

567—50.6(17A,455B) Supporting information for water use permit applications. As described in this rule, applicants shall submit supporting information reasonably required to assist the department in conducting the investigation required by Iowa Code sections 455B.264 and 455B.281 and in determining whether permit issuance would be consistent with the beneficial use policies and principles in Iowa Code section 455B.262. The department may require additional information relative to applications for the following types of permits.

50.6(1) Groundwater withdrawal permit.

a. Identification of source and effects of pumping. Applicants for a water use permit to withdraw groundwater shall submit information to identify the well location(s) and the aquifer(s) from which water withdrawals are proposed, predict the effects of pumping with a reasonable degree of confidence, and determine any permit conditions for well interference pursuant to 567—Chapter 54. In areas of uncertainty, to determine the availability of a water source of adequate quantity and quality and to predict the effects of pumping, the applicants shall perform test drilling, yield testing, and pump testing that includes measurements in one or more observation wells conducted with prior approval and in a manner acceptable to the department. Applicants shall perform each of these exploratory operations to the extent necessary for the department to determine whether a water use permit should be issued and to identify conditions which should be imposed in a permit. The following requirements apply to exploratory drilling, yield testing, and pump testing.

(1) Test drilling. Where test drilling is needed for geological information relevant to the application, an applicant shall employ a driller to collect, bag, and properly label cutting samples at each five-foot interval and at each apparent change in geological formation from a test hole or production well hole at least the approximate depth of the proposed production well. The cutting samples shall be saved for collection in sample bags provided by the Iowa Geological Survey (IGS). The samples shall be submitted to the IGS and be accompanied by a driller's log showing the well's location and total depth and a description of the materials encountered at successive intervals.

(2) Yield testing. An applicant shall construct a well and test pump it for yield to the extent necessary to determine whether water is available at the applicant's proposed rate of withdrawal from the proposed source. A written registration from the department is required before any yield test in which more than 25,000 gallons will be withdrawn in a period of 24 hours or less, as provided in 50.4(4).

(3) Pump testing. An applicant shall conduct a controlled aquifer pump test with supervision by a certified well contractor, licensed professional engineer, or other department designee as a condition of obtaining a water use permit, if the department finds an aquifer test necessary to determine the effects that the proposed withdrawal has on other nearby water users. An applicant may be required to construct, develop, and maintain adequate observation wells for use in an aquifer pump test, subsequent water level measurements, or water quality monitoring. An applicant shall obtain a registration for an aquifer pump test as provided in 50.4(4).

b. Cooperation in obtaining well information. An applicant requesting a permit authorizing groundwater withdrawals from a well or reservoir may be required to assist the department in conducting an inventory of nearby wells within a designated radius of the proposed site. The need for an inventory and the appropriate radius will be determined after considering the characteristics of the aquifer that is proposed as a source of water and the proposed withdrawals. The department shall provide the applicant a map specifying the proposed inventory area, forms specifying the information to be gathered in the inventory, and a description of regulated uses within the inventory area. The applicant shall make a good-faith effort to assist the department in obtaining information from public records to identify landowners and occupants and from drilling contractors or pump installers identified by a landowner or occupant responding to the inventory.

50.6(2) Irrigation permit. An applicant proposing to irrigate crops on land shall submit a conservation plan or describe the conservation system that does not exceed the NRCS compliance-based soil loss limits for the land where crop irrigation is proposed, if the land includes soils more erodible than Capability Subclass IIe as defined by the NRCS. The application shall include a written explanation of how operation of the proposed irrigation system will be compatible with the plan or system.

50.6(3) *Quarry permit.* Iowa Code section 455B.268 requires that a water use permit be obtained before diverting water or material from the surface directly into any underground watercourse or basin.

50.6(4) *Diversion of water into an aquifer not related to the use of an agricultural drainage well.* An applicant for a water use permit to divert water or any other material from the surface into an aquifer not related to the use of an agricultural drainage well shall submit information showing that the requested diversion will not alter the quality of the aquifer.

50.6(5) *Water withdrawal from a protected water source.* An applicant for a water use permit to withdraw water from a protected water source designated in 567—Chapter 53 may be required to provide specific information to support the application as required by rule 567—53.3(455B).

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