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 mattressing, 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*

Published Electronically: *June 11, 2008*