft.

Subp. 23a. **Mooring facility.** "Mooring facility" means a concentrated area intended solely for the mooring or containment of seven or more watercraft or seaplanes by docks, mooring buoys, or other means.

Subp. 23b. **Native plants.** "Native plants" means indigenous plant species growing in an ecological classification system province or a major watershed in Minnesota prior to European settlement.

Subp. 24. **Offshore.** "Offshore" means the area waterward of the ordinary high water level of a public water.

Subp. 25. **Ordinary high water level.** "Ordinary high water level" means the boundary of public waters as defined in Minnesota Statutes, section 103G.005, subdivision 14.

Subp. 26. [Repealed, 27 SR 529]

Subp. 26a. **Permit.** "Permit" means a public waters work permit required under Minnesota Statutes, section 103G.245.

Subp. 27. **Port.** "Port" means a water transportation complex established and operated under the jurisdiction of a port authority pursuant to Minnesota Statutes, chapter 458.

Subp. 28. **Port facility.** "Port facility" means any facility useful in the maintenance and operation of a port. Facilities include, but are not limited to, transportation facilities, terminal and storage facilities, floating and handling equipment, power stations, and other facilities necessary for the maintenance and operation of a port.

Subp. 29. **Principal spillway.** "Principal spillway" means a spillway designed to convey water from an impoundment at release rates established for the structure.

Subp. 30. **Professional engineer.** "Professional engineer" means an engineer registered to practice in Minnesota.

Subp. 30a. **Project.** "Project" means a specific plan, contiguous activity, proposal, or design necessary to accomplish a goal. As used in parts 6115.0150 to 6115.0280, a project may not be split into components or phases for the sole purpose of gaining an exemption from permit requirements.

Subp. 31. **Public water or public waters.** "Public water" or "public waters" means those waters of the state identified under Minnesota Statutes, section 103G.005, subdivision 15 or 15a, or 103G.201.

Subp. 31a. **Public water wetlands.** "Public water wetlands" means those public waters of the state identified as public water wetlands under Minnesota Statutes, section 103G.005, subdivision 15a, or 103G.201, as shown on the public water inventory maps.

Subp. 31b. **Public waterbasins.** "Public waterbasins" means those public waters of the state identified as public waterbasins under Minnesota Statutes, section 103G.005, subdivision 15, clauses (1) to (8), or 103G.201, as shown on the public water inventory maps. Public waterbasins includes public water wetlands reclassified as public waters according to the procedures in Minnesota Statutes, section 103G.201.

Subp. 31c. **Public watercourse.** "Public watercourse" means those public waters of the state identified as natural and altered natural watercourses under Minnesota Statutes, section 103G.005, subdivision 15, clauses (9) and (10), or 103G.201, as shown on the public water inventory maps.

Subp. 31d. **Public waters inventory or protected waters inventory.** "Public waters inventory" or "protected waters inventory" means the map prepared by the commissioner on file with the auditor of a county under Minnesota Statutes, section 103G.201.

Subp. 31e. **Public waters work permit.** "Public waters work permit" means a permit issued by the commissioner under Minnesota Statutes, section 103G.245.

Subp. 32. **Reconstruction.** "Reconstruction" means the rebuilding or renovation of an existing structure, where the cost of such work will exceed 50 percent of the replacement cost.

Subp. 33. **Regional flood.** "Regional flood" means the flood which is representative of large floods known to have occurred generally in Minnesota and reasonably characteristic of what can be expected to occur on an average frequency in the magnitude of the 100-year recurrence interval.

Subp. 34. **Retaining walls.** "Retaining walls" means vertical or nearly vertical structures constructed of mortar-rubble masonry, handlaid rock or stone, vertical timber pilings, horizontal timber planks with piling supports, sheet pilings, poured concrete, concrete blocks, or other durable materials and constructed approximately parallel to the shoreline.

Subp. 35. **Riprap shore protection.** "Riprap shore protection" means coarse stones, boulders, cobbles, artificially broken rock or concrete, or brick materials laid loosely or within gabion baskets against the slope of the existing bank of a public water.

Subp. 36. [Repealed, 27 SR 529]

Subp. 36a. **Shoreline zone.** "Shoreline zone" means an area immediately waterward of the ordinary high water level that may include the littoral area of a water body.

Subp. 37. **Structure.** "Structure" means any building, footing, foundation, slab, roof, boathouse, deck, wall, dock, bridge, culvert, or any other object extending over or under, anchored to, or attached to the bed or bank of a public water.

Subp. 38. **Structural height.** "Structural height" means the vertical distance from the natural bed of the stream or watercourse measured at the downstream toe of the control structure or from the lowest elevation of the outside limit of the control structure, if it is not across a stream channel or watercourse, to the maximum storage elevation.

Subp. 39. **Swellhead.** "Swellhead" means the difference between the headwater elevation necessary to pass the regional flood through the proposed structure and the tail water elevation below the structure.

Subp. 40. **Temporary structure.** "Temporary structure" means any dock, floating structure, watercraft lift, watercraft canopy, or other structure that can be removed from public waters by skidding intact or by disassembly with hand tools.

Subp. 41. **Watercourse.** "Watercourse" means any channel having definable beds and banks capable of conducting generally confined runoff from adjacent lands. During floods water may leave the confining beds and banks but under low and normal flows water is confined within the channel. A watercourse may be perennial or intermittent.

Subp. 42. **Water level control structure.** "Water level control structure" means any structure which impounds or regulates the water surface elevation or flow of public waters, including dams regulated under the provisions of parts 6115.0300 to 6115.0520.

Subp. 42a. **Watercraft canopy.** "Watercraft canopy" means a structure or device with a fabric covered roof and without walls or a floor that is placed on the bed of a public water, is designed to shelter watercraft, and is designed and constructed so that all components may be removed from the lake or stream bed on a seasonal basis by skidding intact or by disassembly with hand tools.

Subp. 42b. **Watercraft lift.** "Watercraft lift" means a structure or device without walls that is placed on the bed of a public water, is designed to lift watercraft above the level of the public water when not in use, and is designed and constructed so that all components may be removed from the lake or stream bed on a seasonal basis by skidding intact or by disassembly with hand tools. A watercraft lift may be designed to include a fabric covered roof.

Subp. 43. **Wharf.** "Wharf" means a permanent structure constructed into navigable waters as a part of a port facility for berthing or mooring commercial watercraft, or for transferring cargo to and from watercraft in an industrial or commercial enterprise, or for loading or unloading passengers from commercial watercraft, or for the operation of a port facility.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529; 34 SR 145*

Posted: *August 27, 2009*

6115.0180 [Repealed by amendment, 8 SR 533]

Posted: *June 11, 2008*

6115.0190 FILLING INTO PUBLIC WATERS.

Subpart 1. **Goals.** It is the goal of the department to limit the placement of any fill material into public waters in order to:

- A. minimize encroachment, change, or damage to the environment;
- B. regulate the quantity and quality of fill and the purposes for which filling may be allowed based upon the capabilities of the waters to assimilate the material; and
- C. maintain consistency with floodplain, shoreland, and wild and scenic rivers management standards and ordinances.

Subp. 2. **Scope.** Filling as used in this part involves placement of unconfined or loosely confined materials in public waters.

Subp. 3. **Prohibited placement.** Placement is prohibited in the following cases:

- A. to achieve vegetation control;
- B. to create upland areas, except where expressly provided herein;
- C. to stabilize beds of public waters which cannot support fill materials because of excessive depths of muck, steep bank, bed slope, or other conditions;
- D. to stabilize or impound the site of active springs;
- E. to dispose of rock, sand, gravel, or any other solid material resulting from activities carried out above the ordinary high water level;
- F. to construct a roadway or pathway, or create or improve land accesses from peripheral shorelands to islands, or to facilitate land transportation across the waters; however, when a project is proposed by a federal, state, or local government agency and this provision would prevent or restrict the project, or create a major conflict with other public purposes or interests, the commissioner may waive this provision if:
 - (1) there is no other feasible and practical alternative to the project that would have less environmental impact; and
 - (2) the public need for the project rules out the no-build alternative; or
- G. filling posted fish spawning areas.

Subp. 4. **No permit required.** No permit is required for the following activities unless prohibited under subpart 3:

- A. to install a beach sand blanket if:
 - (1) the sand or gravel layer does not exceed six inches in thickness, 50 feet in width along the shoreline, or one-half the width of the lot, whichever is less, and does not extend more than ten feet waterward of the ordinary high water level;
 - (2) the beach sand blanket does not cover emergent vegetation, unless authorized by an aquatic plant management permit; and
 - (3) local watershed district and local zoning officials are given at least seven days notice by the landowner;
- B. for one additional installation of a sand or gravel layer subsequent to an initial installation at the same location and not exceeding the same amounts and dimensions allowed under item A; or
- C. to place fill in a public watercourse having a total drainage area, at its mouth, of five square miles or less, if the watercourse is not an officially designated trout stream and the placement of fill does not result in:
 - (1) any diversions of water from the drainage area;
 - (2) any impoundment of waters by damming the watercourse; or
 - (3) any actions that would result in erosion and cause sedimentation of downstream waters as determined by the county or local soil and water conservation district.

Subp. 5. **Permits required.** Permits are required for the placement of fill in public waters, except as provided under subparts 3 and 4, and a project must meet all of the following requirements:

- A. the project does not exceed more than a minimum encroachment, change, or damage to the environment, particularly the ecology of the waters;
- B. the fill consists of clean inorganic material that is free of pollutants and nutrients;
- C. the existence of a stable, supporting foundation is established by appropriate means, including soil boring data where deemed necessary by the commissioner;
- D. where erosion protection is deemed necessary by the commissioner, the site conditions and fill material are capable of being stabilized by an approved erosion control method such as riprap, retaining wall, or other method which is consistent with existing land uses on the affected public water;
- E. the proposed project represents the minimal impact solution to a specific need with respect to all other reasonable alternatives;
- F. the size, shape, depths, shoreline, and bottom character and topography, and susceptibility of the beds of public waters to actions of wind, waves, and currents are such that the fill will be stable;
- G. adverse effects on the physical or biological character of the waters are subject to feasible and practical measures to mitigate the effects;
- H. the proposed filling is consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved; and
- I. the proposed filling is consistent with water and related land management plans and programs of local and regional governments, provided such plans and programs are consistent with state plans and programs.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*

Posted: *June 11, 2008*

6115.0191 SPECIFIC STANDARDS; FILLING.

Subpart 1. **In general.** In addition to compliance with the general standards in part 6115.0190, subparts 2 to 5, specific requirements for certain activities shall be met as follows.

Subp. 2. [Repealed, 27 SR 529]

Subp. 3. **Navigational access.** Filling to gain navigational access to waters shall be permitted only where access to navigable depths cannot be reasonably attained by utilizing a dock, the excavation of an offshore access channel, or other alternatives which would result in less environmental impact.

Fill for navigational access shall not extend beyond the edge of open water, shall not exceed side slopes greater than 2:1 horizontal:vertical, shall not exceed a maximum width of 15 feet at the base of the fill, and shall not extend to a water depth greater than four feet.

Subp. 4. **Shoreline lost by erosion.** Permits for filling to recover shoreland lost by erosion or other natural forces shall be granted if:

- A. the loss of shoreline is a threat to health and safety through the impending loss or damage to existing shoreline developments; or

B. the loss of shoreline has occurred as a result of changes in water level or flow conditions caused by artificial manipulation of flows or levels of the waters involved within a period of not more than five years prior to the date when an application for filling is submitted.

The requirements of items A and B do not preclude the issuance of permits to recover up to 400 square feet of eroded area or to place riprap materials or use other structural means for protection of the shoreline to prevent continuous erosion.

Subp. 5. **Port development or improvement.** Filling necessary for port development or improvement is allowed only on those waters that are under the jurisdiction of established port authorities subject to the following:

A. no filling is allowed to extend beyond the limits of federally established harbor lines, or when no harbor line has been established, beyond the maximum distance waterward which could be attained without obstructing navigational use of the waters;

B. the proposed development is part of a comprehensive port development plan that has been approved by the commissioner; and

C. adverse effects of the proposed filling on the physical and biological character of the area are subject to mitigation measures approved by the commissioner.

Subp. 6. **Fish and wildlife habitat.** Filling to restore or improve fish and wildlife habitat, except for filling in designated trout streams, shall be permitted provided plans are submitted showing the nature and degree of habitat to be benefited, and the project will not create other adverse effects such as flooding, erosion, sedimentation, or navigational obstructions.

Subp. 7. **Trout streams.** Filling in trout streams officially designated by the commissioner is allowed only if:

A. the amount, method of placement, and location of the fill will not result in increased water temperatures, excessive sedimentation in the stream, or destruction of fish habitat; and

B. there is no other feasible or practical alternative other than filling.

Subp. 8. **Other purposes.** Filling for other purposes not specifically listed shall be subject to the general standards in part 6115.0190, subparts 2 to 5 and submission of information to show that:

A. the intended purpose of the fill is reasonable with respect to all other alternatives and there are no feasible and practical means to attain the intended purpose without filling; and

B. the proposal will adequately protect public safety and promote the public welfare.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 27 SR 529*

Posted: *June 11, 2008*

6115.0192 RELATIONSHIP TO STANDARDS AND CRITERIA FOR OTHER ACTIVITIES INVOLVING CHANGES IN COURSE, CURRENT, OR CROSS-SECTION.

Unless otherwise specified in other parts, parts 6115.0190 and 6115.0191 shall apply to filling proposed as part of any other activity or activities including but not limited to: Excavations parts 6115.0200 to 6115.0202, Structures parts 6115.0210 to 6115.0212, Water level controls parts 6115.0220 to 6115.0222, Bridges and culverts parts 6115.0230 to 6115.0232, Drainage of public waters parts 6115.0270 to 6115.0272, and Alterations of public waters for mining part 6115.0280.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*

Posted: *June 11, 2008*

6115.0200 EXCAVATION OF PUBLIC WATERS.

Subpart 1. **Goals.** It is the goal of the department to limit the excavation of materials from the beds of public waters in order to:

- A. preserve the natural character of public waters and their shorelands, in order to minimize encroachment, change, or damage to the environment, particularly the ecosystem of the waters;
- B. regulate the nature, degree, and purpose of excavations so that excavations will be compatible with the capability of the waters to assimilate the excavation; and
- C. control the deposition of materials excavated from public waters and protect and preserve the waters and adjacent lands from sedimentation and other adverse physical and biological effects.

Subp. 2. **Scope.** Excavation as used in this part includes any activity that results in the displacement or removal of bottom materials or the widening, deepening, straightening, realigning, or extending of public waters. It may involve proposals for excavations landward or waterward from the ordinary high water level.

Subp. 3. **Prohibited excavation.** Excavation is prohibited in the following cases:

- A. where it is intended to gain access to navigable water depths when such access can be reasonably attained by alternative means which would result in less environmental impact;
- B. where inland excavation is intended to extend riparian rights to nonriparian lands, or to promote the subdivision and development of nonriparian lands;
- C. when the proposed excavation will be detrimental to significant fish and wildlife habitat and there are no feasible, practical, or ecologically acceptable means to mitigate the effects;
- D. when the proposed excavation will take threatened or endangered species listed in chapter 6134 without authorization by the commissioner according to parts 6212.1800 to 6212.2300;
- E. where it is intended to provide fill materials for development purposes except as provided under part 6115.0280;
- F. where the excavation would not provide an effective solution to a problem because of recurrent sedimentation and there are feasible and practical alternative solutions which do not require excavation;
- G. unless the excavation project includes provisions for acceptable disposal of excavated materials as provided in these rules; or

H. where the excavation would cause increased seepage of water which would lower the water level of public waters and result in subsurface drainage.

Subp. 4. **No permit required.** No permit for excavation is required for the following activities unless prohibited in subpart 3:

A. for excavations in a public watercourse having a total drainage area, at its mouth, of five square miles or less, if the watercourse is not an officially designated trout stream and the excavation will not result in:

- (1) any diversions of water from the drainage area;
- (2) any impoundment of waters by damming the watercourse; or
- (3) any actions that would result in erosion and cause sedimentation of downstream waters as determined by the county or local soil and water conservation district;

B. to remove debris such as trees, logs, stumps, and trash provided such removal does not alter the original alignment, slope, or cross-section of the waters; or

C. for repair of a public drainage system lawfully established under Minnesota Statutes, chapters 103D and 103E, and sponsored by the public drainage authority consistent with the definition of "repair" in Minnesota Statutes, section 103E.701, subdivision 1.

Subp. 5. **Permits required.** Permits are required for the excavation and removal of any materials from public waters or any excavations extending into or out of public waters, except as provided in subparts 3 and 4, and a project is subject to the following general criteria:

A. the project is reasonable and practical based upon geologic and hydrologic conditions, including but not limited to:

- (1) quantity and quality of local drainage at the site;
- (2) type of sediment/soil strata and underground formations in the vicinity;
- (3) life expectancy of the excavation with respect to bedload, longshore drift, and siltation patterns in the project vicinity; and
- (4) protection of the water body from increased seepage, pollution, and other hydrologic impacts;

B. the disposal of excavated materials is subject to the following requirements:

(1) the disposal of any excavated materials containing pollutants is subject to requirements of Minnesota Statutes, chapter 115; and

(2) the most acceptable means of disposing of clean materials, free from pollutants, that are excavated from public waters listed in order of preference are:

(a) complete removal of excavated materials from the waters and disposal or reuse for other purposes outside of the floodplain;

(b) deposition in stable on-land disposal sites located above the ordinary high water level and outside of floodway districts established under local ordinance. Provisions must be included for sodding, seeding, or otherwise properly stabilizing these materials;

(c) temporary deposition along shorelines or within floodplains by stockpiling materials for subsequent removal to areas outside of any public waters and outside of established floodplain

districts provided that: any stockpile materials are removed within one year of stockpiling; and the stockpile is constructed so that any materials or waters entering or leaving the stockpile are controlled to prevent any introduction of sediment into the environment surrounding the stockpile;

(d) redeposition of excavated materials, consisting of inorganic materials free from pollutants, into public waters shall only be permitted when it will result in improvement of natural conditions of public waters for the public benefit and will not result in sedimentation, obstruction of navigation, or a loss of fish or wildlife habitat. Separate permit provisions are required for redeposition of excavated materials subject to the standards and criteria of subparts 2 to 5; and

(e) determination of the public benefit served by redeposition of excavated materials is based on the value to the public of redeposited materials in order to protect shorelines from the damaging effects of erosion due to winds and waves when there are no other feasible, practical, and ecologically acceptable means to protect the shoreline; or create or improve habitat areas for fish and wildlife; or mitigate or enhance the physical and biological environment within public waters when mitigative or enhancement measures are required as a condition of a permitted activity within the waters involved and there are no other feasible, practical, and ecologically acceptable mitigative measures;

C. the proposed project represents the "minimal impact" solution to a specific need with respect to all other reasonable alternatives and does not exceed more than a minimum encroachment, change, or damage to the environment, particularly the ecology of the waters;

D. the excavation is limited to the minimum dimensions necessary for achieving the desired purpose;

E. when excavation is proposed in a public water that is perched on an impervious stratum, soil borings show that the proposed excavation will not rupture the impervious stratum;

F. the biological character of the waters and surrounding shorelines is affected to the minimum degree feasible and practical;

G. adverse effects on the physical or biological character of the waters are subject to feasible and practical measures to mitigate the effects;

H. the water supply, navigational, and drainage characteristics of the waters is protected to ensure that the interests of the public and of private riparian landowners are not adversely affected by the proposed excavation;

I. the proposed excavation is consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved;

J. the proposed excavation is consistent with plans and management programs of local and regional governments, provided that such plans are consistent with state plans and programs; and

K. for harbors, boat slips, and other mooring facilities, the excavation is appropriately sized to provide a single mooring space for each riparian lot to be served. The number of mooring spaces to be provided shall generally be the amount of natural shoreline to be served divided by the lot requirements of the local land use control authority and the state shoreland management standards.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; L 1985 c 172 s 80; L 1985 1Sp16 art 2 s 19; 25 SR 143; 27 SR 529*

Posted: *June 11, 2008*

6115.0201 SPECIFIC STANDARDS; EXCAVATION.

Subpart 1. **In general.** In addition to compliance with the general standards in part 6115.0200, subparts 2 to 5, specific requirements shall be met for the activities described in subparts 2 to 7.

Subp. 2. **Excavations for beach development.** The existing site conditions will not provide a suitable beach using a sand blanket alone. When the proposal includes the installation of a beach sand blanket, the area to be excavated shall be consistent with the criteria for filling under part 6115.0190, subparts 2 to 5. The depth of excavation needed to reach a suitable beach stratum shall be the minimum depth necessary considering anticipated site maintenance and reasonable water depths for a beach.

Subp. 3. **Waterbasin excavations.** Excavations for improvement or enhancement of hydrologic and biologic conditions in all, or large portions of waterbasins:

A. A public need for the excavation has been established by local governmental resolution specifying the public interests to be improved or enhanced, except where the project is state sponsored.

B. The proposed project is intended to achieve one or more of the following public purposes:

- (1) to improve navigation, swimming, and other recreational uses;
- (2) to reduce winter fish-kill potential;
- (3) sediment removal to eliminate a source of nutrients and/or contaminants.

C. The proposed excavation is part of an overall improvement or enhancement project based upon adequate background and field test data for which a comprehensive plan is submitted at the time of application detailing all of the following:

(1) Objectives to be accomplished, and an analysis of any alternative means considered to meet the objectives and the rationale for selecting excavation.

(2) Sufficient soil boring and bottom sampling data to evaluate sediment quality and bottom "seal" conditions. Where excavation is proposed on a waterbasin that is perched on an impervious stratum, soil borings must show that the proposed excavation will not rupture the impervious stratum.

(3) The methods, uses, and locations to be employed in excavating and disposing of excavated material consistent with the provisions of parts 6115.0190 to 6115.0192.

(4) Existing water quality data and provision for future water quality monitoring including any water returned to the waterbasin during the removal of excavated materials.

(5) A timetable which indicates anticipated yearly excavation areas and volumes of materials to be removed, plus the selected disposal methods, uses, and deposition locations for each excavation period.

(6) A detailed description of proposed excavation and disposal equipment and facilities, including, where applicable, the length of discharge pipe purchased or available for the project and the pumping characteristics of the equipment.

Subp. 4. **Excavations for navigation-related purposes.** Excavations for navigation-related purposes:

A. Access channels from shorelines for recreational craft. Excavations for accesses from shorelines to reach navigable depths shall not be allowed if access could reasonably be obtained through use of a dock to reach navigable depths, and prevalent wind, wave, and current conditions would not impair reasonable access to reach navigable depths.

When shoreline conditions and wind, wave, and current conditions preclude access to navigable depths, excavations for navigational access shall be allowed provided the access channel shall not exceed four feet in depth, more than 15 feet in bottom width, and will not extend to an offshore water depth greater than four feet.

B. Other navigational channels. Excavations shall be limited to the minimum depth and width necessary to allow reasonable use of anticipated watercraft.

Excavations to provide maintenance of navigational channel projects shall be limited to the length, width, and depth dimensions of the original channel.

Subp. 5. **Harbors and boat slips.** Harbors and boat slips:

A. Excavations for development of offshore or inland harbors or boat slips for the mooring of more than 25 watercraft or watercraft larger than 20 feet in length shall be restricted to those waters which have the following characteristics:

- (1) waterbasins having areas of 1,000 acres or more;
- (2) watercourses which are used for commercial or industrial navigational purposes.

B. Excavations for development of offshore harbors serving fewer than 25 watercraft shall be limited to those water areas where the location of the proposed offshore harbor would not create unreasonable obstructions to public use and navigation on the water involved. Unreasonable obstructions include any development which would result in threats to public health, safety, or welfare.

C. Excavations for development of private inland harbors or boat slips serving fewer than 25 watercraft or watercraft less than 20 feet in length shall be limited to those waters where:

(1) prevalent wind, wave, or current conditions along the shoreline where excavation is proposed are of a magnitude and frequency which precludes the use and maintenance of docks to moor watercraft. Determinations of magnitude and frequency which would inhibit use of docks shall be based on supporting facts including:

- (a) the character of the water involved and its shoreline in relation to exposure to severe wind, wave, or current actions and the configuration and area of the water;
- (b) the frequency of occurrence of storms producing severe winds and waves based on climatological data for the area; and
- (c) the average number of days during each month of the navigational season when the shoreline is affected by severe winds, waves, or currents;

(2) the presence of lake bed and bank conditions would preclude the use and maintenance of docks and the conditions of the site and the number, type, or size of watercraft intended to be moored would preclude the development and use of on-land facilities, such as rollers, winch and track systems, sliderails, or other facilities which could be used to haul watercraft out of the water for on-land storage; or

(3) the proposed site is located in an area of the water body where offshore mooring or excavations or extensive dock development would create unreasonable obstructions to public use and navigation of the water body.

D. The width and length of boat slips shall not exceed 150 percent of the width and length of the anticipated watercraft and all authorized boat slips shall be oriented to maximize the degree of wave protection.

E. Excavations for development of inland harbors shall be limited to those waters described in item C and shall meet the following additional requirements:

(1) Requirements applicable to all commercial and industrial inland harbors:

(a) The mooring area of the harbor shall be compactly shaped in order to minimize the surface area excavated in relation to the number of mooring spaces to be provided and shall be located at an adequate distance from the shoreline to provide wave protection and prevent breakthrough.

(b) No branch or connecting channels shall be permitted extending laterally outward from authorized inland excavations.

(c) If practical, a "dogleg" shall be incorporated in the approach channel located between the mooring area and the shoreline to minimize visual impact from the water body and promote wave dissipation.

(d) The excavation shall not extend more than 200 feet inland from the public water unless evidence is provided to show that greater distances are required because of the dimensions of the watercraft to be moored.

(e) The methods, use, and deposition locations to be employed in disposing of excavated materials shall be consistent with the provisions of part 6115.0200, subpart 5, item B.

(2) An application for a permit shall contain plans, maps, and supporting data regarding proposed excavation site soil borings, ground water levels and characteristics, water quality, topography, drainage, and vegetation which shall substantiate that the proposed project must be reasonable and practical based upon geologic and hydrologic conditions including:

(a) quantity and quality of stream flow and local drainage at the proposed project site;

(b) water stagnancy problems including the capability of being flushed or drained;

(c) interference with stream flow or longshore drift;

(d) type of soil strata and underground formations in the project vicinity;

(e) protection of the water body itself in terms of reduced water supply, increased seepage or drainage, pollution, increased flooding, and other adverse hydrological impacts;

(f) adequate entrance openings;

(g) ample turning radius;

(h) adequate depth and size for the anticipated watercraft usage;

(i) adequate reduction of wave heights in mooring areas;

(j) proper harbor shape to reduce wave resonance;

(k) need for and feasibility of maintenance dredging;

(l) adequate height of perimeter wall;

(m) need for wave absorbers within the harbor; and

(n) bank stabilization by appropriate erosion control measures.

(3) Additional requirements applicable to specific types of harbors. Private inland harbors serving two or more single family residential riparian lots shall, if practical, be located along the mutual boundary of properties to be served.

Private inland harbors for proposed multifamily or cluster developments, residential planned unit developments, or for resorts, campgrounds, or other commercial purposes. The development plan shall be approved by the local governmental unit. The permit shall be of the title-registration type including a provision that the individual waterfront lots in the development have priority rights to the available mooring spaces thus obviating issuance of future permits for individual harbors for these lots. The harbor shall be appropriately sized, consistent with the number of watercraft to be served. For residential and commercial planned unit developments, the number of mooring spaces to be permitted shall be consistent with part 6120.3800.

Public inland harbor projects must be justified by:

(a) a public need for the proposed inland harbor established by local governmental resolution specifying public interests to be enhanced;

(b) the harbor shall be appropriately sized consistent with the demand for mooring facilities in the area and the number of watercraft to be served;

(c) the harbor shall be available for use by the general public; and

(d) the harbor may extend more than 200 feet inland provided the plans minimize the total length by which the public water is proposed to be extended in keeping with the number of watercraft to be served and the topography.

Subp. 6. **Excavations for fish and wildlife habitat improvement.** Excavation to restore or improve fish and wildlife habitat require plans showing the nature and degree of habitat to be benefited, and information showing that the project will not create other adverse effects such as flooding, erosion, sedimentation, or navigational obstructions.

Excavations in trout streams officially designated by the commissioner shall be allowed only if:

A. the amount, method, and location of the excavation will not result in increased water temperatures, cause excessive sedimentation in the stream, or destruction of fish habitat; and

B. there is no other feasible or practical alternative other than excavation.

Subp. 7. **Excavations in public watercourses.** Except as noted in part 6115.0200, subpart 4, a permit shall be required for any excavation in a public watercourse and shall be subject to the following specific requirements in addition to the general requirements of part 6115.0200, subparts 2 to 5:

A. The watercourse capacity shall be sufficient to adequately convey normal runoff.

B. The watercourse bottom gradients shall be such that normal low flow velocities are nonerosive and the sideslopes shall be graded such that bank slumping is not a hazard. Where excavation will result in excessive bank erosion, energy dissipation structures, channel and bank protection, or other engineering measures shall be required.

C. The outlet shall be adequate in that it:

- (1) sufficiently conveys the discharge waters from the area proposed for excavation;
- (2) does not produce substantial increases in downstream overbank flooding; and
- (3) does not produce downstream erosion hazards as a result of the watercourse excavation.

D. When projects involve widening or straightening which alters the watercourse banks, all sideslopes which contribute direct surface runoff into the authorized altered watercourse, and a strip of land along both sides of the watercourse, one rod wide or to the top of the spoil bank, whichever is the greater, shall be seeded and maintained in permanent grasses. No mowing of this grassed strip shall be allowed until after July 31 of each year.

E. The alignment and slope of the excavated channel shall be such as to provide a smooth transition between the existing and the excavated channel.

F. Disposal of excavated material from channel excavation shall be consistent with part 6115.0200, subpart 5, except where the original channel is allowed to be filled as part of the project.

G. No significant increase in flood damages will be permitted. Floodwater retardance structures may be required to minimize any increase in flood damage.

H. The applicant shall submit the names and addresses of landowners located immediately upstream, downstream, and adjacent to any proposed watercourse alteration resulting from excavation. In addition, the applicant shall submit the names and addresses of other landowners and occupants that the commissioner, after reviewing the plans for the proposed excavation, believes will have a substantial interest in the channel change or will be substantially affected by the watercourse alteration.

I. The preferred alternative to widening, deepening, or straightening a watercourse for control of flood waters is the construction of water impoundment structures in upstream areas. Where impoundments are infeasible, impractical, or would result in adverse effects on health and safety or greater adverse environmental effects, the preferred alternative is the construction of flood bypass channels to convey high velocity flood flows.

Excavations in public watercourses for flood management purposes shall be allowed only where an upstream impoundment or a flood bypass channel is infeasible or impractical or excavation is the least damaging environmentally.

Excavations for widening, deepening, or straightening portions of watercourses shall be based on flood management plans which provide details on the relationship of the proposed excavation to management of flood flows for the entire watercourse and shall be consistent with state standards and state

approved local standards for floodplain management including maximum use of nonstructural measures where feasible and practical.

J. Excavations shall be limited to the minimum extent necessary to facilitate construction of the road crossing and shall include provisions for adequate riprap or other bank protection measures to protect altered banks from erosion.

K. Excavations for construction of sediment traps or settling basins to control sedimentation and water quality shall be based on plans approved by the Pollution Control Agency or the local soil and water conservation district and shall be consistent with any state and local standards, regulations, and requirements.

L. Watercourse channel excavations to restore or improve fish and wildlife habitat shall require plans showing the nature and degree of habitat to be benefited, and information showing that the project will not create other adverse effects such as flooding, erosion, sedimentation, or navigational obstructions.

M. Watercourse channel excavations in trout streams officially designated by the commissioner shall only be allowed if:

(1) the amount, method, and location of the channel excavation will not result in increased water temperatures, cause excessive sedimentation in the stream, or destruction of fish habitat; and

(2) there is no other feasible or practical alternative other than channel excavation.

N. The straightening or realignment of a watercourse with a total drainage area, at its mouth, greater than five square miles shall only be permitted where the project will not result in increased downstream flooding, erosion, or sedimentation. Where it is proposed to straighten or realign a watercourse with a total drainage area, at its mouth, greater than five square miles, the applicant may be required to submit appropriate hydraulic data. Such data may include:

(1) contributing watershed above the project;

(2) data for the flood of record;

(3) maximum observed high water level;

(4) flow data, based on the best available technology as follows:

(a) existing and proposed time of concentration;

(b) existing and proposed stage downstream;

(c) existing and proposed mean velocity downstream;

(5) certification that the data was prepared by a registered professional engineer.

O. The alteration of watercourses by straightening or realigning channels to facilitate adjacent land use shall be allowed only if the applicant provides evidence:

(1) that the alteration is reasonable, practical, and will adequately protect public safety and welfare; and

(2) that the alteration will involve a minimum of encroachment, change, or damage to the environment, particularly to the ecological system of the waterway.

P. All other proposals for excavations in public watercourses shall meet the general requirements of part 6115.0200, subparts 2 to 5 and the specific requirements of subparts 2 to 6 and shall require submission of supporting evidence as provided in items N and O.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*

Posted: *June 11, 2008*

6115.0202 RELATIONSHIP TO STANDARDS AND CRITERIA FOR OTHER ACTIVITIES INVOLVING CHANGES IN COURSE, CURRENT, OR CROSS-SECTION.

Unless otherwise specified in other parts, parts 6115.0200 and 6115.0201 shall apply to excavations proposed as part of any other activity or activities including but not limited to: filling, parts 6115.0190 to 6115.0192; structures, parts 6115.0210 to 6115.0212; water level controls, parts 6115.0220 to 6115.0222; bridges and culverts, parts 6115.0230 to 6115.0232; drainage of public waters, parts 6115.0270 to 6115.0272; and alterations of public waters for mining, part 6115.0280.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*

Posted: *June 11, 2008*

6115.0210 STRUCTURES IN PUBLIC WATERS.

Subpart 1. **Goals.** It is the goal of the department to limit the occupation of public waters by offshore navigational facilities, retaining walls, and other structures in order to:

- A. preserve the natural character of public waters and their shorelands;
- B. provide a balance between the protection and utilization of public waters; and
- C. encourage the removal of existing structures which do not serve the public interest from the beds of public waters at the earliest practicable date.

Subp. 2. **Scope.** This part applies to the placement, construction, reconstruction, repair, relocation, abandonment, or removal of any structure placed on or in public waters.

Subp. 3. **Prohibited placement of structures.** Placement of structures, temporary structures, and floating structures is prohibited when the structure, temporary structure, or floating structure:

- A. will obstruct navigation or create a water safety hazard;
- B. will be detrimental to significant fish and wildlife habitat. Construction is prohibited in posted fish spawning areas;
- C. is designed or intended to be used for human habitation or as a boat storage structure;
- D. is designed or intended to include walls, a roof, or sewage facilities; or
- E. will take threatened or endangered species listed in chapter 6134 without authorization by the commissioner according to parts 6212.1800 to 6212.2300.

Subp. 4. **No permit required.** No permit is required for the following activities, unless prohibited under subpart 3:

A. to construct, reconstruct, or install a dock, floating or temporary structure, watercraft lift, or mooring facility if:

- (1) the structure or mooring facility will not constitute a hazard to navigation or public health, safety, and welfare, as determined by the commissioner;
- (2) the structure will allow the free flow of water beneath it;
- (3) the structure or mooring facility is not used or intended to be used as a marina;
- (4) the structure or mooring facility is consistent with or allowed under local land use controls, as determined by the local government land use authority;
- (5) the length of the structure is limited to that necessary to accomplish its intended use, including reaching navigable water depths;
- (6) the structure, other than a watercraft lift or watercraft canopy, is not more than eight feet in width and is not combined with other similar structures so as to create a larger structure; and
- (7) docks placed on rock filled cribs are located only on waters where the bed is predominantly bedrock, which is incapable of accepting pilings;

B. to construct or reconstruct a boat launching ramp if:

- (1) privately owned ramps do not exceed 12 feet in width and do not extend more than ten feet beyond the shoreline or into water more than four feet in depth, whichever is less. Excavations five cubic yards or less, and placement of up to five cubic yards of crushed rock, gravel, clean sand, or small stone are allowed to provide a stable base or maintain use of the ramp;
- (2) publicly owned ramps do not exceed 36 feet in width and do not extend more than 30 feet waterward of the shoreline or into water more than four feet in depth, whichever is less. Excavations of 200 cubic yards or less, and placement of up to 80 cubic yards of crushed rock, gravel, clean sand, or small stone are allowed to provide a stable base or maintain use of the ramp. The use of coffer dams constructed of metal sheet piling or other portable materials is allowed to construct and maintain public boat launching ramps if all materials are completely removed from public waters within 30 days of completion of the project;
- (3) the ramp is constructed of gravel, natural rock, concrete, steel matting, or other durable inorganic material not exceeding seven inches in thickness; and
- (4) the ramp is not located on a federally designated wild and scenic river; or

C. to remove structures or other waterway obstructions if:

- (1) the original cross-section and bed conditions are restored insofar as practicable;
- (2) the structure is completely removed including any footings or pilings that obstruct navigation;
- (3) the structure is not located on an officially designated trout stream; and
- (4) the structure does not function as a water level control device.

Subp. 5. **Permits required; criteria.** Permits are required for the construction, reconstruction, repair, or relocation of any structure or mooring facility on or in public waters, except as provided under subparts 3 and 4, and a project must meet the following general criteria:

A. the proposed project must represent the minimal impact solution to a specific need with respect to all other reasonable alternatives;

B. the project does not exceed more than a minimum encroachment, change, or damage to the environment, particularly the ecology of the waters;

C. the proposed structure is consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved;

D. adverse effects on the physical or biological character of the waters are subject to feasible and practical measures to mitigate the effects;

E. the proposed structure is consistent with water and related land management plans and programs of local and regional governments, provided these plans and programs are consistent with state plans and programs; and

F. except for mooring facilities and boat ramps, all new structures have a title-registered permit, unless a public agency or local governmental unit accepts responsibility for future maintenance or removal.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*

Posted: *June 11, 2008*

6115.0211 SPECIFIC STANDARDS; STRUCTURES.

Subpart 1. **In general.** In addition to compliance with the general standards in part 6115.0210, subparts 2 to 5, specific requirements shall apply to the activities described in subparts 3 to 8.

Subp. 2. [Repealed, 27 SR 529]

Subp. 3. **Wharves.** A permit is required for the construction or reconstruction of all wharves. The following order of preference for construction types shall be utilized: bulkheaded shoreline, inland slip with bulkheaded sidewalls, and wharf projecting into public waters.

Wharves shall be approved if the structure:

- A. is part of a designated port facility;
- B. is consistent with local land use plans and ordinances;
- C. does not extend further waterward than any existing wharves in the area or beyond any established harbor line, whichever is less;
- D. is of the minimum practicable size; and
- E. is not an obstruction to flood flows or longshore drift and is adequately designed to resist the natural forces of ice, wind, and wave.

Subp. 4. **Breakwaters.** A permit is required for the construction or reconstruction of all offshore breakwaters. These structures shall be approved if the following general conditions and the additional listed specific conditions are met:

- A. alternative dock or inland facilities are infeasible;
- B. the structure is limited to those waters where:

(1) prevalent wind, wave, or current conditions along the shoreline are of a magnitude and frequency that preclude the use and maintenance of docks to moor watercraft. Determinations of magnitude and frequency that would inhibit the use of docks is based on supporting facts including:

(a) the character of the water involved and its shoreline in relation to exposure to severe wind, wave, or current actions and the configuration and area of the water;

(b) the frequency of occurrence of storms producing severe winds and waves based on climatological data for the area; and

(c) the average number of days during each month of the navigational season when the shoreline is affected by severe wind, waves, or currents; and

(2) the conditions of the site and the number, type, or size of watercraft intended to be moored would preclude the development and use of on-land facilities, such as rollers, winch and track systems, sliderails, or other facilities that could be used to haul watercraft out of the water for on-land storage;

C. the facility is adequate in relation to appropriate engineering factors, including but not limited to those listed in part 6115.0201, subpart 5, item E, subitem (2), units (f) to (n);

D. the plan is adequate in relation to the geologic and hydrologic factors listed in part 6115.0201, subpart 5, item E, subitem (2), units (a) to (e);

E. the structure is designed in a compact fashion so as to blend in with the surrounding shoreline and so that all mooring and maneuvering activities can be normally confined to an area bounded by the property lines as extended into the public waters while minimizing the surface area occupied in relation to the number of watercraft to be served; and

F. the breakwaters do not exceed the minimum thickness necessary to withstand the anticipated forces consistent with maintenance requirements and are faced with an adequate layer of natural rock riprap of appropriate size and gradation.

Subp. 4a. **Mooring facilities.** Except as provided in part 6115.0210, subpart 4, item A, a permit is required for the construction of all offshore mooring facilities. A mooring facility shall be approved if the following general conditions and the additional listed specific criteria are met:

A. the mooring facility is designed in a compact fashion so as to blend in with the surrounding shoreline and so that all mooring and maneuvering activities can be normally confined to an area bounded by the property lines as extended into public waters while minimizing the surface area occupied in relation to the number of watercraft to be served;

B. the mooring facility minimizes encroachment waterward of the ordinary high water level;

C. for docks or mooring facilities more than eight feet in width, the applicant provides reasonable justification that the proposed width represents the minimal impact solution to a specific need with respect to all reasonable alternatives; and

D. offshore mooring facilities shall be approved, subject to the listed specific conditions:

(1) private offshore mooring facilities not serving as marinas, if the mooring facility is consistent with or allowed under local land use controls, as determined by the local government land use authority;

(2) public offshore mooring facilities not serving as marinas, if:

(a) a local unit of government passes a resolution that specifies the public interests to be benefited by the proposal;

(b) the mooring facility is appropriately sized consistent with the demand for mooring facilities in the area and the number of watercraft to be served; and

(c) the mooring facility is available for use by the general public; and

(3) offshore marinas, if:

(a) the area is zoned for such use or the local government land use authority grants a land use permit; and

(b) the marina is sized consistent with the demand for mooring facilities in the area and the number of watercraft to be served.

Subp. 5. **Retaining walls and erosion and sedimentation control structures.** A permit is required for the construction or reconstruction of all retaining walls and erosion and sedimentation control structures that do not impound water. The construction of retaining walls is discouraged because their appearance is generally not consistent with the natural environment and their construction and maintenance cost is generally greater than riprap.

The issuance of permits is contingent on the following conditions:

A. existing or expected erosion problems preclude the use of riprap shore protection, there is a demonstrated need for direct shoreland docking, or the design is consistent with existing uses in the area. Examples are: riverfront commercial-industrial areas having existing structures of this nature, dense residential shoreland areas where similar retaining walls are common, resorts where floating docks may be attached to such a bulkhead, or where barges are utilized to transport equipment and supplies;

B. adequate engineering studies are performed of foundation conditions, tiebacks, internal drainage, construction materials, and protection against flanking;

C. the facility is not an aesthetic intrusion upon the area and is consistent with all applicable local, state, and federal management plans and programs for the water body; and

D. encroachment below the ordinary high water level is held to the absolute minimum necessary for construction.

Subp. 6. **Boat launching ramp.** A permit is required for the construction or reconstruction of any boat launching ramp not covered under part 6115.0210, subpart 4, item B, and shall be granted if:

A. the applicant demonstrates a need for a launching facility;

B. the proposed ramp is of the minimum dimensions necessary for launching of watercraft;

C. the proposed ramp does not obstruct flowing water; and

D. construction does not necessitate alteration of shoreland that could result in substantial erosion and sedimentation.

Subp. 6a. **Boathouses.** A permit is required for the construction, reconstruction, relocation, removal, or repair of a boathouse. The permit shall be granted if the following conditions are met:

A. the boathouse is located in an area of historic boathouse use. "Historic boathouse use" shall be determined by the commissioner and shall be based on a review of factual information such as photographs, local government comments, newspaper accounts, or other relevant information;

B. the boathouse is approved by the local unit of government by means of a resolution with supporting documentation that identifies the owner, length, width, height, number of rooms, and sanitary facilities of the boathouse; and

C. the boathouse was located on public waters before January 1, 1997.

Subp. 6b. **Energy exchangers.** A permit is required for the construction, reconstruction, relocation, or repair of energy exchangers located on the bed of a public water. The permit shall be granted if the following general conditions and the additional listed specific conditions are met:

A. there are no other feasible and practical alternative sites for the project that would have less environmental impact;

B. a closed loop design is utilized;

C. the facility is designed in accordance with sound engineering practices;

D. the facility is not located in a designated trout stream or lake, a designated wild and scenic river, or an outstanding resource value water as defined in part 7050.0180;

E. the facility is designed in a fashion and located so as not to cause a navigation hazard;

F. the facility will not exceed more than a minimum encroachment, change, or damage to the environment, particularly the ecology of the waters;

G. the facility will not take threatened or endangered species identified in chapter 6134 without authorization by the commissioner according to parts 6212.1800 to 6212.2300;

H. the facility will not contain substances, if released into public waters, that would be detrimental to water quality or plant or animal life forms; and

I. the construction, relocation, or reconstruction of privately owned structures shall be permitted only when a federal, state, or local governmental agency accepts responsibility for future maintenance of the facility or its removal in the event that the private owner fails to maintain or abandons the facility.

Subp. 7. **Other facilities.** A permit is required for the construction, reconstruction, relocation, removal, repair, and abandonment of all other offshore structures, boat storage structures, cables other than utility crossings, pilings, or other structures not covered by specific regulations.

A. Permits for structural repair, relocation, or modification, other than minor maintenance work such as reroofing, painting of structures, or similar work, shall be issued if all of the following conditions are met:

(1) the applicant demonstrates a need for the work;

(2) the cost of the work will not exceed 50 percent of the replacement cost of the structure;

(3) the degree of permanence of the structure will not be materially increased by virtue of constructing a new foundation or replacing the majority of the structure above the foundation;

(4) the structure being repaired has appropriate permits from the local land use or sanitary authority; and

(5) the degree of obstruction or structure size is not increased.

B. Permits for construction, relocation, or reconstruction of publicly owned structures shall be issued where:

(1) public need is documented and outweighs adverse environmental impact;

(2) the site is adequately protected from the forces of ice and wave pressures; and

(3) the proposed construction is of sound design and is not necessarily obtrusive or visually incompatible with the natural surroundings.

C. The construction, relocation, or reconstruction of privately owned structures, other than docks and mooring facilities, shall be permitted only when a governmental agency or local unit of governmental accepts responsibility for future maintenance of the structure or its removal.

Subp. 8. **Removal of structures.** Where the commissioner has determined that a structure is no longer functional, constitutes a public nuisance or a hazard to navigation, or poses a threat to public health or safety, the structure shall be removed from public waters under the applicable provisions of these rules. Except as provided under part 6115.0210, subpart 4, item C, a permit is required for the removal or abandonment of all existing waterway obstructions including boathouses, bridges, culverts, pilings, piers, and docks. Permits shall be issued provided:

A. the original cross-section and bed conditions will be restored insofar as practicable;

B. adequate provisions are made to mitigate any side effects resulting from removal, such as restoration of wave or current forces; and

C. no portion of the structure remains which would obstruct or impair navigation, interfere with the passage of flood waters, or contribute to erosion and sedimentation.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*

Posted: *June 11, 2008*

6115.0212 RELATIONSHIP TO STANDARDS AND CRITERIA FOR OTHER ACTIVITIES INVOLVING CHANGES IN COURSE, CURRENT, OR CROSS-SECTION.

Unless otherwise specified in other parts, parts 6115.0210 and 6115.0211 shall apply to structures proposed as part of any other activity or activities including but not limited to: filling, parts 6115.0190 to 6115.0192; excavations, parts 6115.0200 to 6115.0202; water level controls, parts 6115.0220 to 6115.0222; bridges and culverts, parts 6115.0230 to 6115.0232; drainage of public waters, parts 6115.0270 to 6115.0272; and alterations of public waters for mining, part 6115.0280.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*

Posted: *June 11, 2008*

6115.0215 RESTORATION OF PUBLIC WATERS.

Subpart 1. **Goals.** It is the goal of the department to encourage the restoration of public waters to:

A. improve and protect fish and wildlife habitat and the diversity of the habitat;

- B. preserve the natural character of public waters and their shoreline zones;
- C. encourage the use of natural materials for shoreline zone protection and restoration;
- D. limit the removal of natural materials from the beds of public waters; and
- E. prevent erosion and siltation of public waters, while maintaining natural processes.

Subp. 2. **Scope.** This part applies to placement, construction, reconstruction, repair, relocation, abandonment, or other work needed to restore or protect public waters or to removal of any materials, structure, fill, water level control, excavation, or drainage device placed on or in public waters. For purposes of this part, "restoration" means the repair, reconstruction, or recreation of essentially natural or native conditions of a public water and its shoreline or banks. This part does not apply to restoration orders issued by the commissioner consistent with part 6115.0255.

Subp. 3. **Prohibited work.** Public waters alteration, protection, or restoration work is prohibited when the work:

- A. is detrimental to significant fish and wildlife habitat and there are no feasible, practical, or ecologically acceptable means to mitigate the effects;
- B. takes threatened or endangered species listed in chapter 6134 without authorization by the commissioner according to parts 6212.1800 to 6212.2300;
- C. obstructs navigation or creates a water safety hazard, as determined by the commissioner;
- D. violates the regulations of any local zoning authority or water management agency;
- E. results in the creation of land above the ordinary high water level that is not deemed essential by the commissioner as part of the project;
- F. uses materials that are not clean and free of pollutants, nutrients, and exotic species sources;
- G. manipulates water levels solely to satisfy private interests; or
- H. will adversely impact public infrastructure, particularly roads and drainage systems.

Subp. 4. **No permit required.** No permit is required for the following activities, unless prohibited elsewhere in parts 6115.0150 to 6115.0280:

A. to perform bank or shoreline zone restoration work using willow wattles, willow posts, brush matting, brush layering, fiber roll breakwaters, plant carpets, root wads, and other natural materials installed by hand for the purpose of shoreline zone restoration work, if:

- (1) the project is approved by the commissioner and designed or reviewed by the local soil and water conservation district or the local watershed district;
- (2) the design does not interfere with navigation or other riparian uses of the waterbody;
- (3) the project is done during times of the year when it will not interfere with fish spawning or the nesting of protected bird species;
- (4) local origin native plant species, adapted for the site, are used;
- (5) an aquatic plant management permit is obtained, when aquatic macrophytes are used;
- (6) the waterward encroachment is the minimum necessary for the purpose of the project;

and

(7) a maintenance plan is developed for the project and a copy submitted for review to the department area fisheries office;

B. to remove or grade an ice ridge, if all of the following conditions are met:

- (1) the ice ridge resulted from ice action within the last year;
- (2) the project is either exempt from local permits or is authorized by issuance of a local government permit;
- (3) the total length of shoreline zone to be affected does not exceed 200 feet;
- (4) all ice ridge material that is composed of muck, clay, or organic sediment is deposited and stabilized at an upland site above the ordinary high water level of any public water;
- (5) all ice ridge material that is composed of sand or gravel is removed as provided in subitem (4) or graded to conform to the original cross-section and alignment of the lakebed, with a finished surface at or below the ordinary high water level;
- (6) no additional excavation or placement of fill material occurs on the site;
- (7) all exposed areas are immediately stabilized as needed to prevent erosion and sedimentation; and
- (8) local zoning officials, the watershed district, if applicable, and the soil and water conservation district are given seven days' prior notice;

C. to construct, reconstruct, or abandon a water level control structure on a public watercourse with a contributing watershed of 300 acres or less, except on officially designated trout streams, if the structure does not qualify as a dam under parts 6115.0300 to 6115.0520;

D. to excavate or place fill for the purpose of planting or collecting native aquatic plants for restoration purposes, if the work is authorized by an aquatic plan management permit; and

E. to install natural rock riprap and associated filter materials where there is a demonstrated need to prevent erosion or to restore eroded shoreline, when there is a demonstrated need for such work, except along the shores of Lake Superior and officially designated trout streams, if:

- (1) the rock is sized appropriately with the erosion potential of the wave or current action of the particular water body, but in no case shall the rock average less than six inches in diameter or more than 30 inches in diameter;
- (2) the rock is placed so that it conforms to the natural alignment of the shoreline zone;
- (3) the finished slope, as measured on top of the rocks, is not steeper than three to one (horizontal to vertical);
- (4) no materials are placed more than six feet waterward of the ordinary high water level, unless the commissioner determines that this dimension may be measured from another point due to the particular nature of water levels of the public water;
- (5) the total length of shoreline to be affected does not exceed 200 feet for public waterbasins or public water wetlands or five times the width of the public watercourse measured at bank full conditions;
- (6) the riprap does not cover emergent vegetation, unless authorized by an aquatic plant management permit;

- (7) the riprap does not obstruct navigation or the flow of water;
- (8) a filter, consisting of crushed rock, gravel, or suitable filter fabric material is placed underneath the rock; and
- (9) the rock and any filter material are free from organic material, soil, clay, debris, trash, or any material that may cause siltation or pollute the waterbody.

Subp. 5. **Permit required; criteria.** A permit is required for the restoration of public waters, except as provided under subpart 4, and shall be granted if all of the following conditions are met:

- A. the proposed project represents the minimal impact solution to a specific need with respect to all other reasonable alternatives;
- B. the proposed project is intended to achieve one or more of the following purposes:
 - (1) improve navigational or recreational uses;
 - (2) improve or restore fish or wildlife habitat;
 - (3) expose sediment to remove or eliminate nutrients or contaminants;
 - (4) restore shorelines or watercourse channels to more natural conditions;
 - (5) improve or restore natural hydrologic conditions; or
 - (6) improve or restore water quality;
- C. the project does not exceed more than a minimum encroachment, change, or damage to the environment, particularly the ecology of the waters;
- D. adverse effects of the proposed project on the physical or biological character of the waters are avoided when possible and are subject to feasible and practical measures to mitigate the effects;
- E. the proposed project is consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved;
- F. the proposed project is consistent with water and related land management plans and programs of local and regional governments, provided the plans and programs are consistent with state plans and programs; and
- G. projects that involve the placement of fill to recover shoreland lost by erosion or other natural forces are subject to part 6115.0191, subpart 4, except that part 6115.0191, subpart 4, does not preclude the issuance of a permit to place riprap materials or use other structural and vegetative means for protection of the shoreline zone to prevent continuing erosion.

Statutory Authority: *MS s 103G.315*

History: *27 SR 529*

Posted: *June 11, 2008*

6115.0216 SPECIFIC STANDARDS; RESTORATION.

Subpart 1. **In general.** In addition to compliance with the general standards in part 6115.0215, subparts 2 to 5, specific requirements apply to the activities described in subparts 2 to 6.

Subp. 2. **Riprap shore protection.** The protection of shoreline from continued erosion by placement of natural rock riprap along the shore shall be approved if:

A. the riprap materials are of sufficient size, quality, and thickness to withstand ice and wave action. The riprap must be placed with a minimum amount of space between the larger materials and the space between them must be filled with firmly seated smaller rocks or gabion baskets to procure a uniform surface;

B. the site soils are capable of supporting riprap and a filter consisting of well-graded gravel, crushed stone, or fabric is installed to prevent undercutting of the riprap;

C. when site conditions warrant, the toe end of the riprap is installed in a trench excavated into the bed of the public water to anchor the riprap from ice and wave action, with all excavated materials either used to back fill behind the riprap or removed from the bed of the public water;

D. the encroachment into the water is the minimum amount necessary to provide protection and does not unduly interfere with the flow of water; and

E. adequate engineering studies are done to certify the adequacy of the design of the riprap project, if deemed necessary by the area hydrologist.

Subp. 3. **Bioengineering projects.** The grading or filling of materials below the ordinary high water level to facilitate the installation or use of willow wattles, willow posts, brush matting, brush layering, fiber roll breakwaters, plant carpets, root wads, and other natural materials for erosion protection and shoreline zone restoration purposes shall be approved if:

A. the methods and materials used are designed in consultation with department or local government staff experienced in the use of such materials;

B. excavation and fill placement needed in conjunction with bioengineering projects are minimized and are subject to all requirements related to fill and excavation in parts 6115.0190, 6115.0191, 6115.0200, and 6115.0201; and

C. a separate aquatic plant management permit is obtained whenever the project involves planting aquatic plants other than willow and dogwood.

Subp. 4. **Structural erosion control projects.** Installation of rock gabions, A-jacks, cable concrete, bendway weirs, interlocking concrete blocks, eddy rocks, deflectors, gravel riffles, or other structural methods of erosion control or bank stabilization shall be approved if:

A. adequate engineering studies are performed to determine the suitability for use of any of these types of erosion control projects, as determined by the department;

B. the project is not an aesthetic intrusion upon the area and is consistent with all applicable local, state, and federal management plans, programs, and ordinances relating to the affected waterbody;

C. encroachment below the ordinary high water level is limited to the minimum necessary for the construction project;

D. when the project involves the removal of aquatic plants, a separate aquatic plant management permit is obtained;

E. the project does not adversely impact native plants, trees, or animals; and

F. any retaining wall complies with requirements for structures under parts 6115.0210 and 6115.0211.

Subp. 5. **Wave breaks.** Grading, filling, or excavation to install rock, silt fence, or any other material or device designed solely for the purpose of protecting native aquatic plants from wave or current action during their establishment shall be approved if:

- A. the materials do not obstruct navigation or the flow of water;
- B. the project is done in conjunction with an issued aquatic plant management permit; and
- C. temporary (less than two years) wave breaks are preferred over permanent structures, which must also meet the requirements of parts 6115.0210 and 6115.0211.

Subp. 6. **Other erosion control projects.** Using a structure, material, fill, excavation, or other technique that is not covered under subparts 2 to 5 and that is designed primarily to control erosion of the shoreline zone or to restore the shoreline zone to a more natural condition or altering the shoreline zone in any way that is not covered by specific regulations shall be approved if:

- A. the intended purpose of the project is reasonable with respect to all other alternatives;
- B. any method of erosion control that is not widely accepted as being effective is used only as a temporary or experimental project, provided that the project sponsor must totally repair the shoreline zone if the project proves to be unsuccessful within five years. A public entity must be a cosponsor of the temporary or experimental project and accept responsibility for maintenance, repair, and removal of the project;
- C. the project complies with all other federal, state, and local regulations and ordinances; and
- D. the project adequately protects public safety and promotes the public welfare.

Subp. 7. **Contaminated site restoration projects.** Restoration of a site contaminated with materials or water determined to be hazardous or toxic through a publicly funded study or site cleanup process shall be approved if:

- A. the study includes a discussion of alternative approaches to restore the contaminated site; and
- B. the commissioner, in consultation with the Minnesota Pollution Control Agency, participated in either the development of the site restoration plan or study and concurs with the site restoration plan or study recommendations or participated in the development of the site restoration funding initiative and concurs with the funded initiative.

Statutory Authority: *MS s 103G.315*

History: *27 SR 529*

Posted: *June 11, 2008*

6115.0217 APPLICATION OF OTHER STANDARDS; RESTORATION.

Unless otherwise specified in other parts, parts 6115.0215 and 6115.0216 apply to projects proposed as part of any other activity or activities including, but not limited to:

- A. filling, parts 6115.0190 to 6115.0192;
- B. excavations, parts 6115.0200 to 6115.0202;
- C. structures, parts 6115.0210 to 6115.0212;
- D. water level controls, parts 6115.0220 to 6115.0222;

- E. bridges and culverts, parts 6115.0230 to 6115.0232;
- F. drainage of public waters, parts 6115.0270 to 6115.0272; and
- G. alterations of public waters for mining, part 6115.0280.

Statutory Authority: *MS s 103G.315*

History: *27 SR 529*

Posted: *June 11, 2008*

6115.0220 WATER LEVEL CONTROLS.

Subpart 1. **Goals.** It is the goal of the department to manage public waters to:

- A. maintain or restore natural flow and natural water level conditions to the maximum feasible extent;
- B. encourage the construction of small off-channel retarding structures for the conservation of water in altered, natural waterbasins, consistent with any overall plans for the affected watershed area; and
- C. limit the artificial manipulation of water levels, except when the balance of affected public interests clearly warrants the establishment of appropriate controls and it is not proposed solely to satisfy private interests.

Subp. 2. **Scope.** The construction, repair, reconstruction, or abandonment of any structure intended to impound, divert, or control the level or flow of public waters is subject to the provisions of this part.

Subp. 3. **Prohibited water level control facilities.** Construction or reconstruction of water level control facilities is prohibited when it is intended to manipulate water levels solely to satisfy private interests.

Subp. 4. **No permit required.** No permit is required to construct, reconstruct, or abandon a water level control structure on public watercourses with a contributing watershed of 300 acres or less, except on officially designated trout streams, provided the structure does not qualify as a dam under the rules for dam safety.

Subp. 5. **Permits required.** Permits are required for the construction, repair, reconstruction, or abandonment of any water level control structure, except as provided in subparts 3 and 4, and a project must meet the following general criteria:

- A. the project will involve a minimum of encroachment, change, or damage to the environment, including but not limited to fish and wildlife habitat, navigation, water supply, storm water retention, and agricultural uses;
- B. adverse effects on the physical or biological character of the waters are subject to feasible and practical measures to mitigate the effects;
- C. the proposed project is consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved;
- D. the proposed project is consistent with water and related land management plans and programs of local and regional governments, provided such plans and programs are consistent with state plans and programs;
- E. the construction or reconstruction complies with parts 6115.0300 to 6115.0520 with respect to dam safety for the protection of human life and property;

F. the construction or reconstruction of water level control structures or changing the level of an existing structure shall be approved only to:

- (1) control and store flood waters;
- (2) maintain low flows for instream flow or water level protection;
- (3) manage water quality, including the prevention or control of erosion and sedimentation;
- (4) improve water-based recreation;
- (5) create, improve, and maintain water supplies;
- (6) create, improve, or maintain aquatic habitat for fish and wildlife species;
- (7) establish, improve, or maintain the generation of hydroelectric power; or
- (8) restore the existing control elevation to a historic natural water elevation if detailed engineering surveys establish that the proposed control elevation does not exceed the estimated natural control elevation; and

G. the construction or reconstruction of water level control structures or changing the level of an existing structure on watercourses shall be approved only to:

- (1) control and store flood waters;
- (2) improve water-based recreation;
- (3) create, improve, and maintain water supplies;
- (4) establish, improve, or maintain the generation of hydroelectric power; or
- (5) create, improve, or maintain aquatic habitat for fish and wildlife species.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*

Posted: *June 11, 2008*

6115.0221 SPECIFIC STANDARDS; WATER LEVEL CONTROLS.

Subpart 1. **Specific requirements.** In addition to the general standards in part 6115.0220, subparts 2 to 5, specific requirements for water level control structures shall be met according to this part.

Subp. 2. Permanent lake level control facilities.

A. Permanent lake level control facilities shall be approved when the commissioner initiates proceedings for the purpose of conserving or utilizing the water resources of the state and assumes responsibility for operation and future maintenance, or when all of the following conditions are met:

- (1) the ordinary high water level and runout elevation of the water body have been determined by a detailed engineering survey, or by order of the commissioner following a public hearing;
- (2) the proposed facilities are "reasonably consistent with natural conditions:"
 - (a) where a functioning outlet existed in a state of nature or for a long period of time following lawful creation or alteration of an outlet by the activities of people or animals, or cataclysmic events, the proposed outlet is at essentially the same control elevation;

(b) where no natural or artificial outlet exists and the lake is for all practical purposes "landlocked," the control elevation shall not be more than 1-1/2 feet below the ordinary high water level, unless the commissioner finds that:

- i. the control is necessary to prevent adverse impacts to the lake or adjoining property;
- ii. other reasonable or cost-effective alternatives are not available;
- iii. natural resource or hydrologic conditions exist in the watershed that would limit the potential for continuous discharge of excess waters from the lake; and
- iv. the outlet and discharge of excess waters is addressed in an approved water management plan under Minnesota Statutes, chapter 103B or 103D; and

(c) the commissioner may issue a permit to restore the existing control elevation to a historic natural water elevation if detailed engineering surveys establish that the proposed control elevation does not exceed the estimated natural control elevation;

(3) the project is sponsored by a governmental unit, which assumes responsibility for operation and future maintenance, except when:

- (a) the majority of the riparian owners sign the permit application;
- (b) appropriate easements or other property interests have been obtained from all affected owners;
- (c) a title-registration type permit is issued to the owner or owners of the property upon which the proposed water level control structure will be located; and
- (d) the structure will further public interests in navigation, propagation of fish or wildlife, or other beneficial public uses of the water;

(4) justification has been made of the need in terms of public and private interests and the available alternatives, including the impact on receiving waters and public uses thereof, through a detailed hydrologic study; and

(5) a detailed plan is developed for operation and control including:

- (a) manner and time of operation;
- (b) frequency of maintenance;
- (c) appropriate monitoring of water levels, water quality, and other factors; and
- (d) management of excess waters.

B. In addition to the requirements of item A, subitem (2), unit (b), if the proposed control elevation is more than 1-1/2 feet below the ordinary high water level, the permit applicant must serve a copy of the application on each county and municipality within which any portion of the lake is located and the lake improvement district, if one exists. The commissioner must not issue a permit to establish a control elevation more than 1-1/2 feet below the ordinary high water level of a lake if a county, municipality, watershed district, or lake improvement district required to be served under this item or Minnesota Statutes, section 103G.301, subdivision 6, files a written objection to the issuance of the permit with the commissioner within 30 days after receiving a copy of the application.

Subp. 3. **Fish and wildlife management.** Fish and wildlife management proposals made pursuant to Minnesota Statutes, section 97A.101, or other appropriate authority shall be approved when:

- A. the public water has been designated for wildlife management purposes;
- B. there is a specific water level management plan for the lake basin;
- C. any drawdown of the lake is only temporary and the management plans include a permanent facility for restoration of water levels following such drawdowns;
- D. any alteration of a watercourse included in the plan follows the requirements specified in part 6115.0201, subpart 7;
- E. appropriate easements or fee title is obtained; and
- F. specified management personnel are required to establish a lake level gauge and keep a record of water levels with a specified frequency during seasons of active water level manipulation and with a lesser frequency during all other open water seasons.

Subp. 4. **Certain landlocked waterbasins.** Plans for landlocked waterbasins less than 25 acres in surface area and contained completely within the municipal boundaries of a single city shall be approved when:

- A. a municipal drainage plan for the affected tributary watershed is prepared by a qualified engineer or hydrologist and is approved by the affected watershed district and the city;
- B. the city has a field survey made of the waterbasin after consultation with the department, including but not limited to:
 - (1) the elevation of the aquatic vegetation fringe;
 - (2) the elevation of the tree line and a description of the location, type, and size of representative trees;
 - (3) groundwater elevations, if appropriate; and
 - (4) other information as requested by the department;
- C. control elevations and associated physical parameters are approved by the department and the city; and
- D. the city holds a public hearing on the proposal and provides a transcript of the proceedings to the department. Provision of a transcript may be waived by the department.

Subp. 5. **Other controls.** Permits for the construction, reconstruction, and abandonment of water level control structures not covered under subparts 2 to 4 shall be issued if:

- A. the need is established in terms of quantifiable benefits;
- B. the structural design is done by a professional engineer or by a qualified engineer of the Natural Resources Conservation Service or the Corps of Engineers and includes the following considerations:
 - (1) gravity forces;
 - (2) hydrostatic pressure;
 - (3) uplift forces;
 - (4) overturning moment;

- (5) resistance to sliding;
- (6) ice pressures;
- (7) earthquake forces;
- (8) slope stability, including consolidation and pore pressures;
- (9) seepage collection or prevention;
- (10) foundation conditions, including appropriate borings and determination of the strength of foundation materials;
- (11) specifications for materials of construction and their placement or installation;
- (12) adequate construction inspection to assure conformance with design assumptions;

and

- (13) adequacy of the cofferdam or diversion during construction, if any; and

C. adequate assurances are made for future maintenance of new water level control structures:

(1) for water level control structures 25 feet or more in structural height or having a maximum storage capacity of 50 acre-feet or more, permits shall be issued only to governmental agencies, public utilities, or corporations having authority to construct and maintain such projects, except that a title-registration type permit may be issued to the owner or owners of the private property upon which the proposed water level control structure will be located when the provisions of subpart 2, item A, subitem (3), are met;

(2) for other water level control structures, title-registration type permits shall be issued to the owner or owners of the private property upon which the water level control structure will be located if the permit runs with the land and requires breaching or removal if the structure ever falls into a state of disrepair or becomes unsafe; and

(3) periodic engineering inspections of authorized water level control structures may be made by the department or its designee.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; L 1986 c 386 art 1 s 19; 17 SR 1279; 25 SR 143; 27 SR 529*

Posted: *June 11, 2008*

6115.0222 RELATIONSHIP TO STANDARDS AND CRITERIA FOR OTHER ACTIVITIES INVOLVING CHANGES IN COURSE, CURRENT, OR CROSS-SECTION.

Unless otherwise specified in other parts, parts 6115.0220 and 6115.0221 shall apply to water level control structures proposed as part of any other activity or activities including but not limited to: filling, parts 6115.0190 to 6115.0192; excavations, parts 6115.0200 to 6115.0202; structures, parts 6115.0210 to 6115.0212; bridges and culverts, parts 6115.0230 to 6115.0232; drainage of public waters, parts 6115.0270 to 6115.0272; and alterations of public waters for mining, part 6115.0280.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*

Posted: *June 11, 2008*

6115.0230 BRIDGES AND CULVERTS, INTAKES AND OUTFALLS.

Subpart 1. **Goals.** It is the goal of the department to allow crossings of public waters, including the construction of water intake and sewer outfall structures in public waters, only when less detrimental alternatives are unavailable or unreasonable, and where such facilities adequately protect public health, safety, and welfare.

Subp. 2. **Scope.** The construction or reconstruction of any bridge, culvert, intake, outfall, or other crossing of public waters is subject to this part. Abandonment or removal of all crossings and structures governed by this part requires a permit according to part 6115.0211, subpart 8.

Subp. 3. **Prohibited crossings.** Crossings are prohibited when the project:

- A. will obstruct navigation or create a water safety hazard;
- B. will cause or contribute to significant increases in flood elevations and flood damages either upstream or downstream;
- C. involves extensive channelization above and beyond minor stream channel realignments to improve hydraulic entrance or exit conditions, except when a separate permit is obtained according to part 6115.0201, subpart 7;
- D. will be detrimental to water quality or significant fish and wildlife habitat;
- E. will take threatened or endangered species listed in chapter 6134 without authorization by the commissioner according to parts 6212.1800 to 6212.2300; or
- F. will provide private access to an island.

Subp. 4. **No permit required.** No permit is required to construct the following types of crossings on public waters, unless prohibited in subpart 3:

- A. to construct or reconstruct a bridge or culvert on a public watercourse with a total drainage area, at its mouth, of five square miles or less, except on officially designated trout streams;
- B. to construct or reconstruct a low-water ford type crossing, if:
 - (1) the stream bed is capable of supporting the crossing without the use of pilings, culverts, dredging, or other special site preparation;
 - (2) the water depth does not exceed two feet under normal summer flow conditions;
 - (3) the crossing conforms to the natural cross-section of the stream channel and does not reduce or restrict normal low-water flows;
 - (4) the original stream bank at the site does not exceed four feet in height;
 - (5) the crossing is constructed of gravel, natural rock, concrete, steel matting, or other durable inorganic material not exceeding one foot in thickness;
 - (6) the approach is graded to a finished slope not steeper than 5:1 horizontal:vertical, and all graded banks are seeded or mulched to prevent erosion and sedimentation; and
 - (7) the crossing is not placed on an officially designated trout stream, on a wild, scenic, or recreational river, or on an officially designated state water trail;
- C. to construct or reconstruct a temporary bridge, if:

- (1) the stream bank is capable of supporting the bridge without the use of foundations, pilings, culverts, excavation, or other special site preparation;
- (2) nothing is placed in the bed of the stream;
- (3) the bridge is designed and constructed so that it can be removed for maintenance and flood damage prevention;
- (4) the bridge is firmly anchored at one end and so constructed as to swing away to allow flood waters to pass;
- (5) the lowest portion of the bridge is at least three feet above the ordinary high water level on navigable streams; and
- (6) the bridge is consistent with state and local rules and regulations for floodplain, shoreland, and wild, scenic, or recreational rivers management standards and ordinances;

D. to maintain the hydraulic adequacy of any storm sewer or agricultural drain tile outfall or ditch that has been functioning within the previous five years, if such work does not alter the original course, current, or cross-section of the public waters; or

E. to install an agricultural drain tile outletting into public waters, if the bank is restored to the original cross-section or contour and no permanent structure is placed below the ordinary high water level, except for the drain tile.

Subp. 5. **Permits required.** Permits are required for the construction or reconstruction of any bridge, culvert, intake, outfall, or other crossing of public waters, except as provided in subparts 3 and 4, and a project must meet the following general criteria:

A. the project must not exceed more than a minimum encroachment, change, or damage to the environment, particularly the ecology of the waters;

B. adverse effects on the physical or biological character of the waters are subject to feasible and practical measures to mitigate the effects;

C. the proposed crossing is consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved;

D. the proposed crossing is consistent with water and related land management plans and programs of local and regional governments, provided such plans and programs are consistent with state plans and programs; and

E. crossings of public waterbasins or public water wetlands are allowed only when there is no feasible and practical alternative that does not require filling, excavating, or the placement of a structure in public waters.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529; L 2010 c 361 art 4 s 82*

Posted: *July 23, 2010*

6115.0231 SPECIFIC STANDARDS; BRIDGES, CULVERTS, INTAKES, AND OUTFALLS.

Subpart 1. **Specific requirements.** In addition to the general standards in part 6115.0230, subparts 2 to 5, specific requirements for bridges, culverts, intakes, outfalls, and other crossings of public waters shall be met according to this part.

Subp. 2. **Bridges, culverts, and other crossings.** The construction, reconstruction, or relocation of all bridges, culverts, or other crossings over public waters shall be approved if all of the following criteria are met:

A. the hydraulic capacity of the structure is established by a competent technical study. The sizing shall not be based solely on the size of existing upstream and downstream structures. If a state or federal floodplain information study exists for the area, or a United States Geological Survey gaging station is located nearby on the stream, the hydraulics of the proposed bridge/culvert design must be consistent with these data. The department may waive this requirement if:

(1) the department has performed a hydraulic study based upon available information and reasonable assumptions;

(2) the department has made a field investigation of the project site; and

(3) the project will not cause flood-related damages or problems for upstream or downstream interests;

B. new crossings and replacements of existing crossings comply with local floodplain management ordinances, with provisions of part 6120.5700, subpart 4, item A, and with the following:

(1) for new crossings, no approach fill for a crossing shall encroach upon a community designated floodway. When a floodway has not been designated or when a floodplain management ordinance has not been adopted, increases in flood stage in the regional flood of up to one-half of one foot shall be approved if they will not materially increase flood damage potential. Additional increases may be permitted if: a field investigation and other available data indicate that no significant increase in flood damage potential would occur upstream or downstream, and any increases in flood stage are reflected in the floodplain boundaries and flood protection elevation adopted in the local floodplain management ordinance;

(2) for replacement of existing crossings, if the existing crossing has a swellhead of one-half of one foot or less for the regional flood, the replacement crossing shall comply with the provisions for new crossings in subitem (1). If the existing crossing has a swellhead of more than one-half of one foot for the regional flood, stage increases up to the existing swellhead shall be allowed if field investigation and other available data indicate that no significant flood damage potential exists upstream from the crossing based on analysis of data submitted by the applicant. The swellhead for the replacement crossing may exceed the existing swellhead if it complies with the provisions for new crossings found in subitem (1); and

(3) the decks and approaches to bridges or culverts on major transportation routes and on roads that provide access to development at urban densities shall be no lower than two feet below the flood protection elevation as defined in part 6120.5700, subpart 5, unless it can be shown that alternative routes or access can be provided during the regional flood;

C. the structure provides for game fish movement, unless the structure is intended to impede rough fish movement or the stream has negligible fisheries value;

D. the structure will not obstruct reasonable public navigation. For bridges over public watercourses, three feet above the calculated 50-year flood stage ordinarily satisfies navigational clearance

requirements. For bridges over public waterbasins or public water wetlands, and all culverts, three feet of clearance above the ordinary high water level ordinarily satisfies navigational requirements;

E. any project proposed near an existing or proposed segment of the state trails system should be consistent therewith; and

F. bridges and walkways to islands comply with the following:

(1) bridges and walkways over watercourses to islands must be designed to cause negligible backwater effects during floods and must be securely anchored or otherwise capable of withstanding the dynamic forces of flowing water, ice, and debris; and

(2) permits for reconstruction of existing bridges or walkways over public waterbasins and public water wetlands to islands that are intended to provide public access shall be issued only if the existing crossing provides the only existing land access to the island, there is existing development on the island, and the design provides for any public navigational needs and is consistent with the natural surroundings.

Subp. 3. **Intakes and outfalls.** The construction, reconstruction, or relocation of all water intake and sewer outfall structures placed in public waters shall be approved if all of the following criteria are met:

A. adequate attention is given to methods of screening the structure from view as much as possible from the surface of the public water through the use of existing vegetation or new plantings;

B. the project is not detrimental to public values, including but not limited to fish and wildlife habitat, navigation, water supply, water quality, or storm water retention;

C. no site conditions will require frequent future disruption of the beds of public waters;

D. adequate precautions are planned during and after construction to prevent silt, soil, and other suspended particles from being discharged into public waters;

E. adjacent to the intake structure, the banks and bed of the public water are protected from erosion and scour by placement of suitable riprap shore protection;

F. the banks are revegetated by seeding and/or sodding;

G. the structure is designed by a professional engineer;

H. for intake structures, excavation is detailed in the application and on design plans. When necessary, a water appropriation permit must be obtained from the department prior to operation of the intake structure. An appropriate sized screen must be used to prevent fish intake; and

I. outfall structure design:

(1) when necessary, incorporates a stilling-basin, surge-basin, energy dissipator, or other device or devices to minimize disturbance and erosion of natural shoreline and bed resulting from peak flows;

(2) when feasible, utilizes discharge to stormwater treatment ponds, artificial stilling or sedimentation basins, or other devices for entrapment of floating trash and litter, sand, silt, debris, and organic matter prior to discharge to public waters; and

(3) when feasible, maximizes use of natural or artificial ponding areas to provide water retention and storage for the reduction of peak flows into public waters.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*

Posted: *June 11, 2008*

6115.0232 RELATIONSHIP TO STANDARDS AND CRITERIA FOR OTHER ACTIVITIES INVOLVING CHANGES IN COURSE, CURRENT, OR CROSS-SECTION.

Unless otherwise specified in other parts, parts 6115.0230 and 6115.0231 shall apply to bridges and culverts proposed as part of any other activity or activities including but not limited to: filling, parts 6115.0190 to 6115.0192; excavations, parts 6115.0200 to 6115.0202; structures, parts 6115.0210 to 6115.0212; water level controls, parts 6115.0220 to 6115.0222; drainage of public waters, parts 6115.0270 to 6115.0272; and alterations of public waters for mining, part 6115.0280.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*

Posted: *June 11, 2008*

6115.0240 APPLICATION FOR PUBLIC WATERS WORK PERMITS.

Subpart 1. **Forms and submission.** All applications pursuant to parts 6115.0150 to 6115.0280 shall be made on forms prepared by the department and submitted to the regional office for the area where the majority of the proposed project is located.

Subp. 2. **Who may apply.** Applications shall be submitted by the riparian owner of the land on which a project is proposed, except:

A. a governmental agency, public utility, or corporation authorized by law to conduct the project may apply if the property rights acquired or to be acquired are fully described in the application;

B. a holder of appropriate property rights such as a lease or easement may apply if the application is countersigned by the owner and accompanied by a copy of the lease or other agreement. A permit shall be issued for the term of the lease only, subject to cancellation prior to the termination date of the agreement if the agreement is canceled; and

C. a prospective lessee of state-owned lands may apply for a permit in the applicant's own name after requesting a lease from the departmental official responsible for the affected lands. Both the lease request and the permit application shall be processed concurrently with appropriate coordination.

Subp. 3. **Information required.** Pursuant to Minnesota Statutes, section 103G.305, an application is complete when:

- A. it includes all of the information specified in parts 6115.0150 to 6115.0280;
- B. it is accompanied by appropriate photographs, maps, sketches, drawings, or other plans that adequately describe the proposed project;
- C. it includes a brief statement regarding the following points:
 - (1) anticipated changes in water and related land resources;

- (2) unavoidable anticipated detrimental effects on the natural environment;
- (3) alternatives to the proposed action;
- (4) that the proposed project is reasonable and practical and will adequately protect public safety and promote the public welfare; and
- (5) a demonstration by the applicant that the proposed activity authorized by part 6115.0190, subpart 5; 6115.0200, subpart 5; 6115.0210, subpart 5; 6115.0215, subpart 5; 6115.0220, subpart 5; 6115.0230, subpart 5; 6115.0270, subpart 4; or 6115.0280, subpart 4, complies with all the following principles in descending order of priority:
 - (a) avoids direct or indirect impacts to public waters that may destroy or diminish the public waters;
 - (b) minimizes the impact to the public water by limiting the degree or magnitude of the public water activity and its implementation;
 - (c) rectifies the impact by repairing, rehabilitating, or restoring the affected public water;
 - (d) reduces or eliminates the impact to the public water over time by preservation and maintenance operations; and
 - (e) for a major change in the public waters, replaces unavoidable impacts to the public water by restoring degraded or impacted public waters having equal or greater public value or, if public waters restoration opportunities are not reasonably available, creating and protecting additional replacement water areas having greater public value;

D. application fees are paid. Final permits shall not be issued until any field inspection fees are paid; and

E. proof of service of a copy of the application and accompanying documents on the mayor of the city or the secretary of the board of the district is included with the application if the project is within or affects a city, watershed district, or soil and water conservation district.

Subp. 4. **Fees.** All applications shall be accompanied by an application fee as required by part 6115.0060. An additional fee may be charged for field inspections conducted by department personnel in the course of review subject to the provisions of part 6115.0080.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 17 SR 1279; 25 SR 143; 27 SR 529*

Posted: *June 11, 2008*

6115.0250 PERMIT REVIEW.

Subpart 1. **Field inspection.** The department may conduct field investigations to determine a project's nature, scope, and impact on water and related land resources. The department shall determine which applications must be investigated and such inspections shall be made in a timely fashion.

Subp. 1a. **Effect on environment and mitigation.** The commissioner may not issue a permit that causes pollution, impairment, or destruction of the air, water, land, or other natural resources so long as there is a feasible and prudent alternative consistent with the reasonable requirements of the public health, safety, and welfare. If the commissioner determines that a major change in public waters is justified and

can be authorized by parts 6115.0190, subpart 5; 6115.0200, subpart 5; 6115.0210, subpart 5; 6115.0215, subpart 5; 6115.0220, subpart 5; 6115.0230, subpart 5; 6115.0270, subpart 4; or 6115.0280, subpart 4, the permit must include provisions to compensate for the detrimental aspects of the change. Compensation for the identified detrimental aspects of the permitted project include:

- A. restoring degraded or impacted public waters having equal or greater public value;
 - B. creating or restoring additional replacement water areas having equal or greater public value;
- or
- C. any other measures approved by the commissioner that compensates for the detrimental aspects of the change.

Subp. 2. **Coordination with other agencies.** Nothing in these standards is intended to supersede or rescind the laws, rules, regulations, standards, and criteria of other federal, state, regional, or local governmental subdivisions with the authority to regulate work in the beds or on the shorelands of public waters. The issuance of a permit shall not confer upon an applicant the approval of any other unit of government for the proposed project. The department shall coordinate the review with other units of government having jurisdiction in such matters.

Subp. 3. **Procedure upon decision.** The commissioner may grant permits, with or without conditions, or deny them. In all cases, the applicant, the managers of the watershed district, the board of supervisors of the soil and water conservation district, or the mayor of the city may demand a hearing in the manner specified in Minnesota Statutes, section 103G.311, within 30 days after receiving mailed notice outlining the reasons for denying or modifying an application. Any hearing shall be conducted as a contested case hearing before an administrative law judge from the independent Office of Administrative Hearings according to Minnesota Statutes, chapter 14 and section 103G.311.

Subp. 4. **General permits.** The commissioner is authorized to issue general permits to a governmental subdivision or to the general public for classes of activities having minimal impact on public waters under which more than one activity may be conducted with a single permit.

Subp. 5. **Public water wetland permit processing.**

A. Public waters work permit applications submitted to the commissioner for proposed projects in public water wetlands shall be granted if authorized by parts 6115.0190 to 6115.0232 or parts 6115.0270 to 6115.0280 and if the public water wetland is:

- (1) assigned a shoreland classification;
- (2) classified as lacustrine wetland or deepwater habitats according to the document under item C; or
- (3) where the state or federal government has become titleholder to any of the beds or shores of the public water wetlands, subsequent to the preparation of the public waters inventory maps on file with the auditor of the county and where the responsible state or federal agency declares that the water is necessary for purposes of public ownership.

B. All other public waters work permit applications for proposed projects in public water wetlands shall be:

- (1) granted, with or without conditions, if authorized by parts 6115.0190 to 6115.0232 or 6115.0270 to 6115.0280 and if the permit application complies with provisions for sequencing under part

8420.0520, and replacement provisions under parts 8420.0522 to 8420.0544, 8420.0810, and 8420.0820, or denied; or

(2) waived pursuant to item D.

C. The following documents are incorporated by reference:

(1) Classification of Wetlands and Deepwater Habitats of the United States, Lewis M. Cowardin et al., United States Department of the Interior, Fish and Wildlife Service (1979); and

(2) Guidelines for Ordinary High Water Level (OHWL) Determinations, John Scherek and Glen Yakel, Minnesota Department of Natural Resources, Division of Waters (June 1993).

These documents are available through the Minitex interlibrary loan system and are not subject to frequent change.

D. Public waters work permits in public water wetlands:

(1) notwithstanding parts 6115.0150 to 6115.0280, the authority of the commissioner to require a permit for activities within public water wetlands is waived to the local unit of government under chapter 8420 when the commissioner has received notice or application from the landowner or project sponsor and when the commissioner has provided the applicant or project sponsor and the local unit of government a notice within 15 days of receipt of the notice or permit application that the department will waive public waters work permit jurisdiction to the local unit of government; or

(2) the commissioner shall not waive the requirement for a public waters work permit in a public water wetland for activities:

(a) allowed under part 8420.0122, subparts 1 to 7 and 10;

(b) in public water wetlands assigned a shoreland classification;

(c) in public water wetlands classified as lacustrine wetland or deepwater habitats according to the document under item C; or

(d) in public water wetlands where the state or federal government has become titleholder to any of the beds or shores of the public water wetlands, subsequent to the preparation of the public waters inventory maps on file with the auditor of the county and where the responsible state or federal agency declares that the water is necessary for purposes of public ownership.

E. Notwithstanding parts 6115.0150 to 6115.0280, the authority of the commissioner to require a permit for public road activities that are associated with the repair, rehabilitation, reconstruction, or replacement of currently serviceable existing public roads is waived to the public road authority under chapter 8420:

(1) for projects that affect less than 10,000 square feet of public water wetlands, upon receipt of a copy of the state, city, county, or town public road authority report that is submitted to the Board of Water and Soil Resources in compliance with part 8420.0544, item D, except for projects in public water wetlands:

(a) assigned a shoreland classification;

(b) classified as lacustrine wetland or deepwater habitats according to the document under item C, subitem (1); or

(c) when the state or federal government has become titleholder to any of the beds or shores of the public water wetlands, subsequent to the preparation of the public waters inventory maps on file with the auditor of the county and when the responsible state or federal agency declares that the water is necessary for purposes of public ownership; or

(2) for projects that affect 10,000 square feet or more of public water wetlands, when the commissioner has provided the public road authority notice of the waiver within 15 days of receipt of a copy of the state, city, county, or town public road authority report that is submitted to the Board of Water and Soil Resources in compliance with part 8420.0544, item D, except for projects in public water wetlands:

(a) assigned a shoreland classification;

(b) classified as lacustrine wetlands or deepwater habitats according to the document under item C, subitem (1); or

(c) when the state or federal government has become titleholder to any of the beds or shores of the public water wetlands, subsequent to the preparation of the public waters inventory maps on file with the auditor of the county and when the responsible state or federal agency declares that the water is necessary for purposes of public ownership.

Subp. 6. Wetland areas of public waters affected by public road permit projects.

A. For purposes of this subpart, "wetland areas of public waters" means areas that are contiguous with the ordinary high water level and that generally exhibit emergent vegetation within:

(1) public waterbasins;

(2) public water wetlands assigned a shoreland classification;

(3) public water wetlands classified as lacustrine wetlands or deepwater habitats according to the document under item C; or

(4) public water wetlands where the state or federal government has become titleholder to any of the beds or shores of the public water wetlands subsequent to the preparation of the public water inventory maps on file with the auditor of the county and where the responsible state or federal agency declares that the water is necessary for purposes of public ownership.

B. Public waters work permit applications submitted by a public road authority to the commissioner for proposed projects in wetland areas of public waters shall be granted if authorized by parts 6115.0190 to 6115.0232 or 6115.0270 to 6115.0280.

C. The classification of lacustrine wetlands and deepwater habitats found in Classification of Wetlands and Deepwater Habitats of the United States, Lewis M. Cowardin et al., United States Department of the Interior, Fish and Wildlife Service (1979) is incorporated by reference. This document is available through the Minitex interlibrary loan system and is not subject to frequent change.

D. Notwithstanding parts 6115.0150 to 6115.0280, the authority of the commissioner to require a permit for public road activities in, on, or over wetland areas of public waters according to the document under item C is waived for:

(1) all activities authorized by the local government unit under chapter 8420 when the commissioner has received notice or application from the public road authority and when the commissioner has notified the public road authority and the local unit of government of the waiver within 15 working days of receipt of the notice or application; or

(2) activities authorized by the public road authority having jurisdiction under chapter 8420 for public road activities that are associated with the repair, rehabilitation, reconstruction, or replacement of currently serviceable existing public roads when the commissioner has notified the public road authority of the waiver within 15 working days of receipt of a copy of the state, city, county, or town public road authority report that is submitted to the Board of Water and Soil Resources in compliance with part 8420.0544, item D.

Subp. 7. Written agreements with local government units.

A. For projects affecting both public waters and wetlands, the local government may, by written agreement with the commissioner, waive the requirement for a replacement plan or a no-loss or exemption determination if a public waters work permit is required and the commissioner includes provisions of Minnesota Statutes, sections 103A.201, 103B.3355, 103G.222, and 103G.2372, and rules adopted thereunder, in the public waters work permit.

B. The written agreement may be done on a project-by-project basis when:

(1) the agreement identifies the parties having authority to make the agreement and the proposed project subject to the agreement;

(2) the commissioner requires an individual public waters work permit for the proposed project;

(3) the majority of the proposed project impacts on public waters and wetlands are to public waters;

(4) the proposed wetland impacts are subject to approval of a wetland replacement plan or a no-loss or exemption determination by the local unit of government according to part 8420.0210, 8420.0220, or 8420.0230;

(5) the local government unit provides the commissioner with specific language addressing no-loss or exemption determinations or allowable wetland impacts and required wetland replacement for incorporation into the commissioner's public waters work permit; and

(6) the local government unit agrees to assist the commissioner should appeals be brought against the commissioner based on the language impacting the wetlands covered in the public waters work permit.

C. The written agreement may be done on a local unit of government basis, a watershed basis, a waterbody basis, or a project activity basis when:

(1) the written agreement identifies the parties having authority to enter into the agreement, the location of agreement application, and the scope of proposed activities subject to the agreement;

(2) the commissioner requires an individual public waters work permit for the proposed project;

(3) the majority of the proposed project impacts to public waters and wetlands are to public waters;

(4) the wetland impacts are subject to approval of a wetland replacement plan or a no-loss or exemption determination by the local unit of government according to part 8420.0210, 8420.0220, or 8420.0230;

(5) the local government unit provides the commissioner with specific language addressing no-loss or exemption determinations or allowable wetland impacts and required wetland replacement for incorporation into the commissioner's public waters work permit;

(6) the local government unit agrees to assist the commissioner should appeals be brought against the commissioner based on the language impacting the wetlands covered in the public waters work permit; and

(7) the agreement addresses enforcement procedures and procedures for the commissioner or the local government unit to terminate the written agreement.

Subp. 8. **Local plan implementation.** Notwithstanding parts 6115.0150 to 6115.0280, the commissioner may authorize alternative regulation of public waters activities that are specifically identified in a local plan, ordinance, or other similar written document approved by the commissioner and subject to the following:

- A. the proposed activities are subject to the following principles in descending order of priority:
 - (1) avoid direct or indirect impacts to the public water that may destroy or diminish the public water;
 - (2) minimize the impact to the public water by limiting the degree or magnitude of the public water activity;
 - (3) rectify the impact by repairing, rehabilitating, or restoring the affected public water;
 - (4) reduce or eliminate the impact to the public water over time by preservation and maintenance operations; and
 - (5) replace unavoidable impacts to the public water when a major change in the resource is justified, by including provisions to compensate for the detrimental aspects of the change according to subpart 1a;
- B. the proposed activities, their dimensional standards, the criteria used to issue or deny applications, and allowable locations are identified in the local plan;
- C. adverse effects of the proposed activity on the physical and biological character of the area are subject to mitigation measures identified in the local plan;
- D. the proposed activities are consistent with locally adopted controls;
- E. the plan addresses enforcement procedures;
- F. the plan includes procedures for the commissioner to reassume the permit authorities in parts 6115.0150 to 6115.0280 upon notice, if determined necessary by the commissioner or plan sponsor;
- G. the local plan sponsor publishes a notice in the State Register identifying:
 - (1) the local plan sponsor that is developing an alternative plan for regulation of public waters;
 - (2) the scope of activities and the location of the public waters impacted by the plan;
 - (3) the groups the local plan sponsor has been working with in the development of the plan;
 - (4) the name and address of the local plan sponsor who can be contacted for copies of the plan, and the name and address of the plan contact for the department; and

(5) a statement that the interested public has a time period of no less than 30 days in which to forward comments to the plan sponsor and the department plan contact for consideration before the plan sponsor submits the draft plan to the commissioner for approval;

H. when considering whether the plan should be approved, the commissioner shall determine that:

(1) the proposed plan, when not in conformity to parts 6115.0150 to 6115.0280, provides an explanation of how the proposed changes are justified;

(2) the public values provided by public waters subject to the plan are maintained or improved; and

(3) the proposed plan provides a mechanism for a periodic review of the plan contents and a procedure to revise the plan, if determined necessary by the commissioner and plan sponsor, or to terminate the plan upon notice being provided by either the plan sponsor or commissioner; and

I. nothing in the review of local plans proposed under this part shall be construed as prohibiting or discouraging a local plan from creating standards that are more restrictive than parts 6115.0150 to 6115.0280.

Statutory Authority: *MS s 14.386; 103G.315; 105.415*

History: *8 SR 533; L 1984 c 640 s 32; 25 SR 143; 27 SR 529; 32 SR 281; 34 SR 145*

Posted: *August 27, 2009*

6115.0255 PUBLIC WATERS ENFORCEMENT PROCEDURES.

Subpart 1. **Enforcement options.** Parts 6115.0150 to 6115.0280 may be enforced through one or any combination of the following authorities:

- A. criminal proceedings under Minnesota Statutes, section 103G.141, subdivision 1;
 - B. orders of the commissioner under Minnesota Statutes, sections 103G.251 and 103G.315;
- and
- C. cease and desist orders, restoration orders, and replacement orders under Minnesota Statutes, section 103G.2372.

The choice of enforcement authorities is dependent on the scope of the activity conducted without a public waters work permit.

Subp. 2. **Enforcement authorities.** The commissioner, conservation officers, and other peace officers may issue cease and desist orders and restoration and replacement orders according to Minnesota Statutes, section 103G.2372.

Subp. 3. **Cease and desist orders.**

A. Cease and desist orders may be issued when the enforcement authority has probable cause to believe that any activity is being or has been conducted in public waters without a valid permit from the commissioner.

B. A cease and desist order must not be issued if a landowner has documentation of a valid public waters work permit from the commissioner authorizing the work that was done or if a landowner has documentation proving that no permit is required.

C. The cease and desist order shall direct a landowner to:

- (1) stop all work, conduct no further work, and take immediate corrective action to stabilize the site from imminent erosion or restore water flow if ordered by the enforcement authority; and
- (2) immediately submit a written project application form to the area hydrologist.

D. The enforcement authority issuing a cease and desist order shall promptly submit copies of the order to the commissioner.

E. The commissioner or agent shall review the evidence, including any evidence produced by a landowner, inspect the site if necessary, and determine:

- (1) whether the area in question is a public water;
- (2) whether a public waters work permit is required; and
- (3) whether a public waters work permit application should be submitted or whether a restoration order or replacement order should be issued immediately, if it is determined that a public waters work permit application submitted in response to the cease and desist order would be denied in its entirety for being inconsistent with parts 6115.0150 to 6115.0280.

F. Pending a resolution of any criminal proceedings, if it is determined that the activity does not require a permit or if a permit is issued, the commissioner or agent shall request that the enforcement authority rescind the cease and desist order, pending the outcome of any decision that is appealed, and notify the soil and water conservation district, the commissioner, and the landowner. If the application is denied, the commissioner shall immediately notify the soil and water conservation district, the enforcement authority, and the landowner.

G. A cease and desist order must advise the landowner that violation of the order is a misdemeanor.

Subp. 4. Restoration and replacement orders.

A. If the commissioner or agent, with the concurrence of the enforcement authority, determines that restoration may not restore all the loss caused by the drain, excavate, structure, or fill activity, the enforcement authority may order restoration, a combination of restoration and replacement, or replacement rather than restoration.

B. The enforcement authority shall issue a restoration order or replacement order if:

- (1) a cease and desist order has been issued and the landowner has not submitted a written project notification form to the area hydrologist within three weeks; or
- (2) the commissioner has denied a permit application, determined that a permit application submitted for the activity subject to a cease and desist order would be denied in its entirety for being inconsistent with parts 6115.0150 to 6115.0280, or determined that some combination of restoration of the site and off-site restoration or replacement is necessary.

C. Promptly upon being informed of the need, the commissioner or agent shall inspect the site and prepare a plan for restoring the site. Restoration shall be ordered unless the commissioner or agent, with the concurrence of the enforcement authority, concludes that restoration would cause additional impairment

or further degradation of the public water. The commissioner or agent shall incorporate the restoration plan into a restoration order and send it to the enforcement authority for service in person or by certified mail to the landowner.

D. A restoration order must specify a date by which the landowner must restore the public waters according to the commissioner's plan and obtain a certificate of satisfactory restoration from the commissioner or agent.

E. A replacement order must specify a date by which the landowner must submit a replacement plan to the commissioner and a subsequent date by which the landowner must replace the public waters and obtain a certificate of satisfactory replacement from the commissioner or agent.

F. A restoration or replacement order must advise the landowner that violation of the order is a misdemeanor.

G. If, as part of a misdemeanor proceeding, the court orders restoration or replacement, the commissioner or agent, with the concurrence of the enforcement authority, shall determine which is appropriate, and if it is restoration, the method of restoration. If the court orders replacement, the landowner must follow the replacement plan ordered by the commissioner or agent.

H. If a landowner seeks approval of a public waters work permit after the proposed project has already impacted the public water, the commissioner may require the landowner to replace the impacted public water at a ratio not to exceed twice the replacement ratio otherwise required.

Subp. 5. **Appeals of replacement and restoration orders.**

A. A landowner may appeal the terms and conditions of a restoration or replacement order issued under subparts 2 to 4, to the commissioner, within 30 days of receipt of written notice by filing a written request for review. If the written request is not submitted within 30 days, the restoration or replacement order becomes final. The commissioner shall review the request and supporting evidence and render a decision within 60 days of the request for review.

B. If a landowner wishes to appeal the decision of the commissioner after review under item A, the landowner must file a written request within 30 days for a contested case hearing under Minnesota Statutes, chapter 14. The demand for hearing must be accompanied by a bond as required under Minnesota Statutes, section 103G.311, subdivision 6.

Statutory Authority: *MS s 14.386; 103G.315; L 2000 c 382 s 20*

History: *25 SR 143; 27 SR 529*

Posted: *June 11, 2008*

6115.0260 STATUTORY REQUIREMENTS.

Further provisions for the administration of parts 6115.0150 to 6115.0280 are found in Minnesota Statutes, chapter 103G, including but not limited to sections 103G.135, 103G.141, 103G.241, 103G.251, 103G.295, 103G.301, 103G.305, 103G.311, and 103G.315.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*

Posted: *June 11, 2008*

6115.0270 DRAINAGE OF PUBLIC WATERS.

Subpart 1. **Goals.** It is the goal of the department to protect and preserve public waterbasins and public water wetlands from damage or destruction by drainage.

Subp. 2. **Scope.** Parts 6115.0270 to 6115.0272 relate to the partial drainage or temporary drawdown of public waterbasins and public water wetlands for all purposes except mining of metallic or nonmetallic minerals which are subject to provisions of part 6115.0280.

Subp. 3. **Prohibited activity.** The permanent or total drainage of public waterbasins and public water wetlands is prohibited.

Subp. 4. **Permits required.** A permit is required for the partial drainage or temporary drawdown of public waterbasins and public water wetlands and shall be granted if all of the following conditions are met:

- A. the proposed project is intended to achieve one or more of the following purposes:
 - (1) improve navigational or recreational uses;
 - (2) improve or restore fish or wildlife habitat;
 - (3) expose sediment in order to remove or eliminate nutrients or contaminants;
 - (4) alleviate flooding of agricultural lands caused by artificial obstruction of downstream drainage or increased upstream discharge; or
 - (5) allow the mining of iron ore, taconite, copper, copper-nickel, or nickel under Minnesota Statutes, section 103G.297;
- B. the project will involve a minimum of encroachment, change, or damage to the environment, including but not limited to fish and wildlife habitat, navigation, water supply, water quality, and storm water retention;
- C. adverse effects on the physical or biological character of the waters are subject to feasible and practical measures to mitigate the effects;
- D. the proposed project is consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved; and
- E. the proposed project is consistent with water and related land management plans and programs of local and regional governments, provided such plans and programs are consistent with state plans and programs.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*

Posted: *June 11, 2008*

6115.0271 SPECIFIC STANDARDS; DRAINAGE.

In addition to compliance with the general standards in part 6115.0270, subparts 2 to 4, specific requirements for drainage or drawdown activities shall be met as follows:

A. the drainage or diversion of public waters for mining iron ore, taconite, copper, copper-nickel, or nickel shall be approved only when all of the provisions of Minnesota Statutes, section 103G.297 and part 6115.0280 have been met;

B. the drainage or diversion of public waters for mining all other metallic and nonmetallic minerals shall be approved only when the public waters being drained are replaced by public waters that will have equal or greater public value, subject to provisions of part 6115.0280; and

C. all other drainage or diversion of public waters allowed in part 6115.0270, subparts 2 to 4, shall be approved if all of the following specific criteria are met:

(1) for public waterbasins and public water wetlands, permits shall be issued only to governmental agencies having the authority to undertake such projects. In addition, a public need for the partial drainage or temporary drawdown shall be established by specifying the public interests to be enhanced;

(2) written consent for the partial drainage or temporary drawdown of public waterbasins and public water wetlands is obtained from all riparian owners;

(3) partial drainage or temporary drawdown of public waterbasins and public water wetlands shall be approved only when the applicant has submitted data to confirm:

(a) that the partial drainage will improve navigation or recreational uses;

(b) that the partial drainage will improve or restore fish and wildlife habitat; or

(c) that agricultural lands have been flooded due to artificial obstruction of downstream drainage or increased upstream discharge;

(4) any proposed temporary drawdown shall not exceed two years in duration under normal climatic conditions;

(5) there are no feasible and practical means to attain the intended purpose without drainage; and

(6) the proposal adequately protects public safety and promotes the public welfare.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*

Posted: *June 11, 2008*

6115.0272 RELATIONSHIP TO STANDARDS AND CRITERIA FOR OTHER ACTIVITIES INVOLVING CHANGES IN COURSE, CURRENT, OR CROSS-SECTION.

Unless otherwise specified in other parts, parts 6115.0270 and 6115.0271 shall apply to drainage activities proposed as part of any other activity or activities including but not limited to: filling, parts 6115.0190 to 6115.0192; excavations, parts 6115.0200 to 6115.0202; structures, parts 6115.0210 to

6115.0212; water level controls, parts 6115.0220 to 6115.0222; and bridges and culverts, parts 6115.0230 to 6115.0232.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533*

Posted: *June 11, 2008*

6115.0280 ALTERATIONS OF PUBLIC WATERS FOR MINING.

Subpart 1. **Goals.** It is the goal of the department to ensure that alterations of public waters for mining or reclamation of mining areas will minimize adverse environmental effects, preserve water resources to the maximum extent feasible and practical, and encourage the planning of future land and water utilization while at the same time promoting the orderly development of mining and the use of sound mining practices.

Subp. 2. **Scope.** Mining activities which may involve alterations of public waters include the mining of metallic minerals including but not limited to iron ore, taconite, copper, copper-nickel, nickel, cobalt, and gold; and the mining of nonmetallic minerals including but not limited to sand and gravel, stone, clay, marl, oil, gas, and coal; and the mining of peat.

Subp. 3. **Permits required for alterations of public waters.** Permits are required for any alterations of public waters to facilitate mining of iron ore, taconite, copper, copper-nickel, or nickel minerals or reclamation of mining areas provided that:

A. permits to mine are obtained when required by Minnesota Statutes, sections 93.44 to 93.51; and

B. permits for alterations in public waters shall be granted according to Minnesota Statutes, section 103G.297. Applications for permits for alterations in public waters shall include an analysis showing why underground mining without drainage, diversion, or control of public waters is not feasible or economical.

Subp. 4. **Permit required for mining of certain minerals and peat.** Permits are required for mining of nonmetallic minerals, peat, and other metallic minerals not regulated in Minnesota Statutes, section 103G.297, or reclamation of mining areas and shall be granted if the applicant provides evidence that:

A. there is no other feasible and practical location for the proposed mining activity;

B. there is no other feasible or economical method to mine except by draining, diverting, or controlling the public waters;

C. the proposed alteration of public waters is necessary and no other feasible and economical method for it is reasonably available;

D. the proposed alteration of public waters will not substantially impair the interests of the public in lands or waters or the substantial beneficial public use thereof, except as expressly authorized in the permit, and will not endanger public health or safety;

E. the proposed mining operations will be in the public interest and that the public benefits resulting from it will be sufficient to warrant the proposed alteration of public waters;

F. the activities represent the minimal impact solution with respect to watershed modifications, watercourse diversions or changes, drainage, runoff and seepage management, and avoidance of major adverse changes in the ecosystem of public waters having substantial public value;

G. whenever public watercourses must be diverted or changed to facilitate mining, the design and construction of the diversion or change shall provide for:

- (1) maintenance of adequate flows and levels in order to protect instream flows and prevent downstream flooding;
 - (2) measures to prevent bank erosion and sedimentation in order to protect water quality;
- and
- (3) details on the location, relocation, and utilization of the watercourse after cessation of mining;

H. whenever public waterbasins and public water wetlands are allowed to be drained to facilitate mining, and such drainage is justified and legally permitted, compensation for the loss of the basin is provided for by either:

- (1) immediate replacement of the public waterbasins and public water wetlands with waters of equal or greater value; or
- (2) submission of acceptable plans for the eventual replacement of the public waterbasins and public water wetlands with waters of equal or greater value upon cessation of mining activities; and

I. whenever a water impoundment is necessary and justified to facilitate mining, the design, construction, operation, and maintenance of the impoundment structure shall:

- (1) meet the applicable requirements of parts 6115.0300 to 6115.0520 pertaining to dam safety;
- (2) provide hydrologic and hydraulic measures to ensure that any public waters downstream of the impoundment area are adequately protected with respect to maintenance of water quantity and quality and prevention of flooding; and
- (3) include plans detailing the disposition and utilization of the impoundment area after cessation of mining activities.

Subp. 5. **Compensatory measures for detrimental aspects of mining.** Whenever metallic, nonmetallic, and peat mining activities in the beds of public waters will result in detrimental effects on the physical and biological character of public waters, measures to compensate for the detrimental aspects shall be required in the permit conditions.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*

Posted: *June 11, 2008*

DAMS

6115.0300 PURPOSE AND STATUTORY AUTHORITY.

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 parts, the department shall be guided by the policies and requirements declared in Minnesota Statutes, section 84.083, and chapters 103A, 103B, 103E to 103G, and 116D.

The rules are pursuant to Laws of Minnesota 1978, chapter 779, section 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: shorelands, floodplains, 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.

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.

Statutory Authority: *MS s 103G.515; 103G.531; 105.535*

Posted: *June 11, 2008*

6115.0310 SCOPE.

These parts shall apply to all dams defined in part 6115.0320 unless excluded in other sections of the 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 (parts 6115.0150 to 6115.0210, 6115.230, and 6115.0240 to 6115.0260).

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

All provisions of part 6115.0220 are superseded by these parts as they relate to dams as defined herein, except the section relating to water level controls.

Statutory Authority: *MS s 105.535*

Posted: *June 11, 2008*

6115.0320 DEFINITIONS.

Subpart 1. **Scope.** For the purposes of these parts, certain terms used herein shall be interpreted as follows. These definitions are in addition to those contained in part 6115.0170, except where the same word is contained in both lists of definitions in which case the definitions in these parts shall apply in respect to dam safety administration.

Subp. 2. **Alteration.** "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.

Subp. 3. **Commissioner.** "Commissioner" means the commissioner of the Department of Natural Resources and any duly authorized representative.

Subp. 4. **Cost.** "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.

Subp. 5. **Dam.** "Dam" means any artificial barrier, together with appurtenant works, which does or may impound water and/or waste materials containing water except:

A. 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;

- B. any artificial barrier which is not in excess of six feet in height regardless of storage capacity or which has a storage capacity not in excess of 15 acre-feet regardless of height;
- C. underground or elevated tanks to store water and/or waste;
- D. 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;
- E. United States owned dams;
- F. 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 parts 6115.0200 to 6115.0260 as further explained in part 6115.0340.

Subp. 6. **Enlargement.** "Enlargement" means any change which may raise the maximum storage elevation of the dam.

Subp. 7. **Height.** "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.

Subp. 8. **Maintenance.** "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.

Subp. 9. **Maximum storage elevation.** "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.

Subp. 10. **Owner.** "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.

Subp. 11. **Repair.** "Repair" means any work which will change the hydraulic capacity of the structure or entail any changes in the structural character of a dam.

Subp. 12. **Shall.** "Shall" is mandatory and not permissive.

Subp. 13. **Surface.** "Surface" shall be determined by multiplying total dam length by average height.

Subp. 14. **Total dam length.** "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.

Statutory Authority: *MS s 105.535*

Posted: *June 11, 2008*

6115.0330 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.

Statutory Authority: *MS s 105.535*

Posted: *June 11, 2008*

6115.0340 CLASSIFICATION OF DAMS.

All existing and proposed dams shall be classified by the commissioner into the following three hazard classes: those dams where failure, misoperation, or other occurrences or conditions would probably result in:

A. 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;

B. Class II: possible health hazard or probable loss of high-value property, damage to secondary highways, railroads or other public utilities, or limited direct or indirect economic loss to the public other than that described in Class III; and

C. 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 definition of dam at part 6115.0230, subpart 5, definition of dam, shall be subject to applicable provisions of parts 6115.0200 to 6115.0260, and shall not be subject to these dam safety rules. Changes in development in the vicinity of the dam may result in future reclassification.

Statutory Authority: *MS s 105.535*

Posted: *June 11, 2008*

6115.0350 GENERAL PROCEDURES FOR ALTERATION, REPAIR, OR REMOVAL OF A DAM.

Subpart 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 subpart 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 shall accompany the application in the form of a check or money order payable to the commissioner of management and budget.

Subp. 2. Emergency work. 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 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 or 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 any other steps essential to safeguard life and property.

Subp. 3. Removal. Before commencing removal, the owner shall comply with the application requirements of subpart 1. 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.

Statutory Authority: *MS s 105.535*

History: *L 2003 c 112 art 2 s 50; L 2009 c 101 art 2 s 109*

Posted: *August 7, 2009*

6115.0360 INSPECTIONS.

Subpart 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 part 6115.0340.

Subp. 2. Dam safety. The commissioner shall make an initial detailed systematic technical inspection and evaluations of every Class I, II, or III dam in order to assess the general safety conditions including:

- A. a review and analysis of available data on the design, construction, and operation;
- B. a visual inspection of the dam and downstream and upstream areas:
 - (1) an examination of significant structural, geotechnical, hydraulic, and hydrologic features including, where applicable, electrical and mechanical equipment for the operation of control facilities;
 - (2) evidence of leakage, erosion, seepage, slope instability, undue settlement, displacement, tilting, cracking, deterioration, and improper functioning of drains and relief wells; and

(3) adequacy and quality of maintenance and operating equipment and procedures;

C. a 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 emergency measures or actions; corrective actions relating to design, construction, and operation; and additional detailed studies, investigations, and analyses.

Subp. 3. **Timing.** Subject to the availability of staff and funds:

A. 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.

B. After the initial detailed inspections, the commissioner shall make periodic inspections of dams based on the following schedule: Class I dams, at least one time every year; Class II dams, at least one time every four years; and Class III dams, at least one time every eight years. The commissioner shall utilize the services of governmental agencies to the maximum extent feasible to provide for periodic inspections.

Subp. 4. **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.

Statutory Authority: *MS s 103G.515; 105.535*

History: *25 SR 1916*

Posted: *June 11, 2008*

6115.0370 TRANSFER OF DAM 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 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 Minnesota Statutes, section 103G.525.

Statutory Authority: *MS s 103G.515; 103G.531; 105.535*

Posted: *June 11, 2008*

6115.0380 OPERATION AND MAINTENANCE.

Subpart 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.

Subp. 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.

Statutory Authority: *MS s 105.535*

Posted: *June 11, 2008*

6115.0390 TERMINATION OF OPERATIONS AND PERPETUAL MAINTENANCE.

Subpart 1. **Owner's duty.** Unless the dam is removed, the owner shall perpetually maintain the dam and appurtenances so as to ensure the integrity of the structure.

Subp. 2. **Financial responsibility.** The commissioner may impose such requirements as may be necessary prior to the ultimate termination of the owner's operation to ensure that the owner will be financially responsible for carrying out the activities required for perpetual maintenance, and that adequate funding will exist.

Subp. 3. **Plans for termination.** In respect to dams utilized for waste disposal, 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 channeled waters;
- C. monitoring and mitigation of surface water and groundwater pollution;
- D. silt, sedimentation, and erosion control; and
- E. vegetation and landscaping.

Statutory Authority: *MS s 105.535*

Posted: *June 11, 2008*

6115.0400 REPORTS TO LEGISLATURE ON PUBLICLY OWNED DAMS.

As required by Laws of Minnesota 1978, chapter 779, section 7 (Minnesota Statutes, section 103G.511), 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.

Statutory Authority: *MS s 103G.515; 103G.531; 105.535*

Posted: *June 11, 2008*

6115.0410 NEW DAMS OR ENLARGEMENTS.

Subpart 1. **Waivers for Class III dams.** 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.

Subp. 2. **Permit application.** A separate application, including a preliminary report for each new dam or each dam proposed to be enlarged, shall be filed with the commissioner upon forms provided by the commissioner which shall contain the following:

- A. name and address of the owner(s) or prospective owner;
- B. purpose;
- C. location, type, size, and height of the dam; and
- D. 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.

Subp. 3. **Preliminary report.** The preliminary report shall consist of:

- A. A general statement setting forth the effect on the environment.
- B. Maps showing the location of 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 facilities including dwellings affected by the proposed dam. State, county, and USGS maps and aerial photographs may be used for this purpose.
- C. A written report of surface conditions, i.e. geology, topography, which is based on a field examination by the applicant's engineer and other qualified personnel.
- D. Typical cross-sections of the dam accurately showing elevations, proposed impoundment levels, and top width.
- E. Logs of borings in the foundation and in the borrow areas, and results of seismic and resistivity subsurface investigations, when they are readily available.
- F. 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.

- G. A preliminary cost estimate.
- H. Where applicable, future plans on ultimate project size including dams and impoundments.
- I. 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 parts 6115.0150 to 6115.0260.

Subp. 4. **Filing fees.** Each application for a permit must include a \$15 fee in the form of a check or money order payable to the commissioner of management and budget.

Subp. 5. **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 Minnesota Statutes, section 326.13, clause (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.

Subp. 6. **Final design requirements.** Upon acceptance and agreement by the commissioner of the preliminary report, the applicant shall submit to the commissioner, for approval, a final design report, together with plans and specifications and the initial inspection fee. The final design report shall include, but is not 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, free-board 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 postoperational maintenance and abandonment considerations; surveillance and inspection programs; and

- C. a detailed cost estimate.

Subp. 7. **Plans and specifications.** 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. Specifications shall contain:

- A. general provisions, specifying the rights, duties, responsibilities of the owner, designer, contractor; the prescribed order of work;

B. technical provisions describing approved work methods, equipment materials, and desired end results; and

C. special conditions.

Subp. 8. **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 socioeconomic 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 socioeconomic base of the area involved.

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 consideration 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 on current, prudent engineering practice and the hazard classification.

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

Subp. 9. **Work inspection and construction reports.** 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 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 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 as provided in item C.

(3) 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 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, the commissioner shall order the owner to revise designs, plans, and specifications.

(5) At the commissioner's 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 days in advance of start of construction.

B. Permanent markers. At least one 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, cutoff trench, grouting, etc; instrumentation installation and maintenance of records and readings; geologic mapping, if any, of exposed foundations; 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.

Subp. 10. **As-built plans and data.** Immediately upon completion of construction the permittee shall file supplementary drawings or descriptions of the dam as actually constructed, or any other items which may be of permanent value bearing on the adequacy and permanency of the dam. In enlargements the data need apply only to the new work.

Subp. 11. **Statement of completion and affidavit of cost.** Within 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 designs, 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 owner by certified mail of the amount within 15 days including notice that permittee may appear

within 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.

Subp. 12. **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 an 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.

Subp. 13. **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.

Statutory Authority: *MS s 105.535*

History: *17 SR 1279; L 2003 c 112 art 2 s 50; L 2009 c 101 art 2 s 109*

Posted: *August 7, 2009*

6115.0420 LEGAL CLAIMS.

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.

Statutory Authority: *MS s 105.535*

Posted: *June 11, 2008*

6115.0430 LIABILITY OF OWNER AND PERMITTEE.

Nothing in these parts 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.

Statutory Authority: *MS s 105.535*

Posted: *June 11, 2008*

6115.0440 OWNER'S RIGHTS.

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

Statutory Authority: *MS s 105.535*

Posted: *June 11, 2008*

6115.0450 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.

Statutory Authority: *MS s 105.535*

Posted: *June 11, 2008*

6115.0460 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.

Statutory Authority: *MS s 105.535*

Posted: *June 11, 2008*

6115.0470 ACQUISITION OF PROPERTY.

Where 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.

Statutory Authority: *MS s 105.535*

Posted: *June 11, 2008*

6115.0480 ASSIGNMENT OF PERMITS.

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.

Statutory Authority: *MS s 105.535*

Posted: *June 11, 2008*

6115.0490 WARNING SYSTEMS AND EMERGENCY PROCEDURES.

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 most practical and expeditious means for warning considering the time factor involved based on the proximity of the dam to affected parties. 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.

Statutory Authority: *MS s 105.535*

Posted: *June 11, 2008*

6115.0500 PERMIT AND HEARING PROCEDURES.

Parts 6115.0300 to 6115.0520 are subject to the permit and public hearing provisions of Minnesota Statutes, sections 103G.251, 103G.295, 103G.297, and 103G.301 to 103G.315, including:

- A. The commissioner must act on permit applications within 30 days of the time that all required data and fees are filed in the commissioner's office.
- B. 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.
- C. Whether or not a dam is under permit, on determining that it is unsafe or needs repair or alteration, the commissioner shall notify the owner to repair, alter, or remove the dam as the exigencies of the case may require.
- D. An order requiring immediate action is effective on the date thereof, but shall not be in effect for more than 30 days from that date unless the permittee is on the same date mailed written notice of the order which includes notice of a Minnesota Statutes, section 103G.311, public hearing on a date not more than 30 days from the date of the notice.
- E. 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 part 6115.0410, subpart 9, item A, subitem (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.
- F. 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.

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

Statutory Authority: *MS s 103G.515; 103G.531; 105.535*

History: *17 SR 1279*

Posted: *June 11, 2008*

6115.0510 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 personal expense. Whenever information or conditions required by these parts is unnecessary, the commissioner shall waive those provisions and shall allow appropriate revisions to make the requirements less burdensome.

Statutory Authority: *MS s 105.535*

History: *17 SR 1279*

Posted: *June 11, 2008*

6115.0520 INSPECTION FEES.

Subpart 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.

Subp. 2. **Fee schedule.** The initial fee required by part 6115.0410, subpart 6 shall be based on the following formula and no fees pursuant to parts 6115.0010 to 6115.0040 shall be charged:

A. for the first \$100,000 of estimated cost (as defined in part 6115.0320, 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 2-1/2 percent;

B. for the next \$400,000, 1-1/2 percent;

C. for the next \$500,000, one percent;

D. one-half of one percent of all costs in excess of \$1,000,000; and

E. if the final total cost exceeds the estimate, the difference as provided in part 6115.0410, subpart 11.

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 costs exceeds the estimate the applicant shall pay the difference.

Subp. 3. **Periodic fees.** Periodic fees shall be charged to owners for each year and inspection is made pursuant to part 6115.0360, subpart 3, of \$30 per dam plus an additional fee based on surface (as defined in part 6115.0320) 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.

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

Statutory Authority: *MS s 105.535*

Posted: *June 11, 2008*

WATER APPROPRIATION AND USE PERMITS

6115.0600 POLICY.

The purpose of these parts is to provide for the orderly and consistent review of permit applications for appropriation and use of waters of the state in order to conserve and utilize the water resources of the state in the public interest. In the application of these parts, the Department of Natural Resources shall be guided by the policies and requirements declared in Minnesota Statutes, section 84.083, and chapters 103A, 103B, 103E to 103G, and 116D.

Any appropriation must be consistent with laws and rules of federal, state, and local governments.

Statutory Authority: *MS s 103G.515; 103G.531; 105.535*

Posted: *June 11, 2008*

6115.0610 PURPOSE AND STATUTORY AUTHORITY.

These parts set forth minimum standards and criteria pertaining to the regulation, conservation, and allocation of the water resources of the state, including the review, issuance, and denial of water appropriation applications and the modification, suspension, or termination of existing permits.

Further provisions for the administration of these parts are found in Minnesota Statutes, section 84.083, and chapters 103A, 103B, and 103E to 103G. Permits for water appropriation for mining shall be in agreement with provisions of Minnesota Statutes, section 103G.297.

Statutory Authority: *MS s 103G.515; 103G.531; 105.535*

Posted: *June 11, 2008*

6115.0620 SCOPE.

Permits shall be required for, and these parts shall apply to, any appropriation of waters of the state, except for the following:

A. Appropriation of water for domestic uses serving less than 25 persons for general residential purposes.

- B. Test pumping of a groundwater source.
- C. Withdrawal for any use at a rate not to exceed 10,000 gallons per day and totaling no more than 1,000,000 gallons per year.
- D. Agricultural field tile or open ditch drainage systems, including pumping, to remove water from crop lands. This shall not preclude the need for compliance with Minnesota Statutes, chapter 103E and for permits for changes in course, current, or cross-section of public waters in the event that the agricultural drainage system adversely affects public waters. Adverse effects on public waters may include partial or complete drainage of public waters, high water or flooding conditions on surrounding lands, and accelerated erosion and sedimentation.
- E. Reuse and discharge of waters resulting from an appropriation of waters of the state for which a permit has been granted, subject to applicable laws, and rules of other state and federal governmental agencies.

Statutory Authority: *MS s 103G.515; 103G.531; 105.535*

History: *L 1985 c 172*

Posted: *June 11, 2008*

6115.0630 DEFINITIONS.

Subpart 1. **Scope; shall.** For the purpose of these rules, the terms or words defined in this part have the meanings given therein, except where the context clearly indicates otherwise. The word "shall" is mandatory, not permissive.

Subp. 2. **Aquifer.** "Aquifer" means any water-bearing bed or stratum of earth or rock capable of yielding groundwater in sufficient quantities that can be extracted.

Subp. 3. **Appropriation.** "Appropriation" shall have the meaning prescribed in Minnesota Statutes, section 105.37, subdivision 5, "appropriation includes but is not limited to taking, regardless of the use to which the water is put."

Subp. 4. **Artesian aquifer or confined aquifer.** "Artesian aquifer" or "confined aquifer" means a water body or aquifer overlain by a layer of material of less permeability than the aquifer. The water is under sufficient pressure so that when it is penetrated by a well, the water will rise above the top of the aquifer. A flowing artesian condition exists when the water flow is at or above the land surface.

Subp. 5. **Basin.** "Basin" means a depression capable of containing water which may be filled or partly filled with waters of the state. It may be a natural, altered, or artificial depression.

Subp. 6. **Commissioner.** "Commissioner" refers to the commissioner of the Department of Natural Resources or the commissioner's authorized representative.

Subp. 7. **Consumptive use or consumption.** "Consumptive use" or "consumption" refers to water withdrawn and not directly returned to the same waters as the source for immediate further use in the area.

Subp. 8. **Division.** "Division" means the Division of Waters, Department of Natural Resources.

Subp. 9. **Domestic use.** "Domestic use" means use for general household purposes for human needs such as cooking, cleaning, drinking, washing, and waste disposal, and uses for on-farm livestock watering excluding commercial livestock operations which use more than 10,000 gallons per day and 1,000,000 gallons per year.

Subp. 10. **Dug pit.** "Dug pit" means an artificial excavation such as sump, trench, pond, water hole, or other basin constructed for the purpose of intercepting and capturing surface and ground water, and often involving groundwater under water table or unconfined conditions.

Subp. 11. **Groundwater.** "Groundwater" means subsurface water in the saturated zone. The saturated zone may contain water under atmospheric pressure (water table condition), or greater than atmospheric pressure (artesian condition).

Subp. 12. **Protected flow.** "Protected flow" is defined as the amount of water required in the watercourse to accommodate instream needs such as water-based recreation, navigation, aesthetics, fish and wildlife habitat, water quality, and needs by downstream higher priority users located in reasonable proximity to the site of appropriation.

Subp. 13. **Protection elevation.** "Protection elevation" is defined as the water level of the basin necessary to maintain fish and wildlife habitat, existing uses of the surface of the basin by the public and riparian landowners, and other values which must be preserved in the public interest.

Subp. 14. **Public water supply.** "Public water supply" refers to the various supplies of water used primarily for domestic supply purposes and obtained from a source or sources by a municipality, a water district, a person, or corporation where water is delivered through a common distribution system, as further defined in Minnesota Statutes, section 144.382, subdivision 4.

Subp. 15. **Safe yield for water table condition.** "Safe yield for water table condition" means the amount of groundwater that can be withdrawn from an aquifer system without degrading the quality of water in the aquifer and without allowing the long term average withdrawal to exceed the available long term average recharge to the aquifer system based on representative climatic conditions.

Subp. 16. **Safe yield for artesian condition.** "Safe yield for artesian condition" means the amount of groundwater that can be withdrawn from an aquifer system without degrading the quality of water in the aquifer and without the progressive decline in water pressures and levels to a degree which will result in a change from artesian condition to water table condition.

Subp. 17. **Water table aquifer or unconfined aquifer.** "Water table aquifer" or "unconfined aquifer" means an aquifer where groundwater is under atmospheric pressure.

Subp. 18. **Waters of the state.** "Waters of the state" means any waters, surface or underground, except those surface waters which are not confined but are spread and diffused over the land. "Waters of the state" includes all boundary and inland waters (Minnesota Statutes, section 103G.005, subdivision 17).

Subp. 19. **Watercourse.** "Watercourse" means any natural, altered, or artificial channel having definable beds and banks capable of conducting confined runoff from adjacent lands (Minnesota Statutes, section 103G.005, subdivisions 3, 5, and 13).

Subp. 20. **Well.** "Well" means any excavation that is drilled, cored, bored, washed, driven, dug, jetted, or otherwise constructed where the intended use is for the location, diversion, or acquisition of groundwater (Minnesota Statutes, section 103I.005, subdivision 21).

Statutory Authority: *MS s 103G.515; 103G.531; 105.535*

Posted: *June 11, 2008*

6115.0640 COORDINATION WITH OTHER AGENCIES.

Nothing in these parts is intended to supersede or rescind the laws, rules, regulations, standards, and criteria of other international, federal, state, regional, or local governmental subdivisions with the authority to regulate the appropriation of waters of the state. The issuance of a permit shall not confer upon an applicant the approval of any other unit of government for the proposed project. The department shall coordinate the review of permit applications with other units of government having jurisdiction in such matters.

Statutory Authority: *MS s 105.535*

Posted: *June 11, 2008*

6115.0650 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.

Statutory Authority: *MS s 105.535*

Posted: *June 11, 2008*

6115.0660 APPLICATION FOR PERMIT.

Subpart 1. **Requirement.** Applications shall be submitted for each surface or ground water source from which water is proposed to be appropriated. A separate application shall be required for the following:

- A. for each distribution system if the water is used in more than one common distribution system;
- B. for each well(s) completed in different aquifers if groundwater is to be appropriated from separate wells completed in more than one aquifer; and
- C. for each basin or watercourse involved if surface water is to be appropriated from several different basins or watercourses.

Subp. 2. **Evidence of ownership.** The applicant must provide written evidence of ownership, or control of, or a license to use, the land overlying the groundwater source or abutting the surface water source from which water will be appropriated.

Subp. 3. **Information required.** All applicants shall submit the following information when it is reasonably available. Additional submittals may be required as prescribed in parts 6115.0680 to 6115.0720 and where deemed necessary by the commissioner in order to adequately evaluate the applications:

- A. A completed application on forms supplied by the commissioner.
- B. The required application fee (Minnesota Statutes, sections 103G.301, subdivisions 2 to 5, and 103G.315, subdivision 12).
- C. Aerial photographs, maps, sketches, detailed plat, topographic maps, or other descriptive data sufficient to show:
 - (1) the location of the area of use;
 - (2) the outline of the property owned, or controlled by the applicant in proximity to the area of use;

(3) the location of the proposed point of appropriation such as well(s) location, stream bank pump(s) or the location of other facilities for appropriation of water;

(4) if ground water is involved, the location of test hole borings which have been drilled on the property from which the appropriation will be made.

D. Signed statement that copies of the application and accompanying documents have been sent to the mayor of the city, secretary of the board of supervisors of the soil and water conservation district, or the secretary of the board of managers of the watershed district if the proposed project is within a city or within or affects a watershed district or soil and water conservation district or a city (Minnesota Statutes, section 103G.301, subdivision 6).

E. Statement of justification supporting the reasonableness and practicality of use with respect to adequacy of the water source, amounts of use, and purposes, including available facts on:

(1) hydrology and hydraulics of the water sources involved, including for surface waters the applicant's analysis of the effect of proposed withdrawals on levels and flows and anticipated impacts, if any, on instream flow or lake level conditions to the extent that such facts are not already available to the commissioner;

(2) proposed pumping schedule including rates, times, and duration;

(3) amounts of water to be appropriated on a maximum daily, monthly, and annual basis;

(4) means, methods, and techniques of appropriation;

(5) alternative sources of water or methods which were considered, to attain the appropriation objective and why the particular alternative proposed in the application was selected.

F. Information on any water storage facilities and capabilities and any proposed reuse and conservation practices.

G. Application for use of surface water shall include the following additional data:

(1) A contingency plan which describes the alternatives the applicant will utilize if at any time appropriation is restricted to meet instream flow needs or to protect the level of a basin. The contingency plan shall be feasible, reasonable, and practical; otherwise the applicant shall submit as part of the application a written statement agreeing in such case to withstand the results of no appropriation (Minnesota Statutes, section 103G.285, subdivision 6).

(2) For appropriation from natural basins or natural watercourses, facts to show that reasonable alternatives for appropriating water have been considered including use of water appropriated during high flows and levels and stored for later use and the use of ground water.

(3) For basins less than 500 acres in surface area the applicant shall notify all riparian landowners and provide the commissioner with a list of all landowners notified; attempt to obtain a signed statement from as many riparian landowners as the applicant is able to obtain stating their support to the proposed appropriation; and provide an accounting of number of signatures of riparian owners the applicant is unable to obtain (Minnesota Statutes, section 103G.285, subdivision 4).

H. Application for use of groundwater, except for agricultural irrigation (part 6115.0680) shall include the following data:

(1) test hole logs (if any) and water well record(s);

(2) hydrologic test data; and

(3) hydrologic studies, if the above data are insufficient to allow the commissioner to properly assess the capability of the aquifer system in the area of withdrawal or are inadequate to allow assessment of the effects of the proposed appropriation on the water resource and on nearby wells.

Subp. 4. **Waiver.** Whenever information required by parts 6115.0660 and 6115.0680 to 6115.0720 is unnecessary or inapplicable, the commissioner shall waive those requirements.

Statutory Authority: *MS s 103G.315; 105.415*

Posted: *June 11, 2008*

6115.0670 COMMISSIONER'S ACTIONS ON PERMIT APPLICATIONS.

Subpart 1. **In general.** Upon receipt of the information required from the applicant under parts 6115.0660 and 6115.0680 to 6115.0720, where applicable, the commissioner shall take action on the application as follows.

Subp. 2. **Review and analysis of data.** Review and analysis of data:

A. The commissioner shall consider the following factors, as applicable:

(1) the location and nature of the area involved and the type of appropriation and its impact on the availability, distribution, and condition of water and related land resources in the area involved;

(2) the hydrology and hydraulics of the water resources involved and the capability of the resources to sustain the proposed appropriation based on existing and probable future use;

(3) the probable effects on the environment including anticipated changes in the resources, unavoidable detrimental effects, and alternatives to the proposed appropriation;

(4) the relationship, consistency, and compliance with existing federal, state, and local laws, rules, legal requirements, and water management plans;

(5) the public health, safety, and welfare served or impacted by the proposed appropriation;

(6) the quantity, quality, and timing of any waters returned after use and the impact on the receiving waters involved;

(7) the efficiency of use and intended application of water conservation practices;

(8) the comments of local and regional units of government, federal and state agencies, private persons, and other affected or interested parties;

(9) the adequacy of state water resources availability when diversions of any waters of the state to any place outside of the state are proposed;

(10) the economic benefits of the proposed appropriation based on supporting data when supplied by the applicant.

B. The commissioner shall further consider the following factors for appropriation from watercourses:

(1) historic streamflow records, and where streamflow records are not available, estimates based on available information on the watershed, climatic factors, runoff, and other pertinent data;

(2) physical characteristics such as discharge, depth, and temperature, and an analysis of the hydrologic characteristics of the watershed;

(3) aquatic system of the watercourse, riparian vegetation, and existing fish and wildlife management within the watercourse;

(4) frequency of occurrence of high and low flows;

(5) feasibility and practicability of off-stream storage of high flows for use in providing water supply during periods of normal low flows, when supply is limited by existing and anticipated use.

C. The commissioner shall further consider the following factors for appropriation from basins:

(1) total volume of water within the basin;

(2) slope of the littoral zone;

(3) available facts on historic water levels of the basin and other relevant hydrologic factors;

(4) cumulative long-range ecological effects of the proposed appropriation;

(5) natural and artificial controls which affect the water levels of the basin.

D. The commissioner shall further consider the following factors for appropriation of groundwater:

(1) type and thickness of the aquifer;

(2) subsurface area of the aquifer;

(3) area of influence of the proposed well(s);

(4) existing water levels in the aquifer and projected water levels due to the proposed appropriation;

(5) other hydrologic and hydraulic characteristics of the aquifer involved; and

(6) probable interference with neighboring wells.

Subp. 3. **Decision on applications.** The commissioner is authorized to grant permits, with or without conditions, or deny them. In all cases, the applicant, the managers of the watershed district, the board of supervisors of the soil and water conservation district, or the mayor of the city may demand a hearing in the manner specified in Minnesota Statutes, section 103G.311, subdivision 5, within 30 days after receiving mailed notice outlining the reasons for denying or modifying an application.

Decisions by the commissioner are further subject to the administrative provisions of Minnesota Statutes, sections 103G.241, 103G.251, 103G.295, 103G.297, and 103G.301 to 103G.315. These sections include information and requirements on procedure, authority, timing of actions, fees, notice, investigations, violations and penalties, and special provisions regarding mining operations.

Based on these statutory requirements and other applicable provisions of Minnesota Statutes, section 84.083, and chapters 103A, 103B, and 103E to 103G, the commissioner shall make decisions as follows:

A. No permit shall be granted if:

(1) for application involving diversion of any waters of the state, surface or ground water, to a place outside the state, the remaining waters in the state will not be adequate to meet the state water resources needs during the specified life of the diversion (Minnesota Statutes, section 103G.265, subdivision 2);

(2) there is no conflict between competing users but the quantity of available waters of the state, in the area involved, are inadequate to provide the amounts of water proposed to be appropriated;

(3) the appropriation is not reasonable, practical, and does not adequately protect public safety and promote the public welfare (Minnesota Statutes, section 103G.315);

(4) the appropriation is not consistent with approved state, regional, and local water and related land resources management plans, provided that regional and local plans are consistent with statewide plans (Minnesota Statutes, section 103G.271, subdivision 2);

(5) there is an unresolved conflict between competing users for the waters involved and the conflict has not been resolved pursuant to provision of part 6115.0740.

B. Approval of any surface water appropriation application shall be further subject to the following:

(1) For all watercourses, proposals for appropriation during periods of flood flows and high water levels shall be given first consideration unless this is not practical, reasonable, or feasible (Minnesota Statutes, section 103G.261).

(2) For natural and altered watercourses, except for drainage ditches established under Minnesota Statutes, chapter 103E, consumptive appropriation may be limited consistent with Minnesota Statutes, section 103G.285, subdivision 2, provided that adequate data are available to set such limits for watercourses. Where protected flow is designated by the commissioner, no appropriation shall be allowed when the flow is below that protected flow.

(3) Permits to appropriate water for any purpose from streams designated trout streams by rule, pursuant to Minnesota Statutes, section 97C.021, shall be limited to temporary appropriations when not in conflict with the special designation, such as during periods of high flows or high water levels (Minnesota Statutes, section 103G.285, subdivision 5).

(4) For natural and altered basins the commissioner shall:

(a) Establish a protection elevation below which no appropriation shall be allowed (Minnesota Statutes, section 103G.285, subdivision 3, paragraph (b)).

(b) Limit the collective maximum annual withdrawals to not exceed a total volume of water amounting to one-half acre-foot per acre of surface water basin based on Minnesota Department of Natural Resources Bulletin No. 25, "An Inventory of Minnesota Lakes." The actual collective annual allocation may be considerably less than the maximum. This limitation is as provided by Minnesota Statutes, section 103G.285, subdivision 3, paragraph (a).

(c) For natural and altered basins less than 500 acres, an application shall not be approved if the commissioner determines that the proposed appropriation would lower the water level in the basin to an extent which would deprive the public and riparian property owners of reasonable use of and access to the water.

(5) The establishment of protection elevation and limitation on maximum withdrawals contained in units (a) and (b), shall not apply to artificial and altered basins constructed primarily for the

purpose of storing high waters and flood flows as water conservation or contingency flow alternatives when such alternatives are approved by the commissioner.

(6) Protected flows and protection elevations shall be established for the purposes as defined in part 6115.0630 and shall be based on available information considered in subpart 2, items B and C. For new applications the proposed establishment of protected flows or protection elevations shall be part of the permit process outlined in subpart 3 including opportunity for public hearing. Existing permittees who will be affected by the proposed establishment of protected flows or protection elevations shall be notified of such proposals and shall be provided opportunity for public hearing before modification of their permits based on the procedures outlined in part 6115.0750, subpart 5, item B. Upon the submission of data set forth in part 6115.0670, subpart 2, item A or B for the specified watercourse segment or basin by a state agency agreeing to pay the costs of any necessary public hearings, the commissioner shall establish requested protected flows and elevations.

C. Approval of appropriation from ground water shall be further subject to the following:

(1) The amounts and timing of water appropriated shall be limited to the safe yield of the aquifer to the maximum extent feasible and practical.

(2) If the commissioner determines, based on substantial evidence, that a direct relationship of ground and surface waters exists such that there would be adverse impact on the surface waters through reduction of flows or levels below protected flows or protection elevations the amount and timing of the proposed appropriation from ground water shall be limited.

(3) Appropriation of ground water shall not be approved or shall be issued on a conditional basis in those instances where sufficient hydrologic data are not available to allow the commissioner to adequately determine the effects of the proposed appropriation. If a conditional appropriation is allowed, the commissioner shall make further approval, modification, or denial when sufficient hydrologic data are available.

(4) The commissioner shall limit the use of dug pits for appropriating water when such pits are so located that they may reasonably be expected to affect protected flows of watercourses or protection elevations of basins.

Subp. 4. **Waiver.** The commissioner shall waive any of the provisions of subpart 3 if it is determined that conditions are such that implementation of a provision would be unnecessary or inapplicable or if an applicant provides sufficient evidence to show just cause why such provision would not be reasonable, practical, or in the public interest. In the event the commissioner does not grant an applicant's request for waiver the applicant may demand a hearing.

Subp. 5. **Specific types of appropriation and use.** Additional requirements and decisions governing agricultural irrigation, public water supplies, dewatering, water level maintenance, and mining are also contained in parts 6115.0680 to 6115.0720.

Statutory Authority: *MS s 103G.315; 105.415*

History: *L 1985 c 172; L 1991 c 259 s 23*

Posted: *June 11, 2008*

6115.0680 ADDITIONAL REQUIREMENTS AND CONDITIONS FOR AGRICULTURAL IRRIGATION.

Subpart 1. **Additional application information.** For ground water appropriation, the applicant must submit to the commissioner the following data in addition to the requirements of part 6115.0660:

A. If the application is for use of groundwater from an aquifer system for which adequate groundwater availability data are available and therefore is designated by the commissioner as a Class A application, (Minnesota Statutes, section 103G.295, subdivision 3):

- (1) copies of test hole log(s) to identify the aquifer the proposed well will penetrate;
- (2) copies of the water well record(s) and production test data;
- (3) additional aquifer test data as may be required by the commissioner if the test holes, water well records, and production test data are insufficient to allow the commissioner to properly assess the capability of the aquifer system in the area of withdrawal, or are inadequate to allow assessment of the effects of the proposed appropriation on other nearby wells.

B. If the application is for use of groundwater from an aquifer system for which inadequate groundwater availability data are available and therefore is designated by the commissioner as a Class B application, (Minnesota Statutes, section 103G.295, subdivision 3) the applicant shall supply the following additional information as required by Minnesota Statutes, section 103G.295, subdivision 4, including:

- (1) copies of test hole log(s) to identify the aquifer the proposed well will penetrate;
- (2) copies of water well record(s) and production test data;
- (3) the anticipated groundwater quality in terms of the measures of quality commonly specified for the proposed water use, when existing data indicate the water supply is not suitable for irrigation;
- (4) the location of each domestic well, for which information is readily available, located within the area of influence or within 1-1/2 mile radius of the proposed irrigation well, whichever is less;
- (5) readily available information from water well records, reports, studies, and field measurements regarding the domestic wells within the area of influence or a 1-1/2 mile radius of the proposed irrigation well whichever is less, such as:

- (a) owner's name, address, and phone number;
- (b) depth of well in feet;
- (c) diameter of well and casing type (concrete curb, steel, wooden, clay tile, etc.);
- (d) nonpumping water level (in feet) below land surface;
- (e) age of well (when constructed);
- (f) type of pump (shallow-jet, deep well jet, submersible reciprocating, etc.) and rate of discharge; and
- (g) length of drop pipe in well;

(6) results of a pumping test of the aquifer system as required in Minnesota Statutes, section 103G.295, subdivision 4, paragraph (a), clause (5).

(7) The commissioner shall in any specific application, waive any of the requirements of subitems (1) to (6), when the necessary data are already available, as required in Minnesota Statutes, section 103G.295, subdivision 4.

Subp. 2. **Commissioner's actions.** The commissioner shall analyze and evaluate applications based on facts supplied by the applicant pursuant to parts 6115.0660 and subpart 1 of this part. Decisions shall be subject to the applicable procedures outlined in part 6115.0670 and based on recommendations of the soil and water conservation district, soil surveys, and other available data on soil characteristics relating to soil suitability for agricultural irrigation and adequacy of existing or proposed soil and water conservation measures in order to protect water quality and prevent erosion and sedimentation.

The commissioner shall determine the amount of water allowed to be used under the above paragraph based on:

- A. Acreage of lands involved.
- B. Climatic characteristics of the area involved.
- C. Dominant soil types of the acreage to be irrigated and major crops to be irrigated.
- D. Best available technology, methodology, and crop-water use requirement information including, but not limited to, Irrigation Guide for Minnesota, Soil Conservation Service, U.S. Department of Agriculture, Saint Paul, Minnesota, 1976.
- E. When adequate data on soil moisture and local climatic conditions are available for the area, the commissioner may in cooperation with irrigators and agricultural experts establish an irrigation scheduling system to provide for improved conservation of water.
- F. For irrigation from surface water, where stream flow or lake level records are unavailable or when available records indicate that flows or levels during the irrigation season would be inadequate if all potential riparian landowners would use the water for irrigation, the amount of appropriation shall be limited to no more than one-half acre-foot per acre of riparian land owned or controlled by the applicant except for appropriation for wild rice paddies as is provided in item G. Riparian lands for the purpose of these rules shall be those 40-acre tracts or government lots, or portions thereof, that directly abut a basin or watercourse. This provision shall apply until a protected flow or protection elevation has been established in accordance with part 6115.0670, subpart 3, item B.
- G. The amount of appropriation for wild rice paddies shall be based on consideration of climatic characteristics of the area and the best available technology relating to amounts of water needed to raise wild rice.

Statutory Authority: *MS s 103G.315; 105.415*

Posted: *June 11, 2008*

6115.0690 ADDITIONAL REQUIREMENTS AND CONDITIONS FOR PUBLIC WATER SUPPLIES.

Subpart 1. **Additional application information.** The applicant shall be required to submit to the commissioner all or portions of the following data in addition to the requirements of part 6115.0660:

- A. the number of domestic users;

- B. reasonable projection of population growth;
- C. the number and type of industrial and commercial users of the public water supply system;
- D. the amount of water to be supplied to domestic, industrial, and commercial users respectively;
- E. other users by type of use and amount to be used from the public water supply system such as golf courses, recreational lake level maintenance, water transferred to other supply systems;
- F. information regarding the quantity of the appropriated water to be used in distribution and waste water treatment facilities, not including volume of actual waste water; and
- G. details on emergency plans for water shortage periods outlining public information programs, priorities for limitations of discretionary water use, and alternate sources of public water supplies.

Subp. 2. **Commissioner's actions.** The commissioner shall allow the appropriation of water for public water supply systems based on evaluation and analysis of the data submitted by the applicant under provisions of parts 6115.0660 and subpart 1 of this part and the procedures outlined in part 6115.0670 and subject to subpart 3.

Subp. 3. **Other requirements.** Appropriation permits issued to public water supply authorities shall be subject to requirements of Minnesota Statutes, section 103G.291, relating to critical water deficiency periods and restriction of nonessential uses.

Statutory Authority: *MS s 103G.315; 105.415*

Posted: *June 11, 2008*

6115.0700 ADDITIONAL REQUIREMENTS AND CONDITIONS FOR WATER LEVEL MAINTENANCE FOR BASINS.

Subpart 1. **Additional application information.** For water appropriation applications for the purpose of establishing and maintaining water levels for basins the applicant shall submit the following data in addition to the requirements of part 6115.0660:

- A. information on the basin and proposed source of supply or source of discharge, including facts indicating how the water will be appropriated and discharged and the proximity of the basin to the proposed source of supply or source of discharge; and
- B. information on the design of any discharge facility into or out of the basin.

Subp. 2. **Commissioner's actions.** The commissioner shall evaluate and make decisions on applications based on facts supplied by the applicant and subject to the applicable procedures outlined in part 6115.0670 and the following determinations:

- A. effects on public welfare of the proposed appropriation;
- B. the proposed appropriation is reasonable, practical, technically feasible, and effectively accomplishes its purpose;
- C. the proposed appropriation will have minimal or no detrimental effect on the basin, the proposed source of supply, or the receiving water and property of riparian owners;
- D. the quality of the water of the basin or the receiving water source will not be detrimentally impaired by the appropriation; and

E. the proposed appropriation is consistent with part 6115.0221, item A, subitem (2), public waters permits rules.

Statutory Authority: *MS s 103G.315; 105.415*

Posted: *June 11, 2008*

6115.0710 ADDITIONAL REQUIREMENTS AND CONDITIONS FOR DEWATERING.

Dewatering, which involves appropriation of water from ground or surface water sources for purpose of removing excess water, shall be subject to water appropriation permit requirements, unless otherwise exempted by these parts. The commissioner shall evaluate and make decisions on such application based on applicable provisions of parts 6115.0660 and 6115.0670 and the following additional requirements:

A. The applicant must show there is a reasonable necessity for such dewatering and the proposal is practical.

B. The applicant must show that the excess water can be discharged without adversely affecting the public interest in the receiving waters, and that the carrying capacity of the outlet to which waters are discharged is adequate.

C. The proposed dewatering is not prohibited by any existing law.

Statutory Authority: *MS s 103G.315; 105.415*

Posted: *June 11, 2008*

6115.0720 ADDITIONAL REQUIREMENTS AND CONDITIONS FOR MINING AND PROCESSING OF METALLIC MINERALS AND PEAT.

Subpart 1. **Additional application information.** All applicants for permits for mining and processing of metallic minerals and peat must provide the following information in addition to the requirements of Minnesota Statutes, section 103G.297 and part 6115.0660:

A. all plans and specifications regarding withdrawal, use, storage, and disposal of waters of the state;

B. details of the rates, volumes, and source of water to be appropriated and consumed in the processing, including all losses such as uncontrolled seepage, evaporation, plant losses, and discharge volumes;

C. criteria used in estimating the proposed appropriation, distribution, and discharge based on climatic averages and extremes;

D. details of the sources, rates, and volumes of water released from the mining operations involved;

E. details of the hydrologic and hydraulic impacts and effects of the operation on the watershed(s) including changes in basins, watercourses, and groundwater systems.

Subp. 2. **Commissioner's actions.** The commissioner shall analyze, evaluate, and make decisions on appropriations for mining and processing of metallic minerals based on facts submitted by the applicant

pursuant to subpart 1 and part 6115.0660, subject to the conditions outlined in part 6115.0670 and the following considerations:

A. The commissioner shall direct the applicant to utilize available surplus water from preexisting mining operations or facilities, whether owned or controlled by the applicant or others, whenever feasible and practical unless justification is provided on why such practice should not be allowed. If the commissioner finds that an existing permittee has available unused water, for which there is inadequate justification, the commissioner, after notice and opportunity for hearing, shall amend the existing permit to promote better utilization of the water.

B. The commissioner shall base the allocation of water on consideration of the legal requirements for water quality, the impact of the appropriation on those requirements, and the following order of priorities of water supply sources located within reasonable distance to the mining or processing site:

- (1) runoff from the mining areas;
- (2) water from active mine pits and tailing basins when such water is not utilized for other purposes or operations;
- (3) water from existing mining operation reservoirs where such water is not utilized for other purposes or operations;
- (4) water from other mining and processing operations;
- (5) water from inactive mine pits;
- (6) water from streams appropriated during periods of high flows;
- (7) water from groundwater sources;
- (8) water collected and stored behind off-stream impoundments;
- (9) water collected and stored behind impoundments on streams; and
- (10) water from natural basins greater than 500 acres in size.

C. If the disposal of excess water is necessary and if any mining operation in the area has caused or will cause a substantial reduction in watercourse flow, the commissioner shall where feasible and practical require the permittee to discharge excess water in a manner that would restore the flow. Such action shall consider the existing and anticipated use of excess water by higher priority users and must be in compliance with appropriate rules of the Minnesota Pollution Control Agency.

Statutory Authority: *MS s 103G.315; 105.415*

Posted: *June 11, 2008*

6115.0730 WELL INTERFERENCE PROBLEMS INVOLVING APPROPRIATION.

Subpart 1. **For new applications.** If the commissioner determines that an adequate supply of water is available and that the proposed project is reasonable and practical as determined based on parts 6115.0670 and 6115.0680 to 6115.0720, but that there is a probable interference with public water supply well(s) and private domestic well(s) which may result in reducing the water levels beyond the reach of those wells, the following procedures shall apply:

A. The applicant shall be responsible for obtaining and providing to the commissioner, available information including depth, diameter, nonpumping and pumping levels, quality, and well construction details for all domestic and public water supply wells located within the area of influence of the proposed appropriation well.

B. The commissioner may require aquifer tests or other field tests to be conducted.

C. The commissioner shall determine the probable interference with the domestic and public water supply wells based on theoretic computations using available information regarding the aquifer characteristics obtained from aquifer tests and/or from hydrologic studies, and the probable effects of lowering the water levels in the domestic and public water supply wells due to the proposed appropriation in the area. For public supply wells only the probable interference with that portion which is used for domestic water supply is considered.

D. The commissioner shall provide the prospective appropriator with an evaluation of the nature and degree of effect of the appropriation on the water levels of the domestic well(s) and public water supply well(s).

E. The commissioner shall not issue the permit until the applicant agrees to exercise any of the following options within 30 days after written notification by the commissioner:

(1) accept a modification or restriction of the permit application to provide for an adequate domestic water supply; or

(2) submit a written agreement signed by the applicant and all parties identified under item C as having probable interference. Such agreement shall outline the measures that will be taken to ensure maintenance of water supplies to such identified parties to the extent that would have existed absent the proposed appropriation. In cases where no agreement can be reached, the commissioner shall implement the settlement procedure identified in item D.

Subp. 2. **For existing permits.** If complaints are made to the commissioner by private domestic well owner(s) or public water supply authority regarding the effects of a water appropriation on the domestic water supplies, the following procedures shall be followed:

A. The commissioner shall provide complaint forms to the parties making the complaint, thereafter referred to as "complainant."

B. Upon receipt of the completed complaint forms the commissioner shall notify the permittee, the applicable watershed district, and the soil and water conservation district and any other governmental agency or person who may be affected or has expressed interest in the complaint.

C. The commissioner shall investigate and assess the complaint by:

(1) Analyzing and evaluating the submitted complaint forms, hydrologic facts and characteristics of the water supply systems involved.

(2) Requesting additional facts from the complainant(s) and the permittee when necessary. In order to assure that available data on domestic well(s) are provided, the complainant shall cooperate with the permittee in providing such facts as may be available and allowing the commissioner access to obtain necessary available facts. If the complainant does not cooperate in providing available facts or allowing the commissioner access to the domestic well(s), the commissioner shall dismiss the complaint.

(3) Conducting, if necessary, a field investigation.

(4) Additional hydrologic tests and evaluation shall be required if hydrologic information is unavailable or inadequate to make a determination of necessary facts in the matter. For irrigation appropriations, the timing and conduct of such tests shall be in accordance with the provision of Minnesota Statutes, section 103G.271, subdivision 3, relating to modifying or restricting appropriation for irrigation.

(5) In evaluating the probable influence of the water appropriation on the domestic well(s) and public water supply well(s) the commissioner shall consider whether the domestic well(s) provides a dependable water supply while meeting the appropriate health requirements for the existing use of the affected well. For public water supply wells only the probable interference with that portion which is used for domestic water supply is considered.

D. Where adverse effects on the domestic well(s) are substantiated, the commissioner shall notify the permittee of the facts and findings of that complaint evaluation. In the event that the commissioner determines that the domestic water supply is endangered the commissioner shall, pursuant to part 6115.0750, subpart 7, unless a temporary solution is worked out, restrict or cancel the appropriation until such time as a decision has been made by either negotiation, settlement, or hearing.

E. The permittee shall within 30 days after written notification by the commissioner take appropriate action by exercising any of the following options:

(1) Requesting the commissioner to modify or restrict the permit in order to provide for an adequate domestic water supply.

(2) Negotiating a reasonable agreement with the affected well owner(s). If no agreement is reached, the settlement procedure outlined in subpart 4 shall apply; or

(3) Requesting a public hearing.

Subp. 3. **New domestic wells installed after appropriation permits have been issued.** In the event that new domestic wells, exempt from permit requirements, are installed in area of adequate ground water supplies where permits have been issued for appropriation the following shall apply:

A. It shall be the responsibility of the prospective new domestic well owner to ensure that the new domestic well will be constructed at adequate depth so that it will provide an adequate domestic water supply which will not be limited by the permitted appropriation.

B. Holders of valid permits for appropriation of water in areas where adequate water supplies are available shall not be responsible for well interference problems, involving new domestic wells exempt from permit, when such exempt domestic wells are installed subsequent to authorized appropriation.

Subp. 4. **Settlement.** If the applicant or permittee and the complainant(s) have been unable to negotiate a reasonable agreement pursuant to subparts 1, item E and 2, item E, the following procedure shall be implemented:

A. The applicant or permittee shall submit to the complainant a notarized written offer including a statement that the complainant must respond in writing to the commissioner within ten days from the receipt of the offer either accepting the offer or explaining why it is rejected. The offer must be submitted to the complainant with a copy to the commissioner within 40 days after the receipt of the written notification provided in subparts 1, item E and 2, item E, based on the following:

(1) If an existing domestic well provides an adequate domestic water supply which meets state health standards, and such well no longer serves as an adequate supply because of the proposed or permitted appropriation in the vicinity the applicant or permittee shall be responsible for all costs necessary

to provide an adequate supply with the same quality and quantity as prior to the applicant's or permittee's interference.

(2) If an existing well provides an adequate domestic water supply but does not meet state health standards and such well would no longer serve as an adequate supply because of the proposed or permitted appropriation in the vicinity, the applicant or permittee shall be responsible for that portion of costs of providing an adequate water supply, but shall not be responsible for those costs necessary to bring the domestic well(s) to state health standards.

B. The complainant shall, within ten days from the receipt of the notarized written offer, respond to the commissioner in writing either accepting the offer or making argument on why the offer is not reasonable. If no response is received from the complainant, within the time limit, the commissioner shall dismiss the complaint.

C. If the offer is not accepted, the commissioner shall make a decision based on the written offer and arguments and available facts, within ten days as follows:

(1) that the applicant or permittee has submitted a reasonable offer, the commissioner shall issue or continue the permit involved;

(2) that the applicant or permittee has not submitted a reasonable offer, the commissioner, after notice and opportunity for hearing, shall deny, modify, or terminate the permit involved;

(3) that there is a need for a public hearing in which case it is ordered.

Statutory Authority: *MS s 103G.315; 105.415*

Posted: *June 11, 2008*

6115.0740 WATER USE CONFLICTS.

Subpart 1. **Conflict defined.** For the purpose of these rules a conflict occurs where the available supply of waters of the state in a given area is limited to the extent that there are competing demands among existing and proposed users which exceed the reasonably available waters. Existing and proposed appropriations could in this situation endanger the supply of waters of the state so that the public health, safety, and welfare would be impaired.

Subp. 2. **Procedure.** Whenever the total withdrawals and uses of ground or surface waters would exceed the available supply based on established resource protection limits, including protection elevations and protected flows for surface water and safe yields for groundwater, resulting in a conflict among proposed users and existing legal users the following shall apply:

A. In no case shall a permittee be considered to have established a right of use or appropriation by obtaining a permit.

B. The commissioner shall analyze and evaluate the following:

(1) the reasonableness for use of water by the proposed and existing users;

(2) the water use practices by the proposed and existing users to determine if the proposed and existing users are or would be using water in the most efficient manner in order to reduce the amount of water required;

(3) the possible alternative sources of water supply available to determine if there are feasible and practical means to provide water to satisfy the reasonable needs of proposed and existing users.

C. If conflicts can be resolved by modifying the appropriation of the proposed and existing users, the commissioner shall do so.

D. If conflicts cannot be resolved through modification of proposed and existing permits the commissioner shall base the decision regarding issuance of new applications and retention, modification, or termination of existing permits on the basis of existing priorities of use established by the legislature as follows:

(1) If the unresolved conflict involves users who are or would be in the same priority class, the commissioner shall require the proposed users and existing permitted users to develop and submit a plan which will provide for proportionate distribution of the limited water available among all users in the same priority class. The commissioner shall withhold consideration of new applications and shall, if the existing permitted appropriations endanger the supply of waters of the state, suspend or limit existing permits until a plan is approved by the commissioner.

The plan must include proposals for allocating the water which address the following: possible reduction in the amounts of appropriation so that each user would receive a proportionate amount of water for use; and possible restrictions in the timing of withdrawals so that each user would be allowed to withdraw a proportionate share of water for use over certain periods of time.

If the commissioner approves the proposed plan, new permits will be issued and existing permits will be amended in accordance with that plan.

If the commissioner determines that the proposed plan is not practical or reasonable, the commissioner shall develop a new plan or modify the proposed plan to provide proportionate share of water among the users involved. The commissioner shall issue new permits and amend existing permits based on that plan.

(2) If the unresolved conflict involves users who are or would be in a different priority class the available water supply shall be allocated to existing and proposed users based on the relative priority of use. Highest priority users shall be satisfied first. Any remaining available water supply shall be allocated to the next succeeding priority users, until no further water is available. Users in the same priority class shall be offered the same options as provided in subitem (1).

Subp. 3. **Notice and hearing.** All actions by the commissioner shall be made after notice and opportunity for public hearing.

Statutory Authority: *MS s 103G.315; 105.415*

Posted: *June 11, 2008*

6115.0750 PROVISIONS AND CONDITIONS OF WATER APPROPRIATION PERMITS.

Subpart 1. **In general.** Water appropriation permits shall include the following provisions and conditions, unless otherwise required by law.

Subp. 2. **Term of permits.** Permits shall be issued for temporary or for long-term appropriation.

Temporary permits involve a one-time, limited life, not more than 12 months, nonrecurring appropriation of waters of the state, such as for highway construction, exploratory drilling for minerals, hydrostatic testing of pipelines and other short-term projects. Requested time extensions shall be permitted, but in no case shall the total length of time the permit remains in force exceed two years.

Long-term permits will remain in effect subject to applicable permit provisions and conditions of the permit, the law, and these parts, provided that in cases where the permittee is not the landowner of record, the term of the permit shall be the same as that of the property rights or license held.

Subp. 3. **Monitoring.** Monitoring:

A. All permittees shall measure and keep monthly and yearly records of the quantity of water used or appropriated at the point of taking from each source under permit.

B. Each installation for appropriating or using water shall be equipped with a device or employ a method to measure the quantity of water appropriated to within ten percent of actual withdrawal.

The commissioner shall determine the method to be used for measuring water appropriated based on: the quantity of water appropriated or used; the source and location of the appropriation; the method of appropriating or using water; other facts supplied by the permittee.

The commissioner shall require flow meters to be used whenever the rate of appropriation is greater than 1,500 gallons per minute, unless the permittee can show justification why flow meters cannot practically be used or are not necessary considering the factors contained in the two preceding paragraphs. Such justification must be supported by facts which indicate the technical difficulties which would be encountered if flow meters were required.

C. For surface water appropriations, where applicable, the permittee shall measure flows or levels in the watercourse or basin at a specific gauge designated by the commissioner and located within the area of appropriation. The commissioner shall require permittees to pay necessary costs of establishing and maintaining such gages as provided in parts 6115.0010 to 6115.0100, rules for permit fees.

For groundwater appropriation, the commissioner, based on availability of hydrologic data on the aquifer involved, frequency and rate of pumping, and probability of conflict or well interference, shall require the permittee to measure and keep records of the water levels in each production well at reasonable times prescribed in the permit. Observation wells may be required as a condition of the permit to better evaluate hydrologic conditions and effects in areas where hydrologic data are unavailable, where probable conflict or well interference problems may occur and where such wells are required by law.

Subp. 4. **Reporting.** Annual calendar year monthly records of the amount of water appropriated or used and the water level measurements shall be recorded for each installation. Such readings and the total amount of water appropriated and used shall be reported annually to the commissioner, on or before February 15 of the following year upon forms to be supplied by the commissioner unless otherwise specified in the permit.

Such records shall be submitted with an annual water appropriation processing fee as required by Minnesota Statutes, sections 103G.271, subdivision 6, and 103G.281, subdivision 3, for each permit whether or not any water was appropriated during the year.

Additional information shall be required such as acreage irrigated, identification of water disposal sites, and amount of water discharged, when necessary for the statewide water information system (Minnesota Statutes, section 103G.275, subdivision 2).

Failure to report and pay the fee shall be sufficient cause for terminating a permit 30 days following written notice by the commissioner of the violation of the permit.

No fee is required from any state agency as defined in Minnesota Statutes, section 16B.01, subdivision 2, or any federal agency.

Subp. 5. **Amendments to permits.** Amendments to permits:

A. Major modification of any water appropriation permit shall not be made before obtaining the written permission from the commissioner. Major modification includes changes such as substantial increase or decrease in the rate and quantity of water withdrawn, any change in source of appropriation or substantial change in the amount of land irrigated, when applicable.

Request for amendment can be made by letter or on forms supplied by the commissioner. New applications shall be required when there are changes in the source of supply, the purpose of appropriation,

or when the proposed increases in rates and amounts of water would probably create conflict or well interference.

Requests for amendments shall be reviewed as if they were for a new application, subject to provisions of parts 6115.0600 to 6115.0800.

B. Pursuant to authority in Minnesota Statutes, section 103G.315, subdivision 11, the commissioner may modify or amend any existing permits based on the following procedures and the criteria in parts 6115.0670 to 6115.0720, where applicable.

The commissioner shall notify the permittee of the intent to amend the permit. The notice will include details on modifications to be implemented by the permittee and the timing to complete the modifications.

The permittee shall respond within 30 days from receipt of the notice. Such response period shall be thereafter extended by the commissioner for good cause shown.

If no response is received in 30 days and no extension of response time is authorized by the commissioner, the proposed amendments shall be made.

The commissioner based on the permittee's response and the criteria established in these rules shall either modify the proposed amendment or adopt the original proposed amendment.

C. All amendments and modifications are made after notice and opportunity for hearing.

Subp. 6. **Transfers or assignments of permits.** If the property involving a water appropriation permit is sold, transferred, or assigned to another person, the permit may be transferred to the transferee without the necessity of reapplication, subject to the following.

The transferee shall, within 90 days after date of property sale, transfer, or assignment, or within a longer period of time allowed by the commissioner for good cause shown, submit written notification to the commissioner stating the intention to continue the appropriation as stated in the permit. If the transferee intends to make major modifications to the existing permit, a new application shall be required subject to the provisions of subpart 5.

No permit is assigned except with the written consent of the commissioner.

Subp. 7. **Limitations on permits.** All permits issued by the commissioner since 1949 are subject to the provisions of Minnesota Statutes, section 103G.315, subdivision 11, relating to cancellation and

conditions of permits and Minnesota Statutes, section 103G.315, subdivisions 2 to 6, 8, and 9, relating to terms and reservations with respect to the amount and manner of such use or appropriation or method of construction or operation of controls as appears reasonably necessary for the safety and welfare of the people of the state.

The commissioner, subject to the terms and conditions of such existing permits, may modify, restrict, or cancel an existing appropriation or use until such time as a decision has been reached by either negotiation, settlement, or after a public hearing. If a permit does not contain a provision which restricts appropriation or use for the protection of safety or welfare of the people of the state the commissioner cannot modify or restrict an existing appropriation until opportunity is provided for a public hearing and where ordered a public hearing has been completed.

Subp. 8. **Terminations.** Permits shall be terminated under the following:

- A. Request by the permittee.
- B. When any of its provisions are violated.
- C. When the permittee sells, transfers, or assigns the property described in the permit and the transferee does not wish to continue appropriating.
- D. Upon finding that the permittee has violated the provisions of any applicable laws and rules.
- E. Where the permittee has not for five consecutive years, from the date of issuance of the permit, appropriated the water. Such time shall be extended by the commissioner for good cause shown.
- F. When the lease or contract for deed is forfeited or canceled.
- G. Permits for agricultural irrigation shall be subject to termination by the commissioner upon justifiable recommendation of the supervisors of the soil and water conservation district, wherein the land irrigated is located, regarding the inadequacy of the soil and water conservation measures.
- H. When the commissioner deems it necessary for the conservation of the water resources of the state or in the interest of public health, safety, and welfare.
- I. When the commissioner deems it necessary pursuant to parts 6115.0730 and 6115.0740.
- J. Any action pursuant to items B and D to I shall be subject to appropriate notice and opportunity for hearing, except as provided in subpart 7.
- K. In the case of permits for mining issued in conjunction with Minnesota Statutes, section 103G.297, procedures for termination shall be subject to provisions of Minnesota Statutes, section 103G.297, subdivision 8.

Statutory Authority: *MS s 103G.315; 105.415*

Posted: *June 11, 2008*

6115.0760 LOCAL PERMITS.

The commissioner, pursuant to Minnesota Statutes, section 103G.271, subdivision 4, shall delegate to municipal, county, or regional level of government the authority to process and approve permit applications for the appropriation and use of waters of the state in amounts of more than 10,000 gallons per day and more than 1,000,000 gallons per year, but less than 3,600,000 million gallons per year. Such delegation shall be made at the municipal, county, or regional level which means a governmental entity, or several governmental entities in combination, having authority or jurisdiction over areas of geographical extent beyond the limits of a single county, or a watershed district. The delegation by the commissioner shall be subject to the following requirements:

A. The authorized unit of government has established an administrative process which includes provisions for establishing a water appropriation management planning process consistent with part 6115.0810.

B. The review and approval of applications are consistent with the applicable provisions of these parts.

C. A formalized agreement is made and signed by the commissioner and the appropriate municipal, county, or regional level authority involved.

D. Copies of all applications and records of local actions on applications are provided to the commissioner upon receipt and action.

E. Records of water appropriation amounts and the processing fee shall be submitted by the permittee to the commissioner as required by part 6115.0750, subparts 3 and 4, and Minnesota Statutes, sections 103G.271, subdivision 6, and 103G.281, subdivision 3.

Statutory Authority: *MS s 103G.315; 105.415*

Posted: *June 11, 2008*

6115.0770 WATER CONSERVATION.

In order to maintain water conservation practices in the water appropriation and use regulatory program it is necessary that existing and proposed appropriators and users of waters of the state employ the best available means and practices based on economic considerations for assuring wise use and development of the waters of the state in the most practical and feasible manner possible to promote the efficient use of waters.

Based on data submitted by applicants and permittees and current information on best available water conservation technology and practice the commissioner, in cooperation with the owners of water supply systems, may analyze the water use practices and procedures and may require a more efficient use of water to be employed by the permittee or applicant, subject to notice and opportunity for hearing.

Statutory Authority: *MS s 103G.315; 105.415*

Posted: *June 11, 2008*

6115.0780 ABANDONMENT OF WELLS.

The permittee shall notify the commissioner prior to abandoning, removing, covering, plugging, or filling the well or wells by means of which a water appropriation was made. The commissioner shall require abandonment procedures and methods consistent with the Minnesota Department of Health rules, parts 4725.2300 to 4725.3200.

Statutory Authority: *MS s 103G.315; 105.415*

Posted: *June 11, 2008*

6115.0790 FIELD INVESTIGATIONS.

In order to fully evaluate water appropriations, the commissioner shall conduct field investigations to determine the nature and scope of the appropriation and the impact it has or will have on water and related land resources. Such field inspection shall be made in a timely fashion and shall be coordinated with one or more of the following divisions of the department: Enforcement, Fish and Wildlife, Forestry, Minerals, Lands, and Parks and Recreation. A fee shall be charged for field inspections subject to rules for permit fees, part 6115.0080.

Statutory Authority: *MS s 103G.315; 105.415*

Posted: *June 11, 2008*

6115.0800 INFORMATION ON APPROPRIATION PERMIT LAWS.

The applicants or existing permittees shall, upon request to the commissioner, be furnished copies of applicable portions of the law or synopsis, where they exist, relating to their proposed or existing appropriation.

Statutory Authority: *MS s 103G.315; 105.415*

Posted: *June 11, 2008*

6115.0810 WATER APPROPRIATION AND USE MANAGEMENT PLANS.

Subpart 1. **In general.** In order to address the provisions of Minnesota Statutes, sections 103B.155, 103G.261, 103G.265, and 103G.271, subdivision 2, the commissioner, in cooperation with other state and federal agencies, regional commissions and authorities, local governments and citizens, establishes the following process for the preparation and implementation of the elements of any state, regional, and local plan relating to water appropriation and use.

Subp. 2. **Criteria and procedures.** Since the availability, distribution, and utilization of waters of the state and the character and use of related land resources vary considerably throughout the state, a comprehensive water appropriation management planning process must be based on these considerations and according to the following principles and procedures:

A. Water appropriation management plans should be prepared for specific definable areas of the state on consideration of:

(1) The hydrologic and physical characteristics of the water and related land resources for which a management plan is necessary. The area must be of sufficient size and areal extent so that the interrelationship of geohydrologic and climatic factors can be adequately defined and managed.

(2) The determination by the commissioner of the need for establishment of a water appropriation management plan for the waters of the state within a specific definable area based on:

(a) areas where development of the waters of the state is, or is likely to, increase considerably within the next five to ten years;

(b) areas where severe water availability problems exist or are soon likely to exist;

(c) areas where there are adequate facts and available geohydrologic data relating to the availability, distribution, and use of the waters of the state and where there is local interest in establishing water appropriation management plans.

B. Upon establishment of the need for a water appropriation management plan pursuant to item A, the commissioner shall establish a management planning process including procedures, a public participation process, and development of a planning team consisting of representatives of the department, permittees, any other interested, concerned, and involved government or citizen group listed in subpart 1 to review and cooperate in preparation of the plan.

Subp. 3. **General requirements and contents of plans.** Every water appropriation plan should, at a minimum, include:

A. An evaluation of the amount and dependability of information on the hydrologic systems of the area and the adequacy of the information to provide necessary facts on the amounts of water which can be reasonably withdrawn from the waters of the state in the area without creating major environmental problems or diminishing the long-term seasonal supply of water for various purposes. This will provide essential background information for establishing protected flows and protection elevations, part 6115.0670, subpart 3, item B, subitem (6).

B. An evaluation of data on stream quality and flows, lake water quality and levels, groundwater quality and levels, and climatic factors. This will provide essential data useful to the applicant and the commissioner in permit application considerations, parts 6115.0660 to 6115.0720.

C. An evaluation of present and anticipated future use of waters and lands and the amounts and distribution of use within the area. This will facilitate the determinations necessary under part 6115.0670, subpart 2, item A, subitem (2).

D. An evaluation of the problems and concerns relating to use of the waters within the area.

E. Water conservation alternatives and methods and procedures for dealing with water shortages or excesses during periods of deficient or excess water. See parts 6115.0660, subpart 3, item F; 6115.0690, subpart 1, item G; and subpart 2 of this part.

F. Considerations of the relationship of the water appropriation and use management plan to other water resources programs of the state, such as floodplain management, shoreland management, water surface use management, water quality management, soil and water conservation management, and agricultural land management.

Statutory Authority: *MS s 103G.315; 105.415*

Posted: *June 11, 2008*

LAKE IMPROVEMENT DISTRICTS

6115.0900 PURPOSE.

In order to provide for the orderly establishment of lake improvement districts in a manner that will preserve and protect the lakes of Minnesota and increase and enhance the use and enjoyment of these lakes, the commissioner of the Department of Natural Resources does hereby provide guidelines, criteria, and standards for establishment of lake improvement districts by counties, cities, and towns, as authorized by Minnesota Statutes, sections 103B.511 to 103B.581, 103G.605, 103G.621, and 459.20, in furtherance of the policies declared in Minnesota Statutes.

These rules establish minimum guidelines, criteria, and requirements relating to:

A. procedures by which proposed lake improvement districts shall be reviewed prior to establishment;

B. standards and criteria which all proposed lake improvement districts shall meet before establishment, modification, or termination.

Statutory Authority: *MS s 103B.511; 378.41*

Posted: *June 11, 2008*

6115.0910 SCOPE.

These parts shall apply to all existing and proposed lake improvement districts. These parts shall not apply to lake conservation districts established by special legislation of the Minnesota state legislature.

Statutory Authority: *MS s 378.41*

Posted: *June 11, 2008*

6115.0920 DEFINITIONS.

Subpart 1. **Shall.** For the purpose of these parts, certain terms or words used herein shall be interpreted as follows: the word "shall" is mandatory, not permissive.

Subp. 2. **Agency.** "Agency" means the Minnesota Pollution Control Agency.

Subp. 3. **Commissioner.** "Commissioner" means the commissioner of the Department of Natural Resources or authorized representative.

Subp. 4. **Direct drainage basin.** "Direct drainage basin" means that portion of a lake's total watershed which is not drained to an upstream water basin, as defined herein. The determination of size and physical limits of a lake's direct drainage basin shall be made by the commissioner.

Subp. 5. **District boundaries.** "District boundaries" means, for the purpose of these parts, the territorial boundaries of a lake improvement district. All lands and waters within the direct drainage basin, as defined herein, shall be included within the district boundaries, except those exclusions for which written approval is obtained from the commissioner. The boundaries shall include a sufficient amount of the lake's watershed and related land to develop and implement feasible solutions to the problems the district intends

to address. The boundaries shall also include all lands and waters which can reasonably be considered adversely affected by the proposed programs, plans, or actions of the lake improvement district.

Subp. 6. **Lake.** "Lake" means, for the purpose of these parts, any public water basin identified and classified in the shoreland management ordinances of the local county or municipal unit of government.

Subp. 7. **Lake improvement district.** "Lake improvement district" means a district formed around a lake in accordance with Minnesota Statutes, sections 103B.501 to 103B.581. A lake improvement district is a local unit of government established by resolution of appropriate county boards and/or city governing bodies, or by the commissioner, for the implementation of defined lake management projects and for the assessment of the costs thereof.

Subp. 8. **Natural hydrologic boundaries.** "Natural hydrologic boundaries" means the boundaries of a lake's direct drainage basin, as defined herein.

Subp. 9. **Resident.** "Resident" means a person 18 years of age or older who meets the residency requirements of Minnesota Statutes, section 200.031.

Subp. 10. **Resident owner.** "Resident owner" means a Minnesota resident who is the owner of land or the contract purchaser of land within the boundaries of a lake improvement district.

Subp. 11. **Water basin.** "Water basin" means an enclosed basin normally partly or completely filled with water. The water basin may have inlet and outlet streams, it may have only an inlet or outlet, or it may be completely enclosed.

Subp. 12. **Watershed.** "Watershed" means the entire surface drainage area that contributes water to a lake.

Statutory Authority: *MS s 103B.511; 378.41*

History: *17 SR 1279*

Posted: *June 11, 2008*

6115.0930 SEVERABILITY.

The provision 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.

Statutory Authority: *MS s 378.41*

Posted: *June 11, 2008*

6115.0940 GOALS FOR LAKE IMPROVEMENT DISTRICTS.

Proposals for the establishment of lake improvement districts shall be evaluated according to the degree to which they promote the following goals:

- A. lake protection and rehabilitation;
- B. protection and enhancement of environmental values by preventing degradation of fish and wildlife habitat, surface and ground water quality, natural beauty and unique scientific values, recreational values, and the quality of life generally;

- C. preservation of the public rights in the public waters of the state and to provide the public use of the lake consistent with the preservation of environmental values;
- D. ensuring local involvement in the project and a commitment to future lake management;
- E. conformity with federal, state, regional, and local laws, rules, and water and related land management policies; and
- F. fair and objective resolution of conflicts between competing lake related interests in and around the district.

Statutory Authority: *MS s 378.41*

Posted: *June 11, 2008*

6115.0950 ELIGIBILITY FOR LAKE IMPROVEMENT DISTRICTS.

The types of lake improvements in items A to H are eligible for the creation of a lake improvement district:

- A. studying the sources of and solutions to lake problems;
- B. preserving and improving water quality by means of water and related land management, excluding land use zoning authority; and in-lake water treatment;
- C. sedimentation and siltation control;
- D. shoreline erosion control;
- E. aquatic nuisance control;
- F. preserving and improving fish and wildlife habitat;
- G. preserving and improving recreational potential of the lake; and
- H. any other purposes approved by the county board pursuant to Minnesota Statutes, sections 103B.551, subdivision 3; 103G.605; and 103G.621.

Statutory Authority: *MS s 103B.511; 378.41*

Posted: *June 11, 2008*

6115.0960 CRITERIA AND STANDARDS FOR ESTABLISHMENT OF LAKE IMPROVEMENT DISTRICTS.

Subpart 1. **In general.** Proposals for the establishment of lake improvement districts shall be evaluated based on the extent to which they demonstrate the following.

Subp. 2. **Local need for district.** The proposal shall demonstrate the need for the district and why another unit of government with similar powers, or a voluntary lake association, cannot or will not satisfactorily accomplish the district's proposed purposes.

Subp. 3. **Appropriateness of proposed boundaries.** The proposed boundaries shall be consistent with district boundaries as defined in part 6115.0920. The proposed boundaries shall include all lands and waters within the lake's direct drainage basin, unless justification is provided for including a lesser area and approved in writing by the commissioner. The proposed boundaries shall include a sufficient amount of

the lake's watershed and related land to develop and implement feasible solutions to the identified problems. The proposed boundaries shall include those lands and waters which can reasonably be considered adversely affected by the proposed actions of the district. The proposed boundaries shall be delineated so as to provide appropriate public representation and the equitable distribution of benefits and levying of costs.

Subp. 4. **Appropriateness of proposed purposes.** The proposed purposes shall be consistent with existing state, federal, regional, and local laws, policies, objectives, and plans pertaining to water and related land management, fish and wildlife habitat, surface and ground water quality, natural beauty and unique scientific values, economic and recreation values, and the quality of life. The proposed purposes shall be consistent with the public rights in the public waters of the state. When a district is proposed for the purpose of conducting a feasibility study of the sources of and solutions to lake problems, the proposal shall demonstrate an understanding that subsequent lake restoration measures may require modification of the district's boundaries and statement of purposes, pursuant to part 6115.0980, subpart 1, and Minnesota Statutes, section 103B.575.

Subp. 5. **Technical feasibility of proposed plans and programs.** The proposal shall demonstrate the technical feasibility of the proposed plans and programs, or provide for the determination of technical feasibility.

Subp. 6. **Adequacy of proposed means of financing.** The proposal shall demonstrate capability of raising sufficient funds to meet district purposes, to ensure continuity of district operations, and to meet the requirements of these parts.

Subp. 7. **Adequacy of procedures for planning, decision-making, and public involvement.** The proposal shall assure consideration of the interests of concerned citizens both within and outside the boundaries of the proposed district. The proposal shall include the identification of varying and often conflicting interests regarding water and related land management in and around the proposed district, and procedures to assure the consideration of such diverse interests so that decisions are made in the best overall interests of fairness and public health, safety, and welfare.

Subp. 8. **Public access.** The proposed plan shall provide for public access when adequate public access consistent with size of the lake, the extent of public interest in using the lake, and the combined uses of the lake is unavailable. Service charges may not be imposed on the use of a public access if other units of government cost share the acquisition, development, or maintenance of the public access.

Subp. 9. **Adequacy of long-range monitoring of environmental effects of district programs.** The proposed plan shall demonstrate an understanding of potential environmental effects of the proposed district plans and programs, and provide for a long-range monitoring of such effects.

Subp. 10. **Coordination with other special purpose districts.** The proposal shall demonstrate how the proposed district programs will be coordinated with existing special purpose districts formed for water and related land management. Examples of such units of government are watershed districts, sanitary districts, drainage and conservancy districts, lake conservation districts, and soil and water conservation districts. Lake improvement districts shall not be established where a special purpose unit of government for water and related land management exists which can implement the purposes of the proposed lake improvement district, unless written approval is acquired from such unit of government or

from the commissioner. The proposal should demonstrate efforts in good faith to resolve at the local level any conflicts between an existing special purpose district and the proposed lake improvement district.

Statutory Authority: *MS s 103B.511; 378.41*

Posted: *June 11, 2008*

6115.0970 CREATION OF LAKE IMPROVEMENT DISTRICT.

Subpart 1. **Petition or county board document.** A county board document proposing the creation of, or a petition to create, a lake improvement district shall contain the following elements:

- A. A written statement of lake problems and objectives.
- B. The proposed type or types of water and related land resource management programs to be undertaken by the proposed district. This shall include a detailed statement of intended studies, management programs, remedial actions, and construction projects.
- C. A statement of the means by which the programs will be financed.
- D. A map showing the boundaries of the proposed lake improvement district. The map shall show the number and location of permanent homes and seasonal dwellings in the district. The scale of the map, and basic geographical information, such as range, township, and section numbers, shall be clearly indicated on the map.
- E. The number of directors proposed for the district.
- F. Copies of local ordinances which regulate use of the lake or any public access.
- G. Any information indicating the degree of local interest and commitment to future management.
- H. The identification of any lands and waters which may be adversely affected by the implementation of district purposes, and a preliminary assessment of these adverse effects.
- I. A statement outlining the adequacy and ownership of public accesses, including public lands and beaches.
- J. An estimate of the total equalized valuation of the property within the district.
- K. Any other information demonstrating accordance with the criteria and standards for establishment as contained in part 6115.0960.

Subp. 2. **Submission of petition or resolution.** Initial submittal of petition or resolution to county board, the commissioner, and the agency for:

- A. Creation by petition. No later than five days after the official filing of a petition for the establishment of a lake improvement district with the county board, the citizens or organization sponsoring the petition shall provide a certified copy of the petition to the commissioner and the agency. This is necessary in order to facilitate preliminary review of the proposed district boundaries prior to the notification of the public hearing.
- B. Creation by resolution. At least 40 days prior to the public hearing, the county board shall provide a certified copy of the document containing the information required by this part to the commissioner and the agency. This is necessary to facilitate preliminary review of the proposed district boundaries prior to notification of the public hearing.

Subp. 3. **Notification of public hearing.** At least 21 days prior to the public hearing, the county board shall give notice of the public hearing to the commissioner and the agency, and make a reasonable attempt to notify every resident and every resident owner within the proposed district of the pending resolution or petition and the public hearing. A reasonable attempt to notify shall consist of mailing notice to the last known address of each landowner within the proposed district, publication of notice in two successive issues of a newspaper widely circulated in the proposed district, and posting notice in public buildings and several leading commercial establishments in or near the proposed district, as appropriate and reasonable. All local and regional units of government, special purpose districts, and development commissions within and adjacent to the boundaries of the proposed district shall be given notice of the public hearing. All corporations and utilities owning real estate or corporate property within the proposed district shall be given notice of the public hearing.

As part of the notification procedure, a statement shall accompany the notice setting forth the following:

- A. a description of the proposed purposes, programs, funding, and boundaries of the proposed district, and the name proposed for the district;
- B. the time and place of the public hearing; and
- C. the following paragraph shall be included:

"The establishment of the proposed lake improvement district requires review by the commissioner of natural resources and the approval of the (as appropriate) county board(s) (and/or city governing body). Concerned citizens may submit evidence at a public hearing to be held prior to the passage of any resolution establishing the proposed lake improvement district. Concerned citizens may also submit evidence and opinions to the commissioner of natural resources. A copy of the petition (or document, as appropriate) for the establishment of the lake improvement district is available for public review at the (as appropriate) county courthouse (or other appropriate public building; give address and telephone number where interested citizens can review the document)."

If the establishment of the lake improvement district is proposed by the county board pursuant to subpart 2, item B and Minnesota Statutes, section 103B.515, the following paragraph shall be included in the notice of the public hearing:

"Citizens may call for a referendum on the question of whether or not to establish a lake improvement district by filing a petition requesting such a referendum. The petition shall be signed by 25 percent of the land owners within the territory of the proposed district, who are Minnesota residents.

Upon receipt of such a petition prior to the effective date of creation of the district, the county board shall hold the creation in abeyance pending the referendum vote of all qualified voters residing within the boundaries of the proposed district."

Subp. 4. **Public review of petition or resolution.** The county board shall make the petition or document containing the information required by this part available for review by concerned citizens, at the county courthouse or other appropriate public building.

Subp. 5. **Review by commissioner and agency.** Upon receipt of a copy of the petition or document, the commissioner shall:

A. Review the petition or document and any evidence presented by the agency or concerned citizens pertaining to the establishment of the proposed district. This review shall include an evaluation of the statement of district purposes and its relation to existing laws, rules, and regulations, units of government, water and related land management programs and policies. The proposed district boundaries shall be examined to assess their consistency with these parts. When one or more of the stated purposes of the proposed district relate to pollution control, this review shall be conducted with the assistance of the agency.

B. Prepare an advisory report stating findings as to whether the proposed lake improvement district should be established. The commissioner shall set forth in the report any matters pertaining to the district which should be further investigated and evaluated. On determining that the establishment of the proposed district is not in the public interest, the commissioner shall so report the specific reasons and inadequacies. The commissioner may request additional time for review of the proposed district in such cases where additional time can be shown to be necessary for proper evaluation. The commissioner's report may contain reports by the agency.

Subp. 6. **Request for continuance or postponement of hearing.** The county board may grant requests by citizens, the commissioner, or the agency for postponement or continuance of the public hearing to a time more than 30 days after receipt of the petition and verification of the signatures thereon. Such requests may be granted if the county board determines that the additional time requested is appropriate and reasonable in order for the requesting organization or citizens to adequately prepare for the public hearing, and consistent with the goals of promptness and fairness in the proceedings.

Subp. 7. **Advisory report.** The commissioner's advisory report shall be publicly read into the record at the public hearing.

Subp. 8. **Modification of findings.** The commissioner may modify findings based on evidence presented during and subsequent to the public hearing.

Subp. 9. **Formal meeting to approve or disapprove district.** No sooner than ten days but within 30 days following the holding of the public hearing, the county board shall formally convene to approve or disapprove the establishment of the proposed lake improvement district. At least ten working days' notice shall be given to the commissioner of the time and place where the board will formally convene for this purpose. If the commissioner or the commissioner's representative does not appear, any modifications of the commissioner's advisory report shall be publicly read into the record.

Statutory Authority: *MS s 103B.511; 378.41*

History: *17 SR 1279*

Posted: *June 11, 2008*

6115.0980 ADMINISTRATION OF LAKE IMPROVEMENT DISTRICTS.

Subpart 1. **Modification.** No program, remedial action, project, or change of district boundaries which is not specified in the resolution creating a lake improvement district may be undertaken, except by modifying the appropriate items listed in part 6115.0970, subpart 1, items A to E.

For an established district, any of the items listed in part 6115.0970, subpart 1, items A to E may be modified by petition to or resolution by the county board, in the same manner that a district is created.

Subp. 2. **Legal responsibilities and liabilities of lake improvement districts.** Nothing in these parts shall be construed to relieve a lake improvement district of the legal duties, obligations, or liabilities incident to the programs, plans, or actions of the district.

The lake improvement district shall assume all legal risks and liabilities, including those for damages or any injury to persons or property, arising from the construction, operation, maintenance, alteration, or abandonment of its programs, plans, or actions.

In the event of termination of the district, or failure of the district to meet its obligations, these responsibilities and liabilities shall fall upon the unit or units of government which established the lake improvement district.

Subp. 3. **Limited state liabilities.** The establishment of a lake improvement district 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 lake improvement district.

Subp. 4. **Rights of lake improvement districts.** Nothing in these parts shall be construed to deprive any lake improvement district of such recourse to the courts as it may be entitled to under the laws of this state.

Subp. 5. **Inspections.** The commissioner shall be given prompt access to and inspection of all records, structures, facilities, and operations at all reasonable times as may be necessary to monitor compliance with the terms of existing permit and to ensure protection of the public health, safety, and welfare. The commissioner's inspections shall not relieve the lake improvement district from the full responsibility of providing adequate inspection and supervision for all programs and projects undertaken by the district.

Subp. 6. **Compliance with other laws and water management policies.** Lake improvement districts shall conform to federal, state, regional, and local laws, rules, and fish and wildlife, water, and related land management policies. Lake improvement districts shall obtain all necessary permits, as required by law, prior to implementing district purposes and programs.

Subp. 7. **Compliance by preexisting lake improvement districts.** Within one year following promulgation of these parts, lake improvement districts in existence prior to the promulgation of these rules shall submit to their county board and to the commissioner a certified copy of a document containing the

information required by part 6115.0970. This document shall also contain a report on the past and current activities and financial condition of the district.

The commissioner shall review the document and prepare an advisory report stating findings as to whether the district is consistent with these parts. The report may contain such recommendations as the commissioner determines is necessary to bring the district into compliance with these parts.

Within 60 days following the official filing of the commissioner's report with the county board, the board shall formally convene to consider the report. The county board shall give ten working days' notice to the commissioner of the time and place where it will convene to consider the commissioner's report. If the commissioner or the commissioner's representative does not appear, the report shall be publicly read into the record.

Statutory Authority: *MS s 378.41*

History: *17 SR 1279*

Posted: *June 11, 2008*

6115.1000 MR 1997 [Obsolete, MS s 14.47, subd. 6, paragraph (b)]

Posted: *June 11, 2008*

6115.1010 MR 1997 [Obsolete, MS s 14.47, subd. 6, paragraph (b)]

Posted: *June 11, 2008*

6115.1020 MR 1997 [Obsolete, MS s 14.47, subd. 6, paragraph (b)]

Posted: *June 11, 2008*

6115.1030 MR 1997 [Obsolete, MS s 14.47, subd. 6, paragraph (b)]

Posted: *June 11, 2008*

6115.1040 MR 1997 [Obsolete, MS s 14.47, subd. 6, paragraph (b)]

Posted: *June 11, 2008*

6115.1050 MR 1997 [Obsolete, MS s 14.47, subd. 6, paragraph (b)]

Posted: *June 11, 2008*

6115.1060 MR 1997 [Obsolete, MS s 14.47, subd. 6, paragraph (b)]

Posted: *June 11, 2008*

6115.1070 MR 1997 [Obsolete, MS s 14.47, subd. 6, paragraph (b)]

Posted: *June 11, 2008*

6115.1080 MR 1997 [Obsolete, MS s 14.47, subd. 6, paragraph (b)]

Posted: *June 11, 2008*

6115.1090 MR 1997 [Obsolete, MS s 14.47, subd. 6, paragraph (b)]

Posted: *June 11, 2008*

6115.1100 MR 1997 [Obsolete, MS s 14.47, subd. 6, paragraph (b)]

Posted: *June 11, 2008*

6115.1150 [Repealed by amendment, L 1979 c 199]

Posted: *June 11, 2008*

STATE WATER BANK PROGRAM

6115.1200 STATUTORY AUTHORITY AND PURPOSE.

These parts are promulgated under the authority of Minnesota Statutes, sections 103F.601, subdivisions 1 and 2, and 103G.315, subdivision 15. Their purpose is to implement and make specific the state water bank program and the indemnification process established by Minnesota Statutes, sections 103G.211 and 103G.221, for the purpose of compensating farmers for not converting certain kinds of wetlands to cropland.

Statutory Authority: *MS s 103F.601; 103G.315; 105.392; 105.415*

Posted: *June 11, 2008*

6115.1210 DEFINITIONS.

Subpart 1. **Adjacent land.** "Adjacent land" means any lands abutting a basin that is eligible for inclusion in the state water bank program.

Subp. 2. **Commissioner.** "Commissioner" means the commissioner of the Department of Natural Resources or designated agents.

Subp. 3. **Drain.** "Drain" means to conduct drainage activities that will remove or reduce the surface water from the basin. Acts constituting draining include, but are not limited to pumping, lowering the outlet, enlarging the outlet, tiling, or reducing the amount of water entering the basin. (Drainage does not include temporary water level reduction for conservation purposes.)

Subp. 4. **Fair market value.** "Fair market value" is an estimate of a property's value based upon standard and accepted land appraisal methods. The appraisal for eligible wetlands will estimate the potential value of the area as agricultural cropland less the cost of drainage.

Subp. 5. **Less than 50 acres in area.** "Less than 50 acres in area" means the area of a plane bounded by the ordinary high water mark which is a mark delineating the highest water level which has been maintained for a sufficient period of time to leave evidence upon the landscape. The ordinary high water mark is commonly that point where the vegetation changes from predominantly aquatic to predominantly terrestrial.

Subp. 6. **Professional soil classifier.** "Professional soil classifier" is a person who qualifies as a professional soil classifier on the basis of criteria specified by the Minnesota Association of Professional Soil Classifiers. The requirements are a bachelor of science degree in soil science or adequate credits (15 semester or 23 quarter hours) in soil science, and four years of field experience in mapping soils.

Subp. 7. **Public waters.** "Public waters" for the purposes of these rules means waters of the state so designated in a county by the process described in Minnesota Statutes, section 103G.201, and those waters that have been determined to be public waters or navigable waters by the district court or if appealed, by the state or federal Supreme Court.

Statutory Authority: *MS s 103F.601; 103G.315; 105.392; 105.415*

History: *17 SR 1279*

Posted: *June 11, 2008*

6115.1220 PROCEDURES.

Subpart 1. **Permit applications.** Application for a permit to drain basins that are potentially eligible for compensation from the department because of being declared public waters shall be made on such forms as the commissioner may provide and shall include all data specified by the form and any required application fees.

The applicant shall include the following information to enable the commissioner to determine the feasibility, practicality, and lawfulness of the proposed drainage:

- A. a statement by the owner that there are no burdens on the property or agreements which drainage would violate;
- B. a demonstration by the owner that the right to use the outlet can be obtained;
- C. a description of the proposed drainage project;
- D. a demonstration of the project costs, showing how the costs were estimated, together with an explanation of why the investment would be profitable; and
- E. a statement by a professional soil classifier that the basin would be high quality cropland. The determination shall be based on the following criteria. The kinds of soils that will that will qualify as high quality cropland are based on the following method arranged from best to poorest.

Rating Value

Soil Properties

1. Loamy or clayey mineral soils (loamy or clayey average particle size in the control section.)
2. Deep organic soils (Typic subgroups,) and shallow organic soils with a loamy or clayey substratum (Terric subgroups with loamy or clayey particle size.)
3. Shallow organic soils with a sandy or gravelly substratus (Terric subgroups with sandy or sandy skeletal particle size.)
4. Sandy or gravelly mineral soils (Aquents, aquepts, and Aquolls with sandy or sandy skeletal average particle size in the control section.)
5. Other soils (mostly soils with limnic materials dominating the control section.)

Growing degree days (GDD) will be used as a climatic parameter to use for accessing soil quality.

The groups from best to poorest are:

Rating Value	Climate Parameter
1.	More than 4400 GDD
2.	3400 - 4400 GDD
4.	Less than 3400 GDD

The following counties fall within the individual climate parameters:

More than 4400 GDD

Anoka	Lac Qui Parle	Rice
Big Stone	Le Sueur	Rock
Blue Earth	Lincoln	Scott
Brown	Lyon	Sibley
Carver	McLeod	Steele
Chippewa	Martin	Stevens
Cottonwood	Meeker	Swift
Dakota	Mower	Traverse
Dodge	Murray	Wabasha
Faribault	Nicollet	Waseca

Fillmore	Nobles	Washington
Freeborn	Olmsted	Watsonwan
Goodhue	Pipestone	Wilkin
Hennepin	Ramsey	Winona
Houston	Redwood	Wright
Jackson	Renville	Yellow Medicine
Kandiyohi		

3400 - 4400 GDD

Aitkin	Hubbard	Otter Tail
Becker	Isanti	Pennington
Beltrami	Itasca	Pine
Benton	Kanabec	Polk
Carlton	Kittson	Pope
Cass	Koochiching	Red Lake
Chisago	Lake of the Woods	Roseau
Clay	Mahnomen	Sherburne
Clearwater	Marshall	Stearns
Crow Wing	Mille Lacs	Todd
Douglas	Morrison	Wadena
Grant	Norman	

Less than 3400 GDD

Cook	Lake	St. Louis
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To arrive at a value, an index is determined by multiplying the soil property rating by the GDD rating. A value of four or less shall be considered high quality cropland.

The determination of soil properties shall be done by a professional soil classifier with at least one observation of soil properties to depths of 50 inches for each ten acres of the wetland. Points of

observations should be located systematically in the wetland, recorded on a map, and a log of soil made for each observation. The information shall be included with the permit application.

Subp. 2. **Eligible water basins.** If the public water basin is eligible for compensation the commissioner shall mail to the applicant, within 60 days of receipt of an application for a permit to drain, the various choices of indemnification, to include:

A. An offer:

(1) to place the basin in the state water bank program, together with a sample water bank agreement;

(2) to acquire the basin and such interest as is necessary to make entry upon the acquired area available to the public;

(3) to acquire an easement in the nature of a conservation restriction as described by Minnesota Statutes, sections 84.64 and 84.65, together with a sample of such an easement; or

(4) to acquire a lease on the basin, together with a sample lease agreement.

B. A statement:

(1) If such be the case, that the wetland appears to be eligible for the federal water bank program and who the landowner should contact. The state program, however, does not incur any obligations on the federal program and if the landowner chooses to select this option the landowner will be subject to the federal program's priorities and procedures.

(2) That the landowner may suggest any other appropriate indemnification method, along with the proposed terms and conditions that the landowner would like to have included.

(3) That the landowner and commissioner may agree to include adjacent property in the terms of the agreements.

(4) That the landowner may choose any one of the indemnification offers or any other method of indemnification that the commissioner will agree to.

C. An explanation of the balance of these procedures in order to establish the dollar amount of each offer as soon as the landowner specifies what adjacent land, if any, the landowner would like to have included.

Subp. 3. **Ineligible areas.** If the area is ineligible for compensation the commissioner will so inform the applicant and advise the applicant that a Minnesota Statutes, section 103G.311 hearing on the issue of eligibility may be demanded.

Subp. 4. **Right to drain basin.** If within 60 days of receipt of an application for a permit to drain, the commissioner does not mail the landowner a choice of indemnification, the landowner is entitled to drain the basin.

Subp. 5. **Adjacent land.** Upon receipt of an offer of indemnification, the landowner shall inform the commissioner of the amount, if any, and location of adjacent land that the landowner would like to have included in the agreement, and what alternative, if any, methods of indemnification the landowner would like the commissioner to consider.

Subp. 6. **Certification.** Within 60 days of receiving the above information the commissioner shall complete an appraisal of the property and submit it to the Department of Administration for certification. If it is not so submitted within the 60-day period, the landowner may drain the basin.

Subp. 7. **Negotiations.** When an appraisal has been certified, the commissioner shall inform the landowner of the dollar amount of each offer, and begin negotiations. The outcome of the negotiations can be either:

- A. the landowner accepts one of the offers made or agreed to by the commissioner;
- B. the landowner places the basin in a federal water bank program;
- C. the landowner signs a consent to condemnation pursuant to Minnesota Statutes, section 84.027, subdivision 9, specifying which of the methods of indemnification offered or agreed to by the commissioner that the landowner has selected; or
- D. the landowner does none of the above, in which case the basin cannot be drained unless and until a new application for a permit to drain is submitted and the commissioner does not make an offer of indemnification.

Subp. 8. **Sale of basin to commissioner.** If the landowner chooses to sell the basin and access area to the commissioner the landowner shall obtain from the county board of commissioners the approval to sell the property as required by Minnesota Statutes, section 97A.145. The commissioner must be supplied with a copy of the board's resolution and if the county board refuses approval, the applicant must select from among those options not requiring county board approval. This procedure does not apply in those counties where blanket approval to sell the property to the state has been granted to those landowners who are eligible for compensation under Minnesota Statutes, section 105.391, subdivision 3.

Subp. 9. **Recording and indexing documents.** Water bank, lease, and easements obtained on an area shall be recorded and indexed in the office of the county recorder in the county where the basin lies.

Statutory Authority: *MS s 103F.601; 103G.315; 105.392; 105.415*

History: *L 1986 c 386 art 1 s 28; 17 SR 1279*

Posted: *June 11, 2008*

6115.1230 EFFECTIVE DATE.

These parts apply to applications for permits to drain received after the water basin involved has been designated a public water pursuant to Minnesota Statutes, section 103G.201, or has been identified as public waters or navigable waters by a district court or if appealed, by the state or federal Supreme Court.

Statutory Authority: *MS s 103F.601; 103G.315; 105.392; 105.415*

Posted: *June 11, 2008*

6115.1240 PAYMENT RATES.

Subpart 1. **Water bank program.** Annual payment rates for the state water bank program will be determined by multiplying the fair market value of the water basin and any adjacent lands by five percent.

Subp. 2. **Water basin and adjacent lands.** Annual lease payments for the water basin and any adjacent lands will be based on a fair market rental rate.

Subp. 3. **Easements.** Conservation restrictions in the form of easements will be established by an appraisal and their lengths will be subject to negotiation.

Subp. 4. **Other method of indemnification.** The rate for any other method of indemnification that is agreed to will be negotiated with the landowner and judged on its merits based upon the proposed restrictions and their relationship to the other payment rates.

Statutory Authority: *MS s 103F.601; 103G.315; 105.392; 105.415*

Posted: *June 11, 2008*

6115.1250 TERMS FOR WATER BANK AND LEASE AGREEMENTS.

Subpart 1. **Agreement period and beginning date.** Agreement period and beginning date:

A. Eligible basins are placed in the state water bank program for a period of ten calendar years and under a lease agreement for, not to exceed, 20 calendar years.

B. The lease agreement is continuous and shall transfer with the property if ownership changes during the time of the lease agreement.

C. A water bank or lease agreement finalized during the current calendar year shall be effective January 1 of that year. Exception: in cases where compliance with the terms of agreement cannot be rendered during the current calendar year, the beginning date of the agreement shall be January 1 of the following year.

D. Water bank or lease payments for the first year of an agreement will be made as soon as possible after an agreement has been finalized. Payments for the duration of a water bank or lease agreement will be made on or about August 1 of each continuous year thereafter.

Subp. 2. **Terms.** Terms:

A. Waterbasins. In return for receipt of an annual payment the landowner must agree not to adopt any practice which would tend to defeat the purposes of the agreement. At a minimum, the designated basin may not be:

(1) Drained, burned, filled, clipped, or otherwise used in such a manner that would effect its wetland character. Exception: noxious weeds may be controlled by the landowner by spot clipping and spot spraying. If cutting is used the area should not be clipped closer than six inches so as to protect nesting wildlife.

(2) Harvested for agricultural purposes.

(3) Grazed.

(4) Used as a source of irrigation water.

(5) Used as a receptacle for draining other wetlands.

Exception: the commissioner may approve designated acreage to receive limited drainage waters if such use is in keeping with sound wetlands management and prescribed in a mutually agreed upon conservation plan.

B. Adjacent lands. On finding it desirable the commissioner may mutually agree with the landowner upon the amount and location of adjacent lands to include in the agreement. Up to one acre of adjacent land may be obtained for each acre of water basin. The commissioner may negotiate and outline a conservation plan for the water basin and adjacent lands. Upon signing the agreement, the landowner shall agree to effectuate the wetland conservation and development plan. Terms that may be included are:

- (1) development of food and/or cover plots;
- (2) specified planting and harvesting dates;
- (3) areas desirable for permanent cover;
- (4) habitat improvement methods such as: clearing, tilling, reestablishment of former wetlands or the creation of new wetlands, fencing to protect the area;
- (5) advice on conservation and development practices; and
- (6) any other mutually agreed upon practice that would effectuate wetland conservation and development.

Subp. 3. **Signatures.** The agreement shall be on forms provided by the commissioner and shall be signed by the owner of the designated acreage, and the commissioner.

Statutory Authority: *MS s 103F.601; 103G.315; 105.392; 105.415*

History: *17 SR 1279*

Posted: *June 11, 2008*

6115.1260 MODIFICATIONS OF WATER BANK AND LEASE AGREEMENTS.

Subpart 1. **In general.** The commissioner and the landowner may mutually agree to any modification of agreement terms that may be desirable to carry out the purposes of the program or facilitate its administration. Exception: no changes in payment rates for acreage under agreement is authorized during the term of the water bank or lease agreement.

Subp. 2. **Change in ownership of lands underlying public waters.** All landowners shall notify the commissioner of the sale of property that is covered by the water bank or lease agreement. Upon transfer of an individual's right and interest in lands subject to a water bank agreement during the agreement period, the former landowner forfeits all rights to further payments under the agreement and refunds to the state all payments received thereunder during that year of the transfer. Forfeiture of payments is not required for those participating in a lease agreement nor if the transferee of any such land agrees with the commissioner to assume all obligations of the former owner.

The new landowner may choose not to participate in the water bank program; however, any water declared public shall not be drained. If an alternative form of indemnification is desired, or if the new owner wishes to have payment rates adjusted on the existing water bank agreement, a permit application will have to be submitted to the commissioner to initiate the procedures in these parts. The requirement for

soils information and borings shall be waived on those basins that have been determined eligible for the water bank program by previous permit applications.

When two or more farms are combined that share mutual public waters the landowner who is adding property shall have the option of adding the new property to the original agreement, continuing the former owners' agreement, or decide not to participate in the program and not be able to drain the basin.

When a transfer of ownership occurs on or before August 1 of the current calendar year and the new owner agrees to continue the former owner's obligation, payments due will be made to the new owner.

Subp. 3. **Registration of modification.** All modifications will be completed on amendment forms provided by the commissioner. Modifications will be noted on the original agreement and the original amendment forms will be retained by the commissioner.

Statutory Authority: *MS s 103F.601; 103G.315; 105.392; 105.415*

History: *17 SR 1279*

Posted: *June 11, 2008*

6115.1270 AGREEMENT TERMINATIONS.

Subpart 1. **Forfeit of rights to further payments.** Upon termination of an agreement the landowner shall forfeit all rights to further payments.

Subp. 2. **Termination by mutual consent.** The commissioner may terminate any agreement with mutual consent of the landowner if the commissioner determines that termination would be in the public interest. If such be the case, no refund of payments made under the agreement is required.

Subp. 3. **Refund of payments.** The landowner must refund to the state all payments, partial or in full, received under the agreement upon any violation of the agreement terms during the time that the landowner has control of the property.

A. Subject to the commissioner's determination that the violation is material and of the nature that warrants termination of the agreement the landowner shall:

- (1) refund to the state all payments received;
- (2) forfeit all rights to further payments;
- (3) not be entitled to drain the affected basin; and

(4) not have the basin considered for a permit to drain or be allowed compensation under Minnesota Statutes, sections 103G.211 and 103G.221, until a transfer of ownership has taken place.

B. Subject to determining that the violation does not warrant termination of the agreement, the commissioner may require partial refunds or make payment adjustments as the commissioner deems appropriate.

Subp. 4. **Termination action.** The commissioner shall notify each party to the agreement of the termination:

- A. the reason for termination;
- B. the amount of payment refund due;
- C. that the landowner is no longer required to comply with the agreement terms and that the public waters cannot be drained; and
- D. that the landowner may challenge the termination by demanding a hearing under Minnesota Statutes, section 103G.311.

Statutory Authority: *MS s 103F.601; 103G.315; 105.392; 105.415*

History: *17 SR 1279*

Posted: *June 11, 2008*

6115.1280 EXTENSION OF WATER BANK OR LEASE AGREEMENT.

At the end of an agreement period the commissioner shall offer the landowner the landowner's choice of the five indemnification offers without requiring a new application for a permit to drain. The landowner has 60 days to notify the commissioner, in writing, if the landowner will be:

- A. continuing the former agreement terms, subject to any rate redetermination; or
- B. dissolving the former agreement; and
- C. changing to another form of indemnification; or
- D. deciding not to participate in the program with the knowledge that the basin cannot be drained.

If the landowner chooses to select another indemnification method, the choice must be specified in the landowner's notice to the commissioner.

If the notification of the landowner's intent to continue in the program is not given, the landowner will be required to submit an application for a permit to drain the basin to establish future eligibility to the water bank program.

Upon receipt of the landowner's choice, the commissioner shall conduct an appraisal to establish the fair market value of the property. Once completed, the agreement may be finalized.

Statutory Authority: *MS s 103F.601; 103G.315; 105.392; 105.415*

History: *17 SR 1279*

Posted: *June 11, 2008*

AGRICULTURAL DIKE CONSTRUCTION ALONG THE

RED RIVER OF THE NORTH AND BOIS DE SIOUX RIVERS**6115.1300 PURPOSE.**

The purpose of these parts is to provide for the orderly and consistent review of permit applications to construct, relocate, rebuild, or alter agricultural dikes along the Red River of the North and Bois de Sioux Rivers in order to assure that the granting of such permits would be in the best interests of the people of Minnesota and North Dakota. These parts are mutually applicable in both states. The authority to establish these joint criteria is granted to the commissioner of Natural Resources in Minnesota Statutes, sections 103G.105, 103G.245, and 471.59 and to the North Dakota State Water Commission by Sections 61-02-24 and 61-16-15 of the North Dakota Century Code. The two states recognize that establishment of these parts governing the issuance, review, and denial of permits to construct, relocate, rebuild, or alter agricultural dikes along the boundary rivers is but the first step in the exercise of joint control over those activities which could contribute to an increased flood potential of these rivers. The two states further recognize the need to exercise this joint control in that water management decisions which appear logical in a local or statewide context may have negative interstate and international impacts.

These parts are being established at this time because there is a current need to provide a basis for the review of existing, unauthorized agricultural dikes and permit applications for the construction of additional agricultural dikes along the boundary waters. Local land owners view such dikes as interim solutions to local flood problems.

Statutory Authority: *MS s 103G.105; 103G.315; 105.415; 105.49; 471.59*

Posted: *June 11, 2008*

6115.1310 SCOPE.

These parts governing the review, issuance, and denial of permits to construct, relocate, rebuild, or alter agricultural dikes along the boundary rivers pertain to all such dikes located within the floodplains of the Red River of the North and the Bois de Sioux Rivers. Floodplain areas of the Red River of the North are defined by Appendix O, Volume 8, of the Souris-Red-Rainy Basins Comprehensive Study as Red River of the North Main Stem Regional Floodplain Area, and the floodplain of the Bois de Sioux River is defined by the U.S. Geological Survey one percent chance of recurrence area flood quadrangles. These rules apply to dikes constructed on tributaries within the floodplains of these boundary rivers. These parts shall be superseded by local authority adoption of commissioner approved floodplain ordinances which include agricultural diking provisions as conditional uses.

Statutory Authority: *MS s 103G.105; 103G.315; 105.415; 105.49; 471.59*

Posted: *June 11, 2008*

6115.1320 DEFINITIONS.

Subpart 1. **Scope.** For the purposes of these parts certain terms or words used herein shall be interpreted as follows.

Subp. 2. **Boundary rivers.** "Boundary rivers" means the Red River of the North and the Bois de Sioux River as they form a natural boundary between the states of Minnesota and North Dakota.

Subp. 3. **Dike.** "Dike" means an embankment constructed of earth and/or other suitable materials to protect agricultural lands.

Subp. 4. **Farmstead.** "Farmstead" means a farm dwelling and/or associated farm buildings.

Subp. 5. **Flood frequency.** "Flood frequency" means the average frequency, statistically determined, for which it is expected that a specific flood stage or discharge may be equalled or exceeded. This frequency is usually expressed as having a probability of occurring, on the average, once within a specified number of years.

Subp. 6. **Flood waters.** "Flood waters" means those waters which temporarily inundate normally dry areas adjoining a watercourse. This inundation results from an overflow of the watercourse caused by excessive amounts of rainfall and/or snowmelt which exceed its capacity.

Subp. 7. **Public waters.** "Public waters" means all natural and altered natural watercourses with a total drainage area greater than two square miles, except that trout streams officially designated by the commissioner shall be public regardless of the size of their drainage area.

Subp. 8. **Watercourse.** "Watercourse" means a channel in which a flow of water occurs either continuously or intermittently in a definite direction. The term applies to either natural or artificially constructed channels.

Statutory Authority: *MS s 103G.105; 103G.315; 105.415; 105.49; 471.59*

Posted: *June 11, 2008*

6115.1330 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.

Statutory Authority: *MS s 103G.105; 103G.315; 105.415; 105.49; 471.59*

Posted: *June 11, 2008*

6115.1340 DESIGN CRITERIA.

Subpart 1. **Dike setbacks and elevation.** Dikes are to be constructed at a location and elevation so as not to cause an increase in elevation of the 100-year frequency flood of more than one-half foot at any point along the river. Calculation of the effects of the dikes shall be based on an assumed equal degree of encroachment along the opposite side of the river. If mutual agreement has been reached between persons on both sides of the river, dikes on one side may utilize up to the entire increase in flood elevation allowable. In all instances the applicants maintain the liability for damages resulting from any and all activities.

Subp. 2. **Dike dimensions.** Dike top width shall not be less than six feet. Side slopes shall not be steeper than 3:1, except where slope stability analysis and slope erosion control can justify steeper slopes. No organic soil or material shall be allowed in the foundation of the fill of dikes.

Subp. 3. **Vegetative cover and riprap.** A protective cover of grasses shall be established on all exposed surfaces of the dike. Riprap shall be used where required for control of erosion.

Subp. 4. **Interior drainage.** Dikes shall have provisions for interior drainage. The design shall include plans to handle the discharge from the drainage area based on drainage design requirements for the local area.

Statutory Authority: *MS s 103G.105; 103G.315; 105.415; 105.49; 471.59*

Posted: *June 11, 2008*

6115.1350 HYDROLOGIC DATA FOR DESIGN.

The North Dakota State Water Commission and the Minnesota Department of Natural Resources shall provide the discharges and corresponding elevations of the various frequency floods (and other available flood data), in relation to known historic floods, for use in dike design.

Statutory Authority: *MS s 103G.105; 103G.315; 105.415; 105.49; 471.59*

Posted: *June 11, 2008*

6115.1360 DIKES ACROSS NATURAL WATERWAYS AND LEGAL DRAINS.

Dikes shall not be constructed across public waters or watercourses without permit from the commissioner of natural resources, under Minnesota Statutes, section 103G.245. Dikes constructed across legal drains or public ditch systems shall require the approval of the appropriate local authority (watershed district, county, city, etc.).

Statutory Authority: *MS s 103G.105; 103G.315; 105.415; 105.49; 471.59*

Posted: *June 11, 2008*

6115.1370 FARMSTEAD DIKING.

Within an existing dike system, ring dikes around individual farmsteads shall not require dike permits if they are not provided with tiebacks to existing roadways or dikes. Ring dikes provided with tiebacks shall be considered part of the overall dike system and will be required to secure diking permits. Outside the dike system there shall be no limitations on tiebacks of dikes around farmsteads. However, appropriate authorization must be obtained from the local land use authority consistent with adopted codes or ordinances.

Statutory Authority: *MS s 103G.105; 103G.315; 105.415; 105.49; 471.59*

Posted: *June 11, 2008*

6115.1380 PERMIT APPLICATION.

Subpart 1. **Forms; plans and specifications.** All applications submitted by the owner to construct, to relocate, rebuild, or alter dikes shall be made on forms provided by the commissioner and shall be accompanied by two complete sets of plans and specifications. Such plans and specifications shall include the following:

A. a general location map with a minimum scale of 1" = 800' showing the following: location of the dike with respect to the watercourse; location of field inlets to provide for internal drainage; and location of legal drains and natural channels tributary to the main river channel;

B. detailed cross-sections of the dike showing elevation, in relation to mean sea level, and side slopes; and

C. other data as deemed appropriate by the commissioner to properly evaluate the application for permit.

Subp. 2. **Cross-sections.** After review of the information required above and other available data, the state agency to which the application is made shall determine the location and number of required cross-sections of the river channel and overland areas. These locations shall be provided to the applicant who shall then provide the required cross-section data. The applicant shall undertake and agree to pay the expenses incurred in securing these cross-sections.

Subp. 3. **Joint permit applications.** Joint permit applications involving two or more landowners or a permit application on behalf of two or more landowners will be accepted by the state agencies. These permit applications, taken together, must meet the above rules.

Subp. 4. **Joint administration.** A copy of each application for a permit shall be forwarded by the state agency receiving the initial application to the other state for comment and recommendation before final approval is granted. If no response is received within 30 days, the commissioner shall process the permit without such comments or recommendations.

Subp. 5. **Permit revocation.** The applicant shall provide for certification by a licensed land surveyor, engineer, or other qualified person or agency that the finished dike elevations are not higher than those approved by the commissioner. The permit will be revoked for failure to provide this certification. The permit may be revoked for failure to construct the dike in accordance with the plans and specifications submitted. Structural alteration of the dike without permission of the appropriate state agency will also result in having the permit revoked.

Subp. 6. **Reconstruction; maintenance.** Reconstruction of any authorized dike may be performed after notification to the commissioner of the repair needed. Permittee shall again certify the repair concurrent with this section. The maintenance of dikes must include periodic removal of woody vegetation (for example, trees and shrubs) which may become established on the embankment.

Subp. 7. **General administration.** All applicants for permit to construct dikes shall be subject to the provisions of parts 6115.0240 to 6115.0260.

Statutory Authority: *MS s 103G.105; 103G.315; 105.415; 105.49; 471.59*

History: *L 1998 c 324 s 9*

Posted: *June 11, 2008*

6115.1390 EXCEPTION TO CRITERIA.

Under special circumstances, exceptions to the dike rules may be authorized on an individual basis but they must have the concurrent approval of the North Dakota state engineer, local water management board in North Dakota, Minnesota Department of Natural Resources, and local watershed district in Minnesota. Factors that will be considered include but shall not be limited to dike setback line, location of farmsteads, property lines, existing roads, stream velocity, environmental effects, and acquisition of flowage rights. Request for exceptions must be accompanied by a plan satisfactory to all agencies.

Statutory Authority: *MS s 103G.105; 103G.315; 105.415; 105.49; 471.59*

Posted: *June 11, 2008*

6115.1400 APPLICATION OF RULES TO EXISTING DIKES.

These parts shall apply to all unauthorized dikes constructed in the past for the protection of those agricultural lands located within the floodplains of the Red River of the North and the Bois de Sioux, as defined in part 6115.1310. Exceptions are farmstead dikes if they meet the provisions of part 6115.1370.

The commissioner shall have the authority to order removal, modification, or reconstruction of dikes not conforming to these parts.

Statutory Authority: *MS s 103G.105; 103G.315; 105.415; 105.49; 471.59*

Posted: *June 11, 2008*

**CONSOLIDATED CONSERVATION AREAS
DRAINAGE PROJECTS****6115.1500 PURPOSE.**

The purpose of parts 6115.1500 to 6115.1550 is to establish criteria and procedures for determining drainage benefits to state-owned lands in consolidated conservation (con-con) areas administered under Minnesota Statutes, chapter 84A. Con-con areas are found in parts of Aitkin, Beltrami, Koochiching, Lake of the Woods, Mahnomon, Marshall, and Roseau Counties.

Statutory Authority: *MS s 84A.55*

History: *32 SR 1697*

Posted: *June 11, 2008*

6115.1510 DEFINITIONS.

Subpart 1. **Scope.** The terms used in parts 6115.1500 to 6115.1550 have the meanings given in this part.

Subp. 2. **Commissioner.** "Commissioner" means the commissioner of natural resources or the commissioner's designated representative.

Subp. 3. **Department.** "Department" means the Department of Natural Resources.

Subp. 4. **Drainage.** "Drainage" means any method for removing or diverting waters from wetlands. The methods include, but are not limited to, excavating an open ditch, installing subsurface drainage tile, filling, diking, or pumping.

Subp. 5. **Drainage authority.** "Drainage authority" has the meaning given under Minnesota Statutes, section 103E.005, subdivision 9.

Subp. 6. **Drainage project.** "Drainage project" means a new drainage system, an improvement of a drainage system, an improvement of an outlet, a lateral, a repair, or a redetermination of benefits involving state-owned lands in consolidated conservation areas administered under Minnesota Statutes, chapter 84A, where:

- A. the drainage authority will make assessments to state-owned lands; or
- B. the commissioner will be asked or must consider whether to participate in the project through assessments or a lump sum, by joining the petition, by consent, or by approval.

Subp. 7. **Drainage system.** "Drainage system" has the meaning given under Minnesota Statutes, section 103E.005, subdivision 12.

Subp. 8. **Improvement.** "Improvement" means the tiling, enlarging, extending, straightening, or deepening of an established and constructed drainage system, including construction of ditches to reline or replace tile and construction of tile to replace a ditch.

Subp. 9. **Lateral.** "Lateral" has the meaning given under Minnesota Statutes, section 103E.005, subdivision 15.

Subp. 10. **Public waters.** "Public waters" has the meaning given in Minnesota Statutes, section 103G.005, subdivision 15.

Subp. 11. **Public waters wetlands.** "Public waters wetlands" has the meaning given in Minnesota Statutes, section 103G.005, subdivision 15a.

Subp. 12. **Repair.** "Repair" means to restore all or a part of a drainage system as nearly as practicable to the same condition as originally constructed and subsequently improved, including resloping of ditches and leveling waste banks if necessary to prevent further deterioration, realignment to original construction if necessary to restore the effectiveness of the drainage system, and routine operations that may be required to remove obstructions and maintain the efficiency of the drainage system. "Repair" also includes:

A. incidental straightening of a tile system resulting from the tile-laying technology used to replace tiles; and

B. replacement of tiles with the next larger size that is readily available, if the original size is not readily available.

Statutory Authority: *MS s 84A.55*

History: *32 SR 1697*

Posted: *June 11, 2008*

6115.1520 DRAINAGE PROJECTS.

Subpart 1. **Notification and documentation.** For the commissioner to consider participating in a drainage project that would have assessments within a consolidated conservation area, the drainage authority must follow the procedures described in this subpart. The drainage authority must notify the commissioner, in writing and as soon as practicable, with specifics about the proposed project. The specifics must describe the purpose of the project and what kind of project it is. The drainage authority must show the extent of the project on a map. The drainage authority must provide the commissioner with copies of all written documents, including any petition and engineer's report that have been filed or used in connection with the drainage project proceedings, as they are available.

Subp. 2. **Investigation.** After receiving notification and all documentation required under subpart 1, the commissioner must complete an investigation to determine whether the proposed drainage project benefits state-owned lands for the purposes for which they were established. In the investigation, the commissioner must:

A. determine, which, if any, state-owned lands are positively impacted by the proposed drainage project according to subpart 3; and

B. determine which, if any, state-owned lands are negatively impacted by the proposed drainage project according to subpart 4.

Subp. 3. **Positive impacts.** Positive impacts to state-owned lands occur when a proposed drainage project allows the department or department's lessee to continue to use or enhances its ability to use drainage to achieve management purposes as provided in Minnesota Statutes, section 84A.55. The following criteria are evidence that the department uses drainage to achieve a management purpose:

A. the department utilizes a drainage system to outlet water into a public ditch from agricultural cropland it manages;

B. the department leases the land for commercial purposes such as agriculture, agro-forestry, aquaculture, wild rice paddies, peat mining, or mineral extraction, and the lessee utilizes a drainage system to outlet water into a public ditch from the leased lands;

C. the department petitions for a drainage project;

D. the department outlets water from state-owned lands into a public ditch from an impoundment that is designed and used exclusively for wildlife management purposes;

E. timber production is improved by the project; or

F. wildlife habitat is improved by the project.

Subp. 4. **Negative impacts.** Negative impacts to state-owned lands occur when a drainage project adversely affects the management of the land for its intended purposes. The following criteria are evidence that a drainage project negatively impacts state-owned lands. The drainage project:

A. degrades public waters, public waters wetlands, or wetlands on state-owned lands;

B. causes direct physical disturbance to rare species or significant natural communities through project activities such as, but not limited to, ditching and depositing soils;

C. causes an alteration of the hydrology that disturbs rare species, natural communities, or peatland features;

D. causes an alteration of the hydrology that degrades designated peatland scientific and natural areas;

E. restricts management options for state-owned lands; or

F. results in the reduction or elimination of access to state-owned lands.

Statutory Authority: *MS s 84A.55*

History: *32 SR 1697*

Posted: *June 11, 2008*

6115.1530 DETERMINING BENEFIT AND PARTICIPATION.

Subpart 1. **Commissioner's determination.** Following the investigation under part 6115.1520, for all drainage projects except those classified as repairs, the commissioner must determine whether the drainage project benefits state-owned lands and whether to participate in the project. In making the determination, the commissioner shall evaluate state-owned lands, on a parcel-by-parcel basis, with each parcel consisting of no more than 40 acres. A drainage project benefits a parcel of state-owned land only when the investigation shows that the positive impacts outweigh the negative impacts to that

parcel of state-owned land. Where the commissioner determines that the project results in a net benefit to state-owned lands, the commissioner shall participate in the project. Having determined to participate, the commissioner shall authorize the imposition of assessments for the project on the lands in any amounts the commissioner determines or may make lump sum contributions to the county or other public funds established for the payment of the cost of the project. The commissioner may also set conditions to modify the project before approving or joining a petition. Before cooperating in a project by joining in the petition or consenting to or approving it, the commissioner may identify conditions that must be satisfied or modifications that must be made in the proposed project if such conditions or modifications are necessary to ensure that the project will benefit state-owned lands in con-con areas.

Subp. 1a. **Commissioner's determination for repairs.** Following the investigation under part 6115.1520, for drainage projects considered repairs, the commissioner must determine whether the repair project benefits state-owned lands and whether to participate in the project. In making the determination, the commissioner, following consultation with drainage authorities, shall develop a table that identifies the benefits for each 40-acre parcel. A repair project benefits a parcel of state-owned land only when the investigation shows that the positive impacts outweigh the negative impacts to that parcel of state-owned land. Where the commissioner determines the project results in a net benefit to state-owned lands, the commissioner shall participate in the project. Having determined to participate, the commissioner shall authorize the imposition of assessments for the projects on the lands in any amounts the commissioner determines or may make lump sum contributions to the county or other public funds established for the payment of the cost of the project. The commissioner may also set conditions to modify the project before approving or joining the petition. Before cooperating in a project by joining in the petition or consenting to or approving it, the commissioner may identify conditions that must be satisfied or modifications that must be made in the proposed project if such conditions or modifications are necessary to ensure that the project will benefit state-owned lands in con-con areas.

Subp. 2. **Routine repair exception.** If a drainage authority's notification and documentation made under part 6115.1520, subpart 1, shows that the total cost of a proposed drainage repair under Minnesota Statutes, section 103E.705, is less than \$20,000 and the commissioner has previously determined the benefits to the state-owned lands within that drainage system, the commissioner may, without investigation, authorize the imposition of assessments for the proposed repair proportionate to the overall benefits to the state-owned lands as previously determined by the commissioner. If the commissioner authorizes assessments under this subpart, the commissioner need not issue the findings and report required under part 6115.1540. Where the commissioner does not authorize an assessment for a repair under this subpart, the commissioner shall issue the findings and report as set forth in part 6115.1540.

Statutory Authority: *MS s 84A.55*

History: *32 SR 1697*

Posted: *June 11, 2008*

6115.1540 FINDINGS AND REPORT.

Upon completion of the table described in part 6115.1530, subpart 1a, for repairs and following the investigation under part 6115.1520, the commissioner must provide the drainage authority with findings within 60 days after the commissioner has received all notifications and documentation required under part 6115.1520, subpart 1. For repairs over \$20,000, and upon completion of the table described in part 6115.1530, subpart 1a, the commissioner must provide the drainage authority with findings within 60 days.

The findings must convey the results of the investigation, state whether the commissioner will participate in the project, and state the reasons for the commissioner's decisions. The findings must identify which state-owned lands are benefited and which are not and set forth any conditions the commissioner attaches to the project and the amount of the contribution if the commissioner will participate.

Statutory Authority: *MS s 84A.55*

History: *32 SR 1697*

Posted: *June 11, 2008*

6115.1550 APPEAL.

The findings and report of the commissioner under part 6115.1540 may be reviewed by a declaratory judgment action in the district court of the county wherein the proposed project, or any part thereof, would be undertaken. Judicial review under this part must be initiated within 60 days after receipt of the findings by the drainage authority.

Statutory Authority: *MS s 84A.55*

History: *32 SR 1697*

Posted: *June 11, 2008*

Minnesota Water Statutes and Rules

What are Statutes?

Statutes are laws that apply to all citizens and cover a variety of topics. Laws refer to all laws passed by the Legislature, which are subsequently bound in the Session Laws of that year. Statutes are a codification of those laws, which are compiled and published every year as Minnesota Statutes. By codifying laws into Minnesota Statutes, the laws are placed into context of statutes that have been on the books in previous years.

What are Rules?

Administrative rules are not actually enacted by the Legislature. Rather, the Legislature merely gives the state agency or unit the authority to establish its own rules. These administrative rules have the force and effect of law.

An agency may adopt a rule only after the legislature has enacted a law granting this authority to the agency. An agency rule that is adopted under the rulemaking provisions of **Minnesota Statutes, chapter 14**, has the force and effect of law. ***Rulemaking in Minnesota: A Guide*** explains each step of the rulemaking process in Minnesota.

Statutes and Rules Relating to DNR Waters Programs

Subject	Statute	Rule
Public Waters and Public Waters Wetlands	<u>103G</u>	<u>6115</u>
Water Appropriation	<u>103G</u>	<u>6115</u>
Dam Safety	<u>103G</u>	<u>6115</u>
Floodplain Management	<u>103F</u>	<u>6120</u>
Shoreland Management	<u>103F</u>	<u>6120</u>
Lake Improvement Districts	<u>103B</u>	<u>6115</u>
Wild and Scenic Rivers	<u>103F</u>	<u>6105</u>
Pollution Sensitivity	<u>103H</u>	No rule

- **[Search statutes by key word or phrase](#)**
- **[Search rules by key word or phrase](#)**

General Water Statutes and Rules Information

- **Minnesota Statutes**
 - **[Index of State Water-Related Statutes: Chapters 103A thru 114](#)**
 - **[Table of Contents for Chapter 103G: Waters of the State](#)**
- **Minnesota Rules**
 - **[Index of Minnesota Department of Natural Resources Rules: Chapter 6100 through 6290](#)**
- **Links to Other State, Federal, and Local Law References**
 - **[Minnesota Legislative Reference Library: Links to the World](#)**

Other Resources

- [Water Law Basics](#)
- [Wetlands Regulation in Minnesota](#)  (410 Kb)
- [Questions and Answers About Water Laws in Minnesota](#)  (413 Kb)

DISCLAIMER

These web page references or links are provided as a service to our customers. These references to statutes and rules are important to understanding the programs that DNR Waters implements. DNR and DNR Waters are not responsible for publishing, maintaining or correcting these web pages. The content of the pages will be reviewed periodically for correctness and corrections will be sent to the webmaster in the office of the Legislative Revisor of Statutes.

E.23. Mississippi



FEMA

GUIDANCE FOR THE DESIGN OF DAMS
PLANS, SPECIFICATIONS & ENGINEERING REPORTS

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CHAPTER 10 GENERAL

10. INTRODUCTION

10.1 Acknowledgment

The technical guidance in this document has primarily been taken from Design of Small Dams, 3rd Edition, U.S. Bureau of Reclamation, Earth Dams and Reservoirs TR-60, NRCS, Earth and Rockfill Dams – General Design and Construction Considerations, EM 1110-2-2300, U.S. Army Corps of Engineers, Technical Manual: Conduits through Embankment Dams, FEMA.

10.2 Applicability

This document, Guidance for the Design of Dams in Mississippi ("Guidance"), should be used as a guide in the design and preparation of plans, specifications and engineering reports for dams, insofar as this guidance is applicable to normal situations for an individual project. Plans, specifications, contract documents and engineering reports required by regulation shall conform to the applicable items in this Guidance.

This document is not a regulation or a standard and has therefore not been adopted by the Commission on Environmental Quality. However, owners, consulting engineers, and other parties involved in the construction of any dam in the State should be aware of, and must comply with, the Commission's "Dam Safety Regulations LW-4", and all other applicable laws and regulations. This guidance does not supersede any existing laws, ordinances, regulations, or standards. If such conflicts arise, the designer should contact the Division of Dam Safety and the other appropriate agencies for instruction on how to proceed.

It should be recognized that simply complying with the items herein does not ensure that a design is correct, or even adequate, but only minimally acceptable to the Department. High quality projects will routinely exceed the minimum standards stipulated herein, and such quality will likely be reflected in the performance, value and satisfaction obtained from such a design.

There are some differing requirements depending on the hazard classification (Low, Significant or High), **the dam height** (Small dams are those less than 25 feet in height, Medium dams are greater than 25 feet and less than 50 feet in height and Large dams are greater than 50 feet in height), and **the storage volume** (Small lakes are less than 150 acre-feet maximum storage, Medium lakes are greater than 150 acre-feet maximum storage and less than 1,000 acre-feet maximum storage and Large lakes are greater than 1,000 acre-feet maximum storage).

Currently, the Dam Safety Regulations LW-4 do not require Low Hazard dams be designed by a registered professional engineer (state law or local ordinances may have different requirements, see previous paragraph). However, owners should consider having the spillway of their Low Hazard dam designed to High Hazard standards. This will help the owner avoid the risk of having to upgrade their dam if the hazard classification changes due to downstream development. Further, the Office of Land and Water, Division of Dam Safety neither warrants

nor assumes any responsibility for any design of any project governed by this Guidance. It is the owner's and/or design engineer's responsibility to ensure that such project designs and specifications are correct and adequate. Should anything contained herein appear to conflict with good design practice, such instance should be brought to the Division of Dam Safety's attention immediately for resolution.

Plans, specifications and engineering reports that vary from this guidance may be submitted and approved (as specified by applicable regulations) when properly justified by the consulting engineer and/or supported by reference to Design of Small Dams 3rd Edition, NRCS technical releases, U.S. Army Corps of Engineers engineering manuals, or other appropriate publications. Although the words "shall" and "must" are used extensively, they are to be interpreted in the context of this section (10.2 Applicability) of the Guidance.

It is recognized that this Guidance does not completely address every conceivable situation concerning the design, inspection, testing, or contracting of dam construction. Therefore, when any issue arises which is not explicitly covered by the Guidance, the Division of Dam Safety may require additional documentation or justification of the reasonableness or adequacy of the plans, specifications and engineering reports. The Division of Dam Safety may withhold completion of review or approval until such documentation, justification, or document changes are submitted and determined acceptable.

Any revisions, changes, addenda, etc. to reviewed and/or approved plans or specifications shall also be made in accordance with this section. Such revisions shall be submitted to the Division of Dam Safety for review and approval. Record drawings (As-built) clearly showing such alterations shall be submitted to the Division of Dam Safety at the completion of the work.

11. PLANS

11.1 General

— All plans shall bear a suitable title block showing the name of the project, the name of the owner and a clear indication whether the owner is a state agency, municipality, district, association, institution, or private individual. The plans shall be signed, sealed, and dated by the Mississippi Registered Professional Engineer responsible for their development in a manner consistent with the requirements of the State Board of Registration for Professional Engineers and Land Surveyors, as they apply generally to the practice of engineering. Nothing herein is to be construed as allowing any such work to be performed other than by or under the direct supervision of a Registered Mississippi Professional Engineer.

— The plans shall be of professional quality, clear and legible (suitable for microfilming). They shall be drawn to a scale that will permit all necessary information to be plainly shown. They shall show the scale in feet, a graphical scale, the north point, and date. Datum used shall be indicated. Locations and data of test borings and wells, when made, should be shown on the plans or reference made to their location in the geotechnical report. Generally, the plans should be full size, but not larger than 30 inches x 42 inches.

Submittal of draft plans for review may be legal size (8.5 x 14) or the AutoCAD project file may be sent in for review. Final submittal of plans shall consist of two (2) complete sets.

___ The plans for dams shall include a site plan which shows the surrounding property, all property lines, and ownership information as recorded in the tax assessor's record. The plans shall include the location, orientation and outline of the lake and dam relative to its surroundings. The drainage direction and receiving stream shall be shown.

___ Detail plans shall consist of: plan views, elevations, sections and supplementary views which, together with the specifications and general layouts, provide the working information for the contract and construction of the dam and its appurtenances. Plans shall also include: dimensions and relative elevations of the spillways / outlet structures, the location and outline form of monitoring equipment / wells, location, size and type of piping for outlets or drains, water levels, location and description of benchmarks used and ground elevations.

11.2 Plans of Dams

11.2.1 General Plan

A complete plan of existing and/or proposed dams shall be submitted for projects involving new dams and/or additions to existing dams. This plan shall show the following:

11.2.1.1 Geographical Features

- ___ a. Topography and elevations - Existing or proposed streets and all ditches, streams, rivers and water surfaces shall be clearly shown. Contour lines at suitable intervals should be included. Location and description of benchmark used.
- ___ b. Boundaries - The boundary lines of the subdivision or the dam owner's property and the surrounding landowners shall be shown.

11.2.2 Detail Plans

___ Detail plans shall be submitted. Profiles should have a horizontal scale of not more than 100 feet to the inch and a vertical scale of not more than 10 feet to the inch. Plan views should be drawn to a corresponding horizontal scale and preferably be shown on the same sheet. Plans and profiles shall show:

- ___ a. Location of primary and emergency spillway.
- ___ b. Profile and plan drawings of spillways with elevations.
- ___ c. Embankment zones, cutoff trench, soil borings, borrow areas.

- ___ d. Special detail drawings, drawn to a scale that clearly shows the nature and details of the design of all joints, connections, thrust blocks, re-bar placement, instrumentation, drains, filters, etc.

12. SPECIFICATIONS

___ Complete technical specifications for the construction of the dam and all appurtenances, shall accompany the plans.

___ The specifications shall be signed, sealed, and dated by the Mississippi Registered Professional Engineer responsible for their development in a manner consistent with the requirements of the State Board of Registration for Professional Engineers and Land Surveyors, as they apply generally to the practice of engineering. Nothing herein is to be construed as allowing any such work to be performed other than by or under the direct supervision of a Mississippi Registered Professional Engineer.

___ The specifications accompanying construction drawings shall include, but not be limited to, all construction information not shown on the drawings which is necessary to inform the builder in detail of the design requirements for the quality of materials, workmanship and fabrication of the project. They shall also include: the type, size, strength, operating characteristics, and rating of equipment; earthwork and compaction; the complete requirements for all mechanical and electrical equipment, including piping, and joining of pipe, machinery, valves, corrosion protection; electrical apparatus, wiring, instrumentation, and meters; operating tools, construction materials; special filter materials, such as filter fabric, stone, sand, or gravel; miscellaneous appurtenances; chemicals when used; instructions for testing materials and equipment as necessary to meet design standards; and performance tests for the completed works and component units. It is suggested that these performance tests be conducted at design load conditions wherever practical.

13. OPERATION DURING CONSTRUCTION

___ Plans and specifications shall contain provisions for routing stream flow and runoff during the entire period of dam construction.

14. RECORD DRAWINGS

___ The owner shall ensure that written notification of completion of the dam is provided to this office within 30 days of completion of the dam. The completion notice shall be accompanied by a set of "as-built" plans (marked as record drawings or as-built) with the engineer's certification that the project was completed in substantial compliance with the approved plans and specifications and any approved revisions.

15. STORM WATER PERMITTING REQUIREMENTS

Has the applicant fulfilled the storm water permitting requirements as outlined below?

Yes No NA

- a. Construction activities where less than one (1) acre of land is disturbed. **(No Permit Required)** Yes No NA
- b. Construction activities where *more than one (1) acre but less than (5) acres* of land is disturbed. A **“Small Construction General Permit” is required.** The dam safety engineer checks to see if the applicant has obtained a copy of: (a) Small Construction Storm Water General Permit (which includes the notice of intent (NOI)); and, (b) Construction Guidance Manual (for the storm water pollution prevention plan (SWPPP)).

Yes No NA

All of these items are also available to the applicant for download on the MDEQ website www.deq.state.ms.us. Click “permits” under “Key Topics”, then click “Storm water”, then scroll down and look for Small Construction for the two forms listed above.

NOTE: None of the above listed items for small construction general permits need be submitted to MDEQ unless specifically requested.

- c. Construction activities where *(5) acres or more* of land is disturbed. A **“Large Construction General Permit” is required.** The dam safety engineer checks to see if the applicant has obtained a copy of: (a) Large Construction Storm Water General Permit; (b) Large Construction Storm Water NOI; and, (c) Construction Guidance Manual (for the storm water pollution prevention plan (SWPPP)).

Yes No NA

All of these items are also available to the applicant for download on the MDEQ website www.deq.state.ms.us.

NOTE: All the above listed items are required to be submitted to the Environmental Permitting Division (EPD) at MDEQ. Coverage will be granted under the large construction general permit once these submittals are determined acceptable by MDEQ Environmental Permitting Division.

16. OTHER

- a. Has the appropriate U. S. Army Corps of Engineers District Office been notified to see if a 404 Permit is required?

Yes No NA

NOTE: If “yes” then a copy of the Corps’ correspondence, application, or authorization letter shall be submitted.

- b. Has the applicant obtained a groundwater withdrawal permit from the Office of Land and Water for wells used to augment lake water levels?

Yes No NA

CHAPTER 20
HYDROLOGIC AND HYDRAULIC ANALYSIS

20. INTRODUCTION

The technical guidance for this chapter has primarily been taken from Applied Hydrology by Chow, Maidment and Mays, Hydrologic Analysis and Design by Richard McCuen, Handbook of Hydraulics 7th Edition by Brater, King, Lindell and Wei, Open Channel Hydraulics by Terry Sturm, assorted technical papers by Arthur Miller, Ph.D., P.E. on hydrologic analysis and assorted technical papers by Danny Fread, Ph.D. on dam failure analysis.

21. HYDROLOGY REPORT

A hydrology report shall be submitted for the construction of all new high and significant hazard dams as well as evaluation of existing high and significant hazard dams to meet dam safety program requirements during a formal inspection (if a report hasn't already been prepared). The report shall contain the following:

_____ The report shall be signed, sealed, and dated by the Mississippi Registered Professional Engineer responsible for its development in a manner consistent with the requirements of the State Board of Registration for Professional Engineers and Land Surveyors, as they apply generally to the practice of engineering. The hydrologic analysis and report may also be done by a registered professional hydrologist, however all design and recommendations that affect public safety must be performed by or under the direct supervision of a Mississippi Registered Professional Engineer.

_____ A description of the drainage basin which includes the name of the stream impounded and/or discharged to, the county the basin is located in, a physical description of the basin's characteristics as they affect runoff, soil type(s) using SCS names, SCS hydrologic group(s) and curve number(s), the amount of urban development present as well as a 5 year projection of urban development, size of the drainage area in square miles or acres and average slope of the basin.

_____ A topographical map showing scale, name of USGS quadrangle map from which it was produced, outline of drainage area and sub-basins (if any), longest flow path from basin boundary to point of concentration (used for calculating time of concentration), the dam, the area that will be submerged at normal pool, outline of area submerged at maximum pool if dam is a flood control structure with low normal pool, downstream area and any development, section, range and township where lake is located and name and outline of stream impounded and/or discharged to.

_____ A description of the design storm(s) used with the amount of inches of rainfall in a 24 hour period shown (refer to Dam Safety Regulation LW-4, Section IV, A, B, and D). For analysis of the principal spillway capacity of High Hazard dams, the 100-year, 24 hour storm event must be modeled using the SCS Type II or Type III dimensionless design

storm distribution. Analysis of the Probable Maximum Precipitation (PMP) design storm must use the dimensionless design storm distribution as shown in the regulations (SCS Emergency Spillway Hydrograph) or SCS Type II or Type III dimensionless design storm distribution. If the drainage area is larger than 10 square miles then the areal adjustments may be used. (See Page 6 & 7)

- ___ The method and calculations used to calculate time of concentration must be shown.
- ___ The program used to do the hydrologic analysis shall be named and all inputs and assumptions listed as well as the outputs. The equation method used to determine the peak discharge shall be stated (Note – the Rational Method shall not be accepted). A summary shall be included which states the peak inflow for each design storm, the time to peak, the volume of inflow to the reservoir, the volume of available storage, the capacity of the principal spillway when the auxiliary spillway activates as well as the maximum capacity of the principal spillway, the capacity of the auxiliary spillway and the maximum elevation of the pool for each design storm evaluated.
- ___ The runoff flow (in cfs) into the proposed impoundment versus time shall be plotted and the volume under the curve stated.
- ___ The storage volume and surface area of the impoundment versus elevation shall be plotted with the elevation of the dam toe (where zero storage occurs), the normal pool elevation, the auxiliary spillway crest elevation and the crest of the dam shown on the chart.
- ___ If augmentation for dry years or initial filling is considered in the design then the primary source shall be from surface water source(s). Groundwater augmentation to fill and/or maintain water levels shall be reviewed on a case by case basis and only allowed for special circumstances.

22. HYDRAULIC REPORT

The hydraulic analysis is usually done using the same program that is used for the hydrologic analysis. Required information may be provided in the same report as the hydrologic analysis and is acceptable where provided on the same output printout as the hydrologic analysis. The report shall contain the following:

- ___ A description of the principal and auxiliary spillways.
- ___ A plan and profile sketch of the principal and auxiliary spillways showing dimensions and elevations of the invert, outlet, control section, slope of spillway, crest of the dam and toe of the dam. The sketch shall show the location of the spillways in relation to the dam and the outlet channel.

- The hydraulic equations (weir, orifice, culvert or gate) used for determining discharge shall be shown along with all coefficients used. If the spillway is a culvert(s) then the governing flow condition assumed shall be stated.
- The stage-storage-discharge or stage-discharge relationship shall be plotted. If principal spillway is a riser and conduit configuration, then the elevation where full conduit flow develops shall be shown.
- The velocity for open channel spillways (chute spillways and vegetated earthen spillways) shall be computed and shown as well as where flow transitions from sub-critical to critical to super-critical. Control section shall be placed where flow passes through critical depth.
- Exit velocity or tractive forces for vegetated earthen spillways shall be computed. Type of vegetation shall be described. Earthen spillways should be cut through natural ground around the abutment of the dam. Earthen spillways that must go through fill or easily erodible soils shall be armored. Exit velocity for a vegetated earthen spillway shall not exceed the permissible velocities shown on the attached table from the USDA-SCS Engineering Field Manual.
- Froude number shall be calculated for exit velocity at end of spillway(s) (flow entering hydraulic jump) for large dams (see Section 10.2). The depth after the jump shall be calculated and the stilling basin sized based on calculated depth (USBR recommends that length be approximately 6 times the calculated depth). A description of the stilling basin and a sketch showing dimensions and elevations shall be provided. For small and medium dams standard stilling basin guidelines (NRCS, COE, DEQ planning manual for storm water, etc.) are acceptable.

23. BREACH ANALYSIS

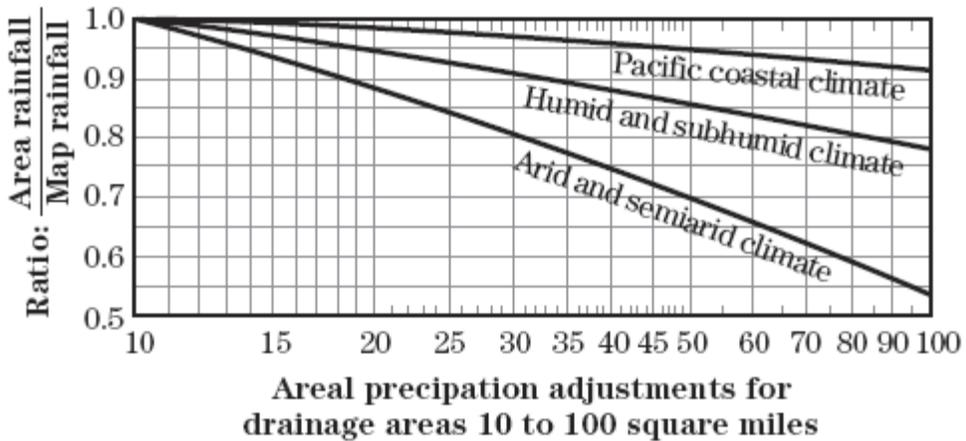
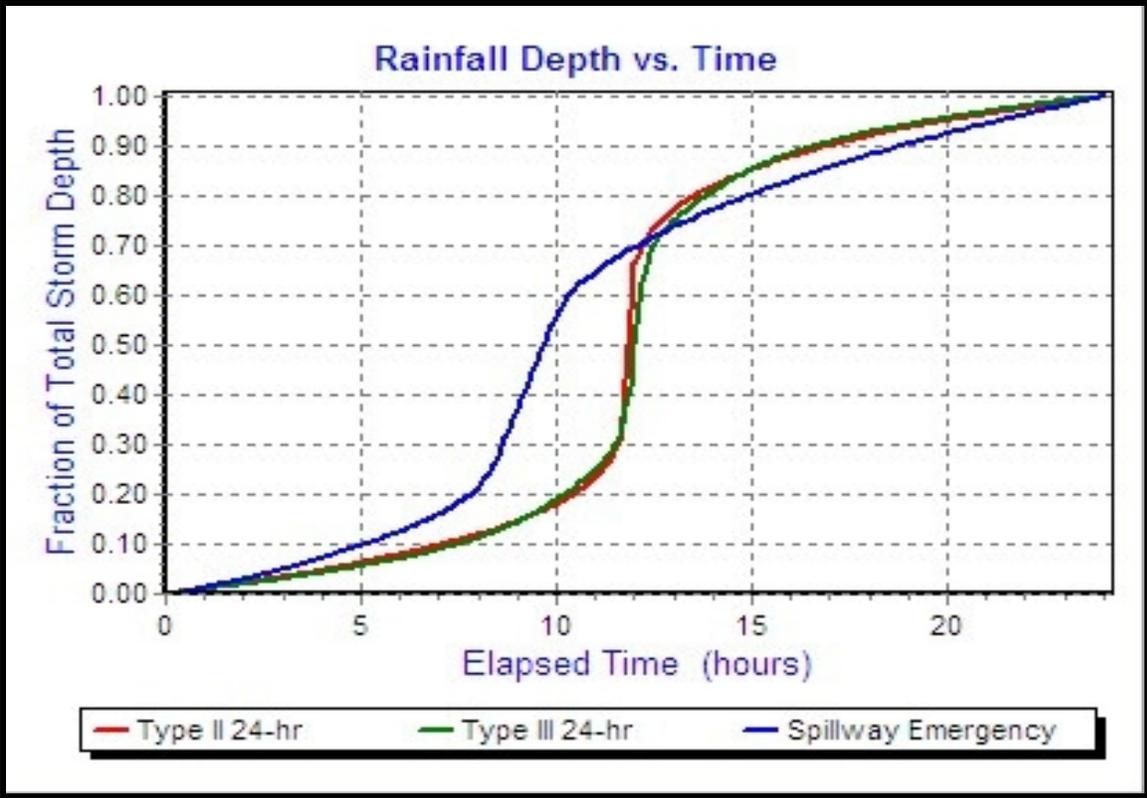
- A breach analysis and inundation mapping shall be done for all high and significant hazard dams.
- The method of breach analysis shall be based on lake size (see Section 10.2) unless special circumstances dictate otherwise. For small lakes breach analysis shall be by overtopping. For medium lakes breach analysis shall be by overtopping and sunny day failure (piping) at normal pool. For large lakes the breach analysis shall be sunny day failure at crest of auxiliary spillway.
 - The report shall be signed, sealed, and dated by the Mississippi Registered Professional Engineer responsible for its development in a manner consistent with the requirements of the State Board of Registration for Professional Engineers and Land Surveyors, as they apply generally to the practice of engineering. Nothing herein is to be construed as allowing any such work to be performed other than by or under the direct supervision of a Mississippi Registered Professional Engineer.

- A description of the reservoir and downstream area which includes the name of the stream impounded and/or discharged to, the volume of the reservoir, the dam and the material (soil type) that it is constructed of, whether or not there is a core in the dam, the height of the dam and elevations for the toe, normal pool and crest, the county (and municipality if reservoir will impact a municipality) the reservoir is located in and a physical description of the downstream area including the amount and type of development present and key elevations shall be provided.
- The method and calculations used to determine the breach formation factors (time of breach, size of breach) must be shown.
- The program used to do the breach analysis shall be named and all inputs and assumptions listed as well as the outputs. A map shall be included showing and identifying the downstream cross sections (identify by labeling with the same number as in the program). An electronic copy of the project file shall be submitted along with the written report.
- Comprehensive surveys of the downstream area for the purposes of establishing cross sections, unless the breach analysis is for the purpose of requesting a lower hazard classification, are at the discretion of the engineer preparing the analysis as to whether they are necessary. Elevations for cross sections may generally be obtained from U.S.G.S. quadrangle maps. More accurate data, such as GIS mapping from LIDAR data with 1 or 2 foot contours, or survey data, if easily obtainable, is recommended.

24. INUNDATION MAPPING

- An inundation map shall be provided along with the breach analysis *unless* the breach analysis is for the purpose of proving that the dam is not a high or significant hazard.
- Map shall be in color and shall be at a scale where lake and impacted structures downstream may be clearly seen. If inundation area is too large to be shown on one map then an index map shall be included which shows the full extent of the inundation area and the outline of the detailed maps with an identifier for each map sheet. Outline of inundation area shall be marked in permanent ink in a color that is easily distinguishable. If inundation area is marked with hatching, then hatching will be done in such a manner as to not obscure impacted structures, roads and identifying labels.
- Identifying features shall be clearly labeled (main roads, subdivisions, commercial complexes, etc.) so as to aid emergency responders in quickly locating impacted areas and conducting evacuations.
- Suggested evacuation routes should be included and be marked with a direction arrow so as to assist emergency responders in directing evacuees to safety.

— Travel times shall be marked on the map with increments no less than 20 minutes. Dams where everything downstream that will be impacted, will be impacted within the first hour, do not require travel times to be marked on the map.



SCS Emergency Spillway Distribution

Time (hrs)	0	0.5	1	1.5	2	2.5	3	3.5	4
Fraction of Total Depth	0	0.004352	0.012838	0.021543	0.030535	0.04	0.050158	0.061078	0.072761
	4.5	5	5.5	6	6.5	7	7.5	8	8.5
	0.085207	0.098416	0.112387	0.127209	0.143542	0.16215	0.184215	0.215628	0.276613
	9	9.5	10	10.5	11	11.5	12	12.5	13
	0.369615	0.466104	0.556392	0.616503	0.646957	0.673827	0.697429	0.718308	0.737594
	13.5	14	14.5	15	15.5	16	16.5	17	17.5
	0.755792	0.772899	0.788923	0.804083	0.818563	0.832469	0.84583	0.858646	0.870918
	18	18.5	19	19.5	20	20.5	21	21.5	22
	0.882657	0.893946	0.904816	0.915348	0.925576	0.935579	0.945364	0.954931	0.964281
	22.5	23	23.5	24					
	0.973412	0.982367	0.991213	1					

Mississippi Commission on Environmental Quality
DAM SAFETY REGULATION
LW-4

Adopted by the Commission on Environmental Quality June 24, 2004
Revised by the Commission on Environmental Quality August 25, 2005

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DAM SAFETY REGULATION (LW-4)

I. Definitions - The words and phrases used in this regulation shall have the meanings set forth in this section:

A. Adverse Effects –Negative impacts that may occur at the site of the dam, upstream, downstream, or at locations remote from the site of the dam. The primary concerns are loss of human life, economic loss (including property damage), lifeline disruptions (such as damage to roads, bridges, or utilities), and adverse environmental impact.

B. Abutment—That part of the undisturbed valley side or a constructed concrete wall against which the dam is constructed. Right and left abutments are identified from the perspective of an observer standing on the dam looking downstream.

C. Alter or Repair— Any change in the surface or cross-section of existing dams and/or appurtenant works or any modification to appurtenant structures, other than minor grading and fill associated with routine slope and turf maintenance activities. Examples of alterations or repairs include such work as adding significant amounts of material to, or removing material from, the cross-section of a dam; changing the dimensions or elevations of an emergency or overflow spillway; replacing pipe or in any other way altering a principal spillway; making any repairs of erosion or undermining associated with seepage through the dam; building a roadway on or across any part of a dam; burying pipelines; or in any way altering the approved operational features of a dam.

- D. Appurtenant Works – This term includes, but is not limited to; spillways, either in the dam or separate therefrom; the reservoir and its rim or shoreline; low level outlet works; and water conduits such as tunnels, pipelines, or penstocks, either through the dam or its abutments.
- E. Breach—Partial removal of a dam by creating a channel through the dam to the original stream bed elevation, so that no water is impounded by the breached structure.
- F. Commission--- The Mississippi Commission on Environmental Quality, or its designee.
- G. Dam—Any artificial barrier, including appurtenant works, constructed to impound or divert water, waste-water, liquid borne materials, or solids that may flow if saturated. All structures necessary to maintain the water level in an impoundment or to divert a stream from its course will be considered one dam.
- H. Days—Calendar days including Saturdays, Sundays, and Holidays; unless specifically indicated otherwise in the body of this regulation.
- I. Department or MDEQ--- The Mississippi Department of Environmental Quality.
- J. Emergency Action Plan--- A formal written document identifying the area that would be inundated in the event of a dam failure and setting forth the plans and procedures for notifying the individuals, agencies, and public officials that would mobilize resources to respond to the emergency.
- K. Emergency –This term includes, but is not limited to, uncontrolled breach of a dam; or any conditions leading to, or causing, a breach, overtopping, or any other condition in the dam and/or its appurtenant works that may lead to failure of the dam or otherwise pose a threat to life or property.
- L. Enlarge –Any change in, or addition to, an existing dam or reservoir, which raises, or may raise the water storage elevation or storage volume of the water, waste-water, or liquid-borne material impounded by the dam.
- M. High Hazard—A class of dam in which failure may cause loss of life, serious damage to residential, industrial, or commercial buildings; or damage to, or disruption of, important public utilities or transportation facilities such as major highways or railroads. Dams which meet the statutory thresholds for regulation that are proposed for construction in established or proposed residential, commercial, or industrial areas will be assigned this classification, unless the applicant provides convincing evidence to the contrary.
- N. Impoundment or Reservoir — A man-made dammed, leveed, or diked area or basin designed to store water or other liquids above surface levels that would occur under natural conditions.
- O. Low Hazard—A class of dam in which failure would at the most result in damage to agricultural land, farm buildings (excluding residences), or minor roads.
- P. Permit Board or Board --- The Mississippi Environmental Quality Permit Board.
- Q. Person—The state or other agency or institution thereof, any municipality, political subdivision, public or private corporation, individual, partnership, association or other entity, and including any officer or governing or managing body of any municipality, political subdivision, or public or private corporation, or the United States or any officer or employee thereof.
- R. Probable Maximum Precipitation (PMP) —The rainfall event used for hydraulic design of dams and appurtenant spillways in Mississippi. The Probable Maximum Precipitation (PMP) varies by location within the state and the event used in design shall be as defined for the proposed construction location by Hydrometeorological Reports published by the Office of Hydrology, National Weather Service.
- S. Professional Engineer—An engineer with experience in the design of dams who is registered with the State of Mississippi Board of Registration for Professional Engineers and Land Surveyors.
- T. Professional Geologist---A geologist with experience in determining and analyzing geologic conditions

affecting the siting of dams who is registered with the Mississippi State Board of Registered Professional Geologists.

U. Removal—Complete elimination of the dam embankment or structure to restore the approximate original topographic contours of the area.

V. Significant Hazard—A class of dam in which failure poses no threat to life, but may cause significant damage to main roads, minor railroads, or cause interruption of use or service of public utilities.

W. Water Storage Elevation—The maximum surface elevation of water that can be maintained by a dam or reservoir.

X. Written Authorization--- Official written correspondence or permit document from the Board, or its designee, authorizing construction, enlargement, repair, or alteration of a dam; including any specified conditions or limitations under which the work is to be performed by the person to whom the approval is granted.

II. Authorization

A. Applicability

1. Except as otherwise provided in this section, any person or entity proposing to construct, enlarge, repair, or alter a dam or reservoir in the state of Mississippi must obtain written authorization from the Permit Board, or its designee, prior to commencement of any site work related to the project. For high hazard and significant hazard dams, the written authorization will be in the form of a permit document. Application for such permits shall be made on a form prescribed by the Board and will be processed by the Board in accordance with Mississippi Code Annotated, Section 49-17-29.
2. The Board may require submittal of any information deemed necessary to evaluate a proposal to construct, enlarge, repair, or alter a dam or reservoir. Once the Board has authorized the project, the applicant shall not modify the approved design, plans, specifications, or construction methods, or act according to such modified documents, without the prior written authorization of the Permit Board.
3. Any person intending to acquire the right to store or use water from a reservoir formed by a dam, regardless of whether or not written construction authorization is required under this regulation, shall submit an application for a surface water use permit to MDEQ in accordance with Mississippi Code Annotated, Sections 51-3-5 and 51-3-7, and the regulations of the Commission promulgated thereunder.

B. Exceptions

1. Prior written authorization is not required for emergency repairs to a dam which is in imminent danger of failing. However, the dam owner shall report such emergency repairs to MDEQ by close of business on the next business day following the incident and file a written report with MDEQ within five (5) days of the incident.
2. Written construction authorization shall not be required for:
 - a.) a peripheral dam or levee eight (8) feet or less in height, measured from the point of lowest elevation of its toe, regardless of the impounded storage volume; or
 - b.) a dam that impounds twenty-five (25) acre-feet or less at maximum storage volume; or
 - c.) a dam that does not impound a watercourse with a continuous flow of water, as determined by the Commission;

Any person or entity proposing to construct, enlarge, repair, or alter any dam or reservoir in reliance upon the provisions of paragraphs II.B.2.(a.-c.) to exempt the project from the requirement to obtain

written authorization must submit a notification of the planned project to MDEQ prior to the onset of construction. If, upon review of such notification, the Commission determines that the proposed dam poses a potential threat to downstream lives and property; the person or entity proposing the project may be required to comply with design and safety requirements contained in Section IV of this regulation. The Commission may enforce compliance with such design and safety standards in the interest of public safety, notwithstanding the fact that written authorization may not be required for the project. The pre-construction notification shall be submitted on a form prescribed by the Permit Board.

3. Prior written authorization is not required for recurring routine maintenance activities including but not limited to mowing, grading or filling ruts in roadways that cross the dam, filling ruts or repairing other surface damage caused by vehicles or animals on the slopes, filling eroded areas in the surface of an embankment to establish or maintain the turf, or other similar activities.

C. Limitations

1. The Board's receipt, comment, or approval of any design, construction, or modification does not relieve the dam's owner, consulting engineer, consulting Geologist, contractor, equipment supplier, attorney, or any other party of any liabilities or responsibilities. Board and/or MDEQ approval of, or comment on, any document does not establish or convey any liability or responsibility to the Board and/or MDEQ, nor does such approval or comment represent any assurances that the project will comply with any authorization requirements or otherwise perform as intended by the owner, consulting engineer, consulting Geologist, contractor, equipment supplier, attorney or other parties. The dam owner and/or any person responsible for constructing, enlarging, repairing, or altering a dam or reservoir shall comply with all conditions of the Board's authorization to construct and ensure that all construction, operation, and maintenance activities achieve such compliance. It is the responsibility of the dam owner/applicant to obtain all other approvals, permits, clearances, easements, and/or agreements for the construction and/or operation of the dam which may be required by federal, state, or local law or regulation.

2. Written authorizations by the Board expire one (1) year from the date of issuance if work has not commenced on the project. If the work cannot be commenced within the one-year period, the dam owner or any other person responsible for the project must request a time extension from the Board, in writing, at least thirty (30) days prior to the expiration of the one-year authorization period. The written request shall provide an explanation of project delays and an estimated construction commencement date. The Board will normally grant a time extension, on proper application therefor, unless the Board determines that circumstances surrounding the project have so changed that the construction and operation of the dam as originally proposed would violate state or federal laws or regulations. If the applicant allows the authorization to expire, a new application must be submitted and approved prior to the onset of construction.

3. The hazard classification assigned to a dam by the Board is subject to change based on future developments that may increase the potential threat to life and property in the event of a dam failure. The dam owner and/or any person responsible for the construction and/or operation of a dam or reservoir assume all risks associated with designing and constructing the dam to meet less than the most stringent design criteria for high-hazard dams, including the risk of having to make modifications to the dam to meet future heightened regulatory requirements associated with a change in classification.

III. Application Content and Procedure

A. Any person or entity proposing to construct, enlarge, repair, or alter a dam or reservoir shall submit either an application or a pre-construction notification (if the provisions of paragraph II. B. apply) to the Board, on forms prescribed by the Board, at least thirty (30) days prior to the anticipated commencement of construction. The submittal must have a United States Geologic Survey (USGS) topographic map, or portion thereof, attached to it showing the location of the proposed dam and reservoir including a clearly marked access route to the site and marked locations and general descriptions of all buildings, drainage

structures or culverts, roads, railroads, bridges, and utility lines within two-miles downstream of the site of the proposed dam.

B. If the provisions of paragraph II. B. do not apply, and the potential threat to life or potential property damage that would result from failure of the proposed dam rises to the level of significance characteristic of a high hazard or significant hazard classification, the application package also must include two complete sets of design documents prepared in accordance with the following requirements:

1. Engineering drawings, specifications, and engineering reports shall be prepared, signed, and sealed by a professional engineer.
2. Drawings shall be prepared to a scale that provides sufficient detail for review of all project components.
3. Specifications shall include detailed descriptions of all work to be performed and materials to be used in the construction.
4. Engineering reports shall include, but not be limited to, hydrologic calculations, hydraulic calculations, geotechnical investigation, stability analysis, dewatering plan, and provisions for internal drainage. Portions of the investigation at the site of the dam and within the catchment area including, but not limited to, characterization of geologic formations, assessment of groundwater conditions, and/or other geologic conditions, factors, and processes which may impact the design of the dam may be performed by a professional geologist. If a professional geologist produces documents in support of the design of a project, the work products must be signed and sealed by the professional geologist.
5. If a professional geologist produces documents in support of the design of a project, the work products must be signed and sealed by the professional geologist.

C. The Board may require the applicant to supply any additional information necessary to evaluate an application, including the following:

1. Whether the proposed dam will provide adequate safety for lives and property; and/or
2. Whether the proposed dam will adversely affect riparian or other beneficial water uses, or plans for the proper utilization of the water resources of the state, and/or
3. Any other information the Board deems appropriate.

IV. Design and Safety Requirements

A. Any modification, alteration, enlargement, or major repair of an existing dam, whether requested by the owner or directed by the Commission, will be subject to the current design standards for the appropriate hazard classification as set forth in this regulation.

B. The owner of any existing dam, regardless of its condition, that poses an unacceptable threat to downstream lives or property may be required by the Commission either to bring the dam into compliance with current standards or take the dam out of service by draining the impoundment and removing the dam.

C. High Hazard dams must be capable of safely passing the runoff from a 100-year rainfall event through the principal spillway without activating the emergency spillway. The 100-year rainfall event is established by the National Weather Service and varies for different areas of the state. The proper design rainfall event for the county where the proposed dam is located can be obtained from MDEQ or from the nearest Natural Resources Conservation Service (NRCS) office. The runoff from one hundred percent (100%) of the Probable Maximum Precipitation (PMP), as defined in paragraph 1.R. of this regulation, must be passed

through the principal and emergency spillway and/or stored in the reservoir without overtopping the dam. The appropriate PMP for each county as obtained from the National Weather Service Bulletins and the rainfall distribution curve to be used in design routings are provided at Appendix A to this regulation. The Commission may require the owner or operator of a high hazard dam that does not meet this requirement to take remedial action to bring the dam into compliance with all current dam safety requirements or to breach the dam.

D. Within thirty (30) days after completion of a high hazard dam, the owner shall submit one (1) complete set of as-built plans and specifications to the Board. The submittal also shall include a letter signed by the professional engineer responsible for the project, certifying that the dam was constructed in accordance with the Board approved plans and specifications.

E. Significant hazard dams shall be designed to control the contributory watershed runoff from at least fifty percent (50%) of the PMP without overtopping the dam. The owner and any other persons responsible for the construction and operation of the dam shall assume all risks for future costs to upgrade a dam in the event the hazard classification changes. Applicants for authorization to construct significant hazard dams must comply with the document submittal requirements set forth for high hazard dams in paragraph III.B. Within thirty (30) days after completion of a significant hazard dam, the owner shall submit one (1) complete set of as-built plans and specifications to the Board accompanied by a letter signed by the professional engineer responsible for the project, certifying that the dam was constructed in accordance with the Board approved plans and specifications.

F. Low hazard dams shall be designed to control the contributory watershed runoff from at least thirty-five percent (35%) of the PMP without overtopping the dam. The owner and any other persons responsible for the construction and operation of the dam shall assume all risks for future costs to upgrade a dam in the event the hazard classification changes. Drawings to be submitted with the application for a low hazard dam shall include, but not be limited to, a plan view of the dam (including all appurtenant works) and sections through the dam at the centerline of the principal spillway and at the centerline of the emergency spillway if it is located in the dam. The applicant shall provide written notification of completion of the dam to the Board, within thirty (30) days after the dam has been constructed, and either certify that the dam was constructed as shown in the drawings previously submitted or submit new as-built drawings.

G. Because the size and type of pipe used for the principal spillway is one of the most critical elements in the design of high hazard and significant hazard dams, the professional engineer responsible for the project shall provide the Board with detailed hydraulic, hydrologic, and structural computations supporting selection of the size and type of pipe to be used. Detailed drawings and specifications relating to the installation of the pipe shall include, but not be limited to, construction measures that adequately address critical loading, bedding, backfill, compaction, and seepage precautions related to installation of the pipe.

H. The Freeboard Hydrograph shall be used to determine the top of dam elevation and the size and crest elevation of the emergency spillway for high hazard dams.

I. The soils in an earthen emergency spillway shall be capable of withstanding the water velocities generated when the emergency spillway is activated without experiencing excessive erosion.

J. Side slopes of all dams shall be a minimum of three horizontal to one vertical (3:1).

K. The owner or operator of a high hazard dam shall develop an Emergency Action Plan (EAP) for the dam. The Board may direct the owner or operator of a significant hazard dam to develop an Emergency Action Plan (EAP). The EAP shall be submitted to the Board for approval. Once approved, a copy of the EAP will be maintained on file by the Board. The owner or operator of the dam shall review the EAP on an annual basis to assure that the information contained therein is current. Revisions to the EAP, as necessary, shall be furnished to the Board and all other persons involved in the implementation of the EAP. The owner or operator also shall be responsible for conducting or coordinating periodic training and exercises to assure that personnel involved in the implementation of the EAP are properly prepared to carry out their responsibilities in the event of an emergency.

V. General Conditions of Authorization

A. No materials shall be placed in a watercourse that will impede or block the natural flow of water without prior written authorization from the Permit Board and other appropriate federal, state, and local authorities. Additionally, any activity involving the discharge of dredged or fill material or any other construction in any state waters that are also subject to federal regulation under Section 404 of the 1972 Clean Water Act and/or Section 10 of the Rivers and Harbors Appropriation Act of 1899 shall be conducted in accordance with appropriate provisions of those federal statutes.

B. A permit or written authorization issued by the Permit Board does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, State, or local laws or regulations. No impoundment may be constructed that will adversely affect riparian or other beneficial water uses or plans for the proper utilization of state waters, or that will cause flooding of upstream property unless the owner of the proposed dam has legally acquired the right to do so. The Commission may prescribe minimum flow releases from any dam or reservoir, as necessary, to protect downstream uses or otherwise prudently manage available surface water.

C. Any dam that impounds a watercourse with a continuous flow shall be designed so that the established minimum flow for the stream (as established by the Commission) is maintained.

D. The owner and/or any person responsible for the construction, enlargement, repair, or alteration of a dam on a watercourse lying, in whole or in part, within a levee district duly constituted under the laws of the State of Mississippi, shall first obtain permission for the work from the board of the levee district and shall provide proof of such permission with the application to the Board.

E. Owners of earthen dams covered under this regulation shall establish and maintain a healthy turf on the exposed faces of the dam to prevent erosion, and shall mow frequently enough to prevent the encroachment of woody vegetation into the slopes of the dam embankment.

F. Owners of High Hazard or Significant Hazard dams will be required to prohibit livestock grazing on the dam in order to prevent damage to the turf and to prevent erosion associated with establishment of animal trails

G. In addition to the general conditions contained herein, the Board may place special conditions on any authorization to construct or modify a dam.

H. The Commission may order the removal of a dam after it has been constructed or modified when it is determined that the dam does not meet criteria and/or standards established by the Board or the Commission and/or otherwise fails to adequately protect lives and property.

I. A Surface Water Use Permit may also be required for any person to impound and store water behind a dam.

J. The owners or operators of high hazard or significant hazard dams shall maintain records and documents related to the original construction, recurring inspections, maintenance, repairs, and alterations of the dam for the life of the project. Such records shall be made available for inspection, or copies of such records furnished, upon request by the Department.

VI. Inspection and Reporting

A. The owner and the operator of a dam shall be responsible for the proper operation and maintenance as well as the structural integrity of the dam. In order to fulfill this responsibility, the owner and/or the operator should perform a visual inspection of the dam at least every sixty (60) days and after every major rainfall event over the watershed. Any symptoms of dam failure observed during such visual inspections shall be immediately reported

to MDEQ.

B. The owner or operator of a high hazard or significant hazard dam shall have a detailed inspection of the dam performed by a registered professional engineer with experience in the design and construction of dams not later than March 1, 2006, and thereafter at such recurring intervals as may be directed by the Department. A checklist form prescribed and furnished by MDEQ shall be used to record observations during the inspection. The report on findings of scheduled detailed inspections (including the completed MDEQ prescribed checklist and an evaluation of the operation, maintenance, and the structural integrity of the dam), bearing the signature and seal of the professional engineer performing the inspection, shall be submitted to the Board within sixty (60) days after completion of the inspection.

C. MDEQ employees are authorized to make inspections at any time to evaluate the operation, maintenance, and structural integrity of dams and reservoirs. The owner or operator shall be required to perform, at the owner's or operator's expense, such work as may be necessary to correct deficiencies in maintenance and operation or accomplish necessary repairs identified by such inspections. If deficiencies are not corrected or repairs are not made as specified in the inspection report, the Commission may order owners or operators to take remedial action or remove the dam in order to safeguard lives and property.

D. If, upon inspection, the Board or the Commission determines that:

1. A dam was constructed without obtaining required prior written authorization from the Permit Board;
 2. A dam was not constructed in accordance with the plans and specifications upon which the Board based its written authorization;
 3. The dam may not provide adequate safety for lives and property;
4. The dam may adversely affect riparian or other beneficial water uses, or plans for the proper utilization of the water resources of the state; or
5. The owner and/or operator of the dam has allowed the dam to deteriorate and remain in an unsafe condition after having been ordered to make the necessary repairs or modifications, the Board or the Commission may:
- a.) cause the dam to be removed or breached;
 - b.) require the owner and/or operator to take remedial action;
 - c.) revoke or modify any authorization pertaining thereto; or
 - d.) take other action the Commission deems appropriate, within its jurisdiction.

VII. Confidential Information

Procedures for declaring submitted information confidential and for agency handling of such information are found in Miss. Code Ann. Section 49-17-39, Section 51-3-44, and the Commission's Regulations Regarding the Review and Reproduction of Public Records (MCEQ-2).

VIII. Enforcement

A. Any person who allows a dam to deteriorate to an unsafe condition may be ordered to make necessary repairs to restore it to a safe condition. If appropriate repairs are not made, the Commission may take action to correct unsafe conditions, or to require removal of the dam, and the Board may revoke or modify any written authorization pertaining thereto.

B. Enforcement of this regulation shall be governed by Miss. Code Ann. Sections 49-17-31, 49-17-

33, 49-17-35, 49-17-37, 49-17-41, and Sections 51-3-49, 51-3-51, and 51-3-55.

IX. Correspondence and Adequacy of Notice

A. General -- All regulated dam owners shall inform MDEQ of any address changes, changes in ownership, or changes in the designated agent of the owner within fifteen (15) days of any such changes, and must readily accept all mail sent to them from the Commission, MDEQ, or the Permit Board.

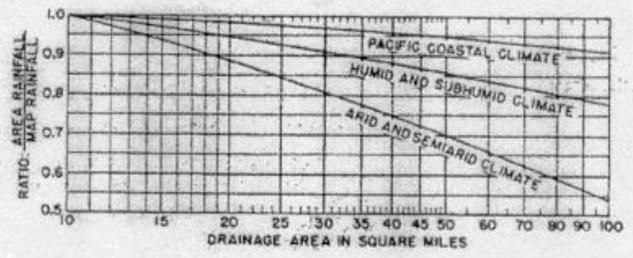
B. Registered or certified mail -- Registered or Certified Mail sent with proper postage and to the last address provided to MDEQ by the dam owner of record shall be considered adequate notification of notice served if MDEQ is notified that the mail was delivered and accepted or if the mail is returned as rejected or unclaimed by the addressee.

C. Refusal to accept mail -- Refusal to accept mail from the Commission, the Permit Board, the Department, or its designee, shall be considered a violation of this regulation.

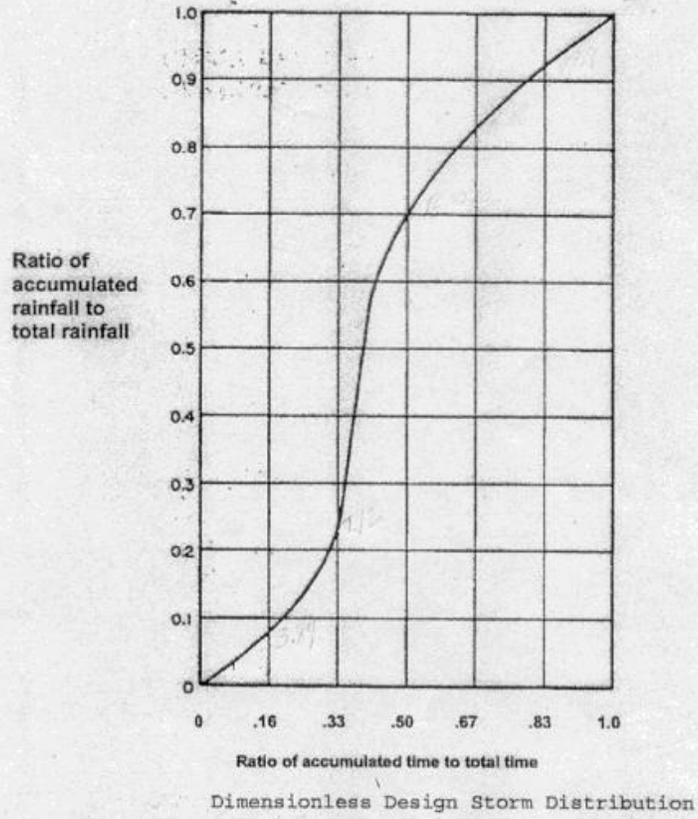
X. Hearings and Appeals

Any person aggrieved by any initial action of the Permit Board to issue, deny, transfer, modify or revoke a permit or written authorization may request an evidentiary hearing before the Permit Board regarding the decision. Procedures for hearings and further appeals of Permit Board decisions are set forth in Mississippi Code Annotated Section 49-17-29.

APPENDIX A
HYDROLOGIC DESIGN CRITERIA



Areal Adjustment



Dimensionless Design Storm Distribution

A-1

PMP (24 hour duration) for MS Counties							
COUNTY	PMP (in.)		COUNTY	PMP (in.)		COUNTY	PMP (in.)
Adams	46.1		Itawamba	41.3		Perry	47.0
Alcorn	40.2		Jackson	47.8		Pike	46.9
Amite	46.7		Jasper	45.3		Pontotoc	41.5
Attala	43.4		Jefferson	45.7		Prentiss	40.7
Benton	40.4		Jeff Davis	46.1		Quitman	41.4
Bolivar	42.1		Jones	46.1		Rankin	44.8
Calhoun	42.0		Kemper	44.0		Scott	44.6
Carroll	42.8		Lafayette	41.2		Sharkey	43.6
Chickasaw	42.1		Lamar	46.8		Simpson	45.5
Choctaw	43.0		Lauderdale	44.6		Smith	45.3
Claiborne	45.3		Lawrence	46.2		Stone	47.6
Clarke	45.3		Leake	44.0		Sunflower	42.4
Clay	42.5		Lee	41.3		Tallahatchie	41.9
Coahoma	41.4		Leflore	42.6		Tate	40.7
Copiah	45.5		Lincoln	46.2		Tippah	40.4
Covington	46.1		Lowndes	42.8		Tishomingo	40.4
DeSoto	40.4		Madison	44.2		Tunica	40.7
Forrest	47.0		Marion	46.8		Union	41.0
Franklin	46.2		Marshall	40.5		Walthall	46.9
George	47.5		Monroe	42.1		Warren	44.6
Greene	46.9		Montgomery	42.7		Washington	43.0
Grenada	42.3		Neshoba	44.0		Wayne	46.0
Hancock	48.3		Newton	44.6		Webster	42.5
Harrison	48.0		Noxubee	43.4		Wilkinson	46.7
Hinds	44.7		Oktibbeha	42.8		Winston	43.4
Holmes	43.3		Panola	41.2		Yalobusha	41.8
Humphreys	43.3		Pearl River	47.6		Yazoo	43.8
Issaquena	43.8						

Note – These data interpolated or extrapolated from Figure 20 of Hydrometeorological Report No. 51, Probable Maximum Precipitation Estimates, United States East of 105th Meridian, Office of Hydrology, National Weather Service, U.S. Department of Commerce, NOAA, June 1978. Consideration shall be given to updated National Weather Service references applicable to the location of the dam site as data becomes available.

A-2

