

567—50.6(17A,455B) Supporting information. Applicants shall submit supporting information which is reasonably required to assist the department in conducting the investigation of an application required by Iowa Code sections 455B.264 and 455B.281 and in determining whether granting of a permit would be consistent with the policies and principles of beneficial use set forth in Iowa Code section 455B.262. Certain supporting information requirements are described in this rule. This description is intended to identify frequently required information. The department may require additional information relative to the permit application.

50.6(1) Application for permit to withdraw groundwater.

a. Identification of source and effects of pumping. An applicant shall be required to submit information needed by the department to identify the aquifer(s) from which withdrawals of water 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. At many locations the only reliable methods to determine the availability of a water source of adequate quantity and quality and to predict the effects of pumping require test drilling, yield test pumping, and a controlled aquifer test with measurements in one or more observation wells conducted with prior approval in a manner that is acceptable to the department. The applicant shall be required to perform each of these exploratory operations to the extent necessary for the department to obtain information from which to determine whether a permit should be granted and to identify conditions which should be imposed in any permit granted. The following requirements apply to exploratory drilling and test pumping.

(1) Test drilling. In cases where test drilling is needed for geological information relevant to the application, the applicant is responsible for employing a driller who will 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 must be saved for collection by the department in sample bags provided by the department's Iowa geological survey (IGS). The samples shall be accompanied by a driller's log showing the location and total depth of the hole and a description of the materials encountered at successive intervals.

(2) Yield testing. An applicant shall be required to 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 (see 567—subrule 51.6(5)).

(3) Controlled aquifer test with supervision. An applicant shall be required to conduct a controlled aquifer test with supervision by a certified well contractor, licensed professional engineer or other designee of the department as a condition of obtaining a water permit if the department finds an aquifer test necessary to determine the effects which the proposed withdrawal has on other water uses. The applicant may be required to construct, develop, and maintain adequate observation wells for use in an aquifer test and for subsequent water level measurements or water quality monitoring. An applicant shall be responsible for obtaining a registration for an aquifer test as provided in 567—subrule 51.6(5).

b. Cooperation in obtaining information about surrounding wells. An applicant who requests a permit authorizing withdrawals of groundwater 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 known characteristics of the aquifer which the applicant proposes as a source of water and the rate and amount of the proposed withdrawals. The department shall provide a map specifying the area within which an inventory is proposed and forms specifying the information to be gathered in the inventory. The department shall also provide to the applicant a description of regulated uses within the inventory area. The applicant shall make a good faith effort to assist the department in obtaining available 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) Application for an irrigation permit. An applicant who proposes to irrigate crops on land which includes soils more erodible than Capability Subclass IIe as defined by the U.S.D.A. Natural Resources Conservation Service (NRCS), or slopes greater than 6 percent where a modern NRCS Soil

Survey is not available, shall submit a soil conservation plan prepared with the assistance of the NRCS for the land in which crop irrigation is proposed. The plan shall be accompanied by the applicant's written explanation of how operation of the proposed irrigation system will be compatible with the conservation plan.

50.6(3) *Application for permit to dewater a rock quarry.* Iowa Code section 455B.268 and 567—Chapter 51 require that a permit be obtained before diverting water or material from the surface directly into any underground watercourse or basin. When the department investigates an application for a permit to pump water for dewatering of a quarry excavated in carbonate rock, the department shall consider the potential for pollution of an underground watercourse or basin from drainage of surface water into the quarry. If available information, including topographic and subsurface geological information, supports a finding that drainage of surface water into the quarry would constitute a violation of the permit requirement in Iowa Code section 455B.268 and might cause pollution of an underground watercourse or basin if not controlled, then the department shall require that the applicant either request a permit to authorize a drainage of surface water into the quarry, or construct and maintain a means of controlling surface water which would otherwise drain into the quarry. Examples of suitable methods of controlling surface drainage are low berms or artificial drainage ways constructed as needed to reduce runoff of surface water from adjacent land into the quarry.

50.6(4) *Application for permit to divert water into an aquifer not related to the use of an agricultural drainage well.* An applicant for a 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) *Application for uses that were nonregulated prior to July 1, 1985.* Rescinded IAB 6/7/06, effective 7/12/06.

50.6(6) *Applications for a permit to withdraw water from a protected water source.* An applicant for a permit to withdraw water from a protected water source designated in rule 567—53.7(455B) may be required to provide specific information to support the application as required by rule 567—53.5(455B) or rule 567—53.7(455B).

50.6(7) *Application for permit to divert water into an aquifer related to the use of an agricultural drainage well.* An applicant for a permit to divert water or any other material into an aquifer by means of an agricultural drainage well shall submit the following information. The locations of the features as listed below shall be shown on a map drawn to scale submitted with the application.

- a. Location of the agricultural drainage well to at least the nearest quarter-quarter section, township and range.
- b. Diameter and depth of the agricultural drainage well, if known.
- c. Description and ownership of the lands which are drained by the agricultural drainage well and the associated drainage system.
- d. Location of tiles which drain to the agricultural drainage well, if known, and the location of any existing surface water intakes.
- e. The location and description of any earthen storage structures, confinement feeding operations, or open feedlots within the agricultural drainage well area.
- f. Information regarding any known connections between the agricultural drainage well or its drainage system and wastewater disposal or storage systems such as septic tanks and the location of such connections.
- g. The nature and extent of any agreements between the well owner and adjacent landowners who have lands which are drained by the agricultural drainage well and associated tile drainage system.
- h. Any available information regarding the economic and physical feasibility of closing the agricultural drainage well.