## CHAPTER 71 FLOOD PLAIN OR FLOODWAY DEVELOPMENT— WHEN APPROVAL IS REQUIRED

[Prior to 7/1/83, INRC, Ch 5, Div. 1] [Prior to 12/3/86, Water, Air and Waste Management[900]]

PREAMBLE: This chapter of these rules contains administrative thresholds which implement the statutory requirement that approval from the department be obtained for any development including construction, maintenance and use of a structure, dam, obstruction, deposit, excavation or "flood control work" on a flood plain or floodway. These administrative thresholds are organized into categories such as "channel changes," "levees or dikes," "buildings," etc. Any doubt concerning whether a project or activity requires approval under these thresholds should be resolved by requesting advice from the department.

The department may delegate regulatory authority to a local government by approving local flood plain regulations (see 567—Chapter 75). To determine whether the department has delegated regulatory authority over a specific category of project at a specific location, an inquiry should be made to:

State Coordinator National Flood Insurance Program Department of Natural Resources Wallace State Office Building Des Moines, Iowa 50319 Telephone: (515)281-8690

**567—71.1(455B)** Bridges, culverts, temporary stream crossings, and road embankments. Approval by the department for the construction, operation, and maintenance of bridges, culverts, temporary stream crossings, and road embankments shall be required in the following instances.

**71.1(1)** *Rural area—floodway.* In rural areas, bridges, culverts, road embankments, and temporary stream crossings in or on the floodway of any river or stream draining more than 100 square miles. (NOTE: Channel modifications associated with bridge, culvert or roadway projects may need approval; see 567—71.2(455B).)

**71.1(2)** *Rural area—floodway and flood plain.* Road embankments located in the floodway or flood plains, but not crossing the channel of a river or stream draining more than 10 square miles, where such works occupy more than 3 percent of the cross-sectional area of the channel at bankfull stage or where such works obstruct more than 15 percent of the total cross-sectional area of the flood plain at any stage. In determining a 15 percent occupancy of the flood plain, the concept of equal and opposite conveyance as defined in 567—Chapter 70 shall apply.

**71.1(3)** Urban areas. In urban areas, bridges, culverts, road embankments and temporary stream crossings in or on the floodway or flood plains of any river or stream draining more than 2 square miles.

**567—71.2(455B)** Channel changes. Approval by the department for the construction, operation, and maintenance of channel changes shall be required in the following instances.

71.2(1) Rural areas. In rural areas:

*a.* Channel changes not otherwise associated with road projects in or on the floodway of any stream draining more than 10 square miles at the location of the channel change.

*b.* Channel changes associated with road projects in or on the floodway of any stream draining more than 10 square miles at the location of the channel change whereby either (i) more than a 500-foot length of the existing channel is being altered or (ii) the length of existing channel being altered is reduced by more than 25 percent.

**71.2(2)** Urban areas. In urban areas channel changes on any river or stream draining more than 2 square miles at the location of the channel change.

**71.2(3)** *Protected streams.* Channel changes at any location on any river or stream designated as a protected stream pursuant to division III of 567—Chapter 72.

**71.2(4)** Channel change by drainage district. Rule 72.2(455B) applies to channel changes sponsored by a drainage district. However, approval is not required for repair and maintenance of a drainage district

ditch as defined in 70.2(455B) if the drainage area of the ditch at the location of the proposed work is less than 100 square miles.

This rule is intended to implement Iowa Code section 455B.275.

**567—71.3(455B) Dams.** Approval by the department for construction, operation, or maintenance of a dam in the floodway or flood plain of any water source shall be required when the dimensions and effects of such dam exceed the thresholds established by this rule. EXCEPTION: Public road embankments with culverts which impound water only in temporary storage are exempt from the requirements of this rule and shall be reviewed under rules 567—71.1(455B) and 567—72.1(455B). Approval required by this rule shall be coordinated with approval for storage of water required by 567—Chapter 51. Approval by the department shall be required in the following instances:

71.3(1) Rural areas. In rural areas:

*a.* Any dam designed to provide a sum of permanent and temporary storage exceeding 50 acre-feet at the top of dam elevation, or 25 acre-feet if the dam does not have an emergency spillway, and which has a height of 5 feet or more.

*b.* Any dam designed to provide permanent storage in excess of 18 acre-feet and which has a height of 5 feet or more.

c. Any dam across a stream draining more than 10 square miles.

*d.* Any dam located within 1 mile of an incorporated municipality, if the dam has a height of 10 feet or more, stores 10 acre-feet or more at the top of dam elevation, and is situated such that the discharge from the dam will flow through the incorporated area.

71.3(2) Urban areas. Any dam which exceeds the thresholds in 71.3(1) "a," "b" or "d."

**71.3(3)** *Low head dams.* Any low head dam on a stream draining 2 or more square miles in an urban area, or 10 or more square miles in a rural area.

**71.3(4)** *Modifications to existing dams.* Modification or alteration of any dam or appurtenant structure beyond the scope of ordinary maintenance or repair, or any change in operating procedures, if the dimensions or effects of the dam exceed the applicable thresholds in this rule. Changes in the spillway height or dimensions of the dam or spillway are examples of modifications for which approval is required.

71.3(5) Mill dams. Rescinded IAB 2/20/91, effective 3/27/91.

**71.3(6)** *Maintenance of preexisting dams.* Approval shall be required to maintain a preexisting dam as described in 567—Chapter 73 only if the department determines that the dam poses a significant threat to the well-being of the public or environment and should therefore be removed or repaired and safely maintained. Preexisting dams are subject to the water, air and waste management dam safety inspection program as set forth in 567—Chapter 73.

This rule is intended to implement Iowa Code sections 455B.262, 455B.264, 455B.267, 455B.275 and 455B.277.

**567—71.4(455B)** Levees or dikes. Approval by the department for construction, operation, and maintenance of levees or dikes shall be required in the following instances.

**71.4(1)** *Rural areas.* In rural areas, any levees or dikes located on the flood plain or floodway of any stream or river draining more than 10 square miles.

**71.4(2)** *Urban areas.* In urban areas, any levee or dike along any river or stream draining more than 2 square miles.

**567**—71.5(455B) Waste or water treatment facilities. Approval by the department for construction, operation, and maintenance of waste or water treatment facilities shall be required in the following instances.

**71.5(1)** *Rural areas.* In rural areas, any such facilities on the flood plains or floodway of any river or stream draining more than 10 square miles.

**71.5(2)** Urban areas. In urban areas, any such facilities on the flood plain or floodway of any river or stream draining more than 2 square miles.

**567—71.6(455B)** Sanitary landfills. Approval by the department for construction, operation, and maintenance of any sanitary landfill shall be required in the following instances.

**71.6(1)** *Rural areas.* In rural areas, any such landfill located on the flood plain or floodway of any stream draining more than 10 square miles at the landfill site.

**71.6(2)** Urban areas. In urban areas, any such facilities located on the flood plain or floodway of any stream draining more than 2 square miles at the landfill site.

**567—71.7(455B) Buildings and associated fill.** Approval by the department for construction, use and maintenance of "buildings" as defined in 567—Chapter 70 and for placement of fill is required as described in the following thresholds.

**71.7(1)** Building and placement of associated fill in urban areas. In urban areas as defined in these rules approval is required for construction, use and maintenance of buildings in the floodway or flood plain of any stream draining more than 2 square miles at the location of the structure as follows:

*a.* New construction including fill for development purposes. Approval is required for construction of any new building. New construction includes replacement or relocation of an existing building. New construction also includes placement and grading of fill materials in a manner that would create an elevated building site.

*b.* Additions to existing buildings. Approval is required for any addition which increases the original floor area of a building by 25 percent or more. All additions constructed after July 4, 1965, shall be added to any proposed addition in determining whether the total increase in original floor space would exceed 25 percent.

*c.* Lowering or elevating. Approval is required for lowering a floor of a building. Approval is not required for elevating an existing building. However, when a building is elevated the lowest floor should be elevated to the appropriate minimum protection level stated in 567—subrule 72.5(1). The department, upon request, will cooperate in determining the minimum protection level for a person who proposes to elevate a building.

*d. Reconstruction.* Approval is required for reconstruction of any portion of a building if the cost of reconstruction exceeds 50 percent of the market value of the existing building or if reconstruction will increase the market value by more than 50 percent.

**71.7(2)** Buildings and associated fill located within 2 miles of an urban area. The thresholds for buildings and associated fill in subrule 71.7(1) shall apply to rural areas within 2 miles of municipal corporate limits.

**71.7(3)** Buildings and associated fill in all other rural areas. In rural areas not covered by 71.7(1) the thresholds for approval of buildings and associated fill are the same as in 71.7(1) except that approval is required only when the drainage area at the location of the structure is more than 10 square miles.

**71.7(4)** Buildings and associated fill adjacent to or downstream from impoundments. Approval is required for new construction, additions, lowering, or reconstruction and associated fill as described in 71.7(1) without regard to the drainage area if the proximity of the building to a dam regulated by the department is as follows:

*a. Adjacent to impoundment.* Approval is required for a building and associated fill adjacent to an impoundment if the lowest floor level including any basement is lower than the top of the dam.

*b.* Downstream from dam. Approval is required for a building and associated fill downstream from a dam at any location where flooding can be reasonably anticipated from principal or emergency spillway discharges. If the dam does not substantially comply with high hazard criteria in these rules, approval is required for a building and associated fill at any location where flooding can be reasonably anticipated from overtopping and failure of the dam.

**567—71.8(455B) Pipeline crossings.** Approval by the department for the construction, operation and maintenance of buried pipeline crossings is not required if the natural contours of the channel and flood plain are maintained. (NOTE: Approval of stream bank protection measures associated with pipeline crossings may need approval under 567—71.9(455B).) Approval by the department for the construction, operation, and maintenance of all other pipeline crossings shall be required in the following instances:

**71.8(1)** *Rural areas.* In rural areas, pipeline crossings on any river or stream draining more than 100 square miles.

**71.8(2)** Urban areas. In urban areas, pipeline crossings on any river or stream draining more than 2 square miles.

**567—71.9(455B)** Stream bank protective devices. Approval by the department for construction, operation, and maintenance of stream bank protective devices (including wing dikes, jetties, et cetera) shall be required in the following instances:

71.9(1) Rural areas. In rural areas:

*a.* All stream bank protective devices along any river or stream draining more than 100 square miles.

*b.* Stream bank protective devices along any river or stream draining between 10 and 100 square miles where the cross-sectional area of the river or stream channel is reduced more than 3 percent.

71.9(2) Urban areas. In urban areas:

*a.* Stream bank protective devices along any river or stream draining more than 100 square miles.

*b.* Stream bank protective devices along any river or stream draining between 2 and 100 square miles where the cross-sectional area of the river or stream channel is reduced more than 3 percent.

## 567-71.10(455B) Boat docks.

**71.10(1)** *In general.* Except as provided in subrule 71.10(2), department approval is required for all boat docks that are located in any stream other than a lake and do not float on the surface of the water.

**71.10(2)** *Exempted nonfloating boat docks*. Recreational nonfloating type boat docks located on the Mississippi and Missouri rivers, and the conservation pools of the Coralville, Rathbun, Red Rock, and Saylorville reservoirs shall not require department approval, other than a permit obtained from the parks, recreation and preserves division of the department.

**567—71.11(455B) Excavations.** Approval by the department for excavations shall be required in the following instances:

**71.11(1)** *Rural areas.* In rural areas:

*a.* Excavation in the channel on any river or stream draining more than 10 square miles where said excavation increases the cross-sectional area of said channel below bankfull stage by more than 10 percent. The cross-sectional area of the channel shall be determined based on current engineering plans, or original engineering plans, if being performed by a drainage district. If an original plan is not available, the current engineering plan will be used to determine the original cross-sectional area of the channel. The drainage district shall submit a copy of the engineering plan for increasing the cross-sectional area of a channel to the department prior to approval by the board of supervisors or trustees regardless of size of the increase. The department shall submit its decision to the drainage district within 60 days.

*b.* Excavation on any flood plain of any river or stream draining more than 10 square miles where said excavation is within 100 feet of the normal stream or riverbank.

c. Excavations in relation to highway projects are exempt except as otherwise provided for in 71.1(1), 71.1(2) and 71.1(3).

*d.* Excavation for the repair and maintenance of a drainage district ditch as defined in 567-70.2(455B) is not considered an excavation within the intent of this rule if the drainage area of the ditch at the location of the proposed work is less than 100 square miles.

**71.11(2)** *Urban areas.* In urban areas excavations on the floodway of any stream draining more than 2 square miles.

This rule is intended to implement Iowa Code section 455B.275.

**567—71.12(455B)** Miscellaneous structures, obstructions, or deposits not otherwise provided for in other rules. Approval by the department for construction, operation, and maintenance of miscellaneous structures, obstructions, or deposits, shall be required in the following instances.

**71.12(1)** *Rural areas.* In rural areas, any miscellaneous structures, obstructions, or deposits on the floodway or flood plain of any river or stream draining more than 10 square miles where such works obstruct more than 3 percent of the cross-sectional area of the stream channel at bankfull stage or where such works obstruct more than 15 percent of the total cross-sectional area of the flood plain at any stage. In determining a 15 percent obstruction of the flood plain, the concept of equal and opposite conveyance as defined in 567—Chapter 70 shall apply.

**71.12(2)** Urban areas. In urban areas, miscellaneous structures, obstructions, or deposits on the floodway or flood plains of any river or stream draining more than 2 square miles.

**567—71.13(455B)** Animal feeding operation structures. Approval by the department for construction, operation, and maintenance of animal feeding operation structures shall be required in the following instances.

**71.13(1)** *Rural areas.* In rural areas, any such facilities on the flood plain or floodway of any stream draining more than ten square miles.

**71.13(2)** Urban areas. In urban areas, any such facilities on the flood plain or floodway of any stream draining more than two square miles.

**71.13(3)** *Adjacent to an impoundment.* Any such facilities if any part of the facility is located on land that is naturally lower than the top of the dam.

These rules are intended to implement Iowa Code chapter 455B, division III, part 4; and Iowa Code sections 459.102, 459.301 and 481A.15.

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