567—65.8(455B,459,459A,459B) Karst terrain—stockpile requirements. The provisions of this rule shall apply to locations at confinement feeding operations where dry manure or dry bedded manure is stockpiled.

65.8(1) *Karst terrain submittal requirements.* Prior to stockpiling dry manure or dry bedded manure, the person planning to stockpile shall determine whether the proposed stockpile location will be located in potential "karst terrain," as defined in subrule 65.1(1). The AFO Siting Atlas shall be used to determine if the proposed stockpile location is in potential karst terrain. The results of the karst terrain determination shall be submitted to the department according to the following:

a. If the proposed stockpile location is not in potential karst terrain, the person planning the stockpiling shall submit a printed map from the AFO Siting Atlas indicating the location of the stockpile location, with the potential karst layer turned on, to the department.

b. If the proposed stockpile is located in potential karst terrain, a PE licensed in Iowa, NRCS-qualified staff person or a qualified organization shall submit a soil report to the department, based on the results from soil corings, test pits or acceptable well log data, describing the subsurface materials and vertical separation distance from the proposed bottom of the stockpile to the underlying limestone, dolomite or soluble rock. A minimum of two soil corings spaced equally within the stockpile location or two test pits located within five feet of the outside of the stockpile location are required if acceptable well log data is not available. The soil corings shall be taken to a minimum depth of 25 feet below the bottom elevation of the proposed stockpile or into bedrock, whichever is shallower. After the soil exploration is complete, each coring or test pit shall be properly plugged with concrete grout, bentonite or similar materials and completion of this activity shall be documented in the soil report. If a 25-foot vertical separation distance can be maintained between the bottom of the proposed stockpile and limestone, dolomite, or other soluble rock, then the structure is not considered to be in karst terrain.

65.8(2) *Dry manure stockpiling.* A person shall comply with all of the following when stockpiling dry manure on karst terrain:

a. Maintain a minimum five-foot vertical separation distance between the bottom of the stockpile and the underlying limestone, dolomite, or other soluble rock.

b. A person who stockpiles dry manure for more than 15 days shall use any of the following:

(1) A qualified stockpile structure; or

(2) A qualified stockpile cover. However, a person shall not stockpile dry manure using a qualified stockpile cover at a long-term stockpile location unless the stockpile is located on a reinforced concrete slab at least five inches thick.

65.8(3) *Dry bedded manure stockpiling.* A person shall comply with all of the following when stockpiling dry bedded manure on karst terrain or above an alluvial aquifer:

a. Maintain a minimum five-foot vertical separation distance between the bottom of the stockpile and the underlying limestone, dolomite, or other soluble rock in karst terrain or the underlying sand and gravel aquifer in an alluvial aquifer area.

b. Stockpiles shall be placed on a reinforced concrete slab that is a minimum of five inches thick.

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