

STATE OF NEBRASKA
DEPARTMENT OF NATURAL RESOURCES

RULES FOR GROUND WATER

JUNE 2022

NEBRASKA ADMINISTRATIVE CODE

TITLE 456 - RULES FOR GROUND WATER

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CHAPTER 1 - DEFINITIONS

001. DEPARTMENT. The Department of Natural Resources.

002. DOMESTIC WATER WELL. A well that provides ground water required for human needs as it relates to health, fire control, and sanitation or for domestic livestock as related to normal farm and ranch operations, or for irrigation of lands not exceeding a total of two acres in area, and the water use is of a domestic and non-commercial nature. The domestic water well must be constructed to potable well drinking water standards according to applicable statutes and rules for water well construction.

003. GEOTHERMAL WATER WELL. A well from which water is withdrawn for purposes of using the geothermal properties of the water. The temperature of the water must be greater than or equal to the mean annual air temperature at the location of the well plus 18° Fahrenheit plus (0.0137°F times depth of well measured in feet). Heat pump wells that use ground water with temperatures at or below the normal gradient do not fall under the definition of permit requirements for geothermal resource development.

004. INACTIVE STATUS WATER WELL. A well that meets the definition in Neb. Rev. Stat. § 46-1207,02.

005. INDUSTRIAL WATER WELL. A well that provides ground water for manufacturing, commercial, and power generation purposes. Commercial use shall include, but not be limited to, maintenance of golf course turf.

006. INJECTION WATER WELL. A well used for injecting water into the underground water reservoir. Not included are wells used for inserting media to repressure oil or natural gas bearing formations regulated by the Nebraska Oil and Gas Conservation Commission.

007. IRRIGATION WATER WELL. A well that provides water for purposes of irrigating more than two acres of crops and other plants.

008. MONITORING WATER WELL. A well that meets the definition in Neb. Rev. Stat. § 46-706(25).

009. OBSERVATION WATER WELL. A well used for purposes of monitoring static water levels.

010. PUBLIC WATER SUPPLY WELL (SPACING PROTECTED). A well owned and operated by a city, village, municipal corporation, metropolitan utilities district, reclamation district, or sanitary improvement district that provides water to the public fit for human consumption through at least 15 service connections, or regularly serves at least 25 individuals.

011. PUBLIC WATER SUPPLY WELL (SPACING UNPROTECTED). A well not owned and operated by a city, village, municipal corporation, metropolitan utilities district, reclamation district, or sanitary improvement district that provides water to the public fit for human consumption through at least 15 service connections or regularly serves at least 25 individuals.

012. TEST HOLE. A hole designed to obtain information on hydrogeologic conditions.

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CHAPTERS 2 - 3 – (Repealed)

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CHAPTER 4 – INDUSTRIAL GROUND WATER PERMIT

001. APPLICATION. All information required under Neb. Rev. Stat. § 46-678 must be compiled and submitted in loose-leaf binder(s) with maximum dimensions of 11 inches by 11 inches by 4 inches. Maps, plans and drawings must be of a size sufficient to clearly depict the subject matter, but must be folded to dimensions not to exceed 11 inches by 11 inches. The review area for each application must be a minimum one-mile radius (aerial extent) around the well site. If the applicant desires to submit its application in an electronic format and/or in dimensions other than described previously it may do so only if granted permission by the Department in advance. The application must consist of all items requested on the application form provided by the Department. The form may be found on the Department's website and in the Department's offices.

001.01. Completed application form.

001.02. Hydrologic Evaluation Report. The hydrologic evaluation shall include but not be limited to:

001.02(A). A detailed description of each well proposed to be included under this permit. The description shall include the intended depth, screen and casing size, pump capacity, description of location, applicable well registration numbers, control and management area permit numbers.

001.02(B). A narrative evaluating the geologic and hydrologic conditions of the well site and review area.

001.02(C). Proposed operating data criteria.

001.02(D). A list of other relevant permits.

001.02(E). Well driller's logs from test holes and production wells and electric logs, if available, in tabular or graphical form.

001.02(F). Pumping test data, if available.

001.02(G). A table depicting proposed rates of withdrawal and anticipated drawdown in the project wells as a function of both time and distance from the project wells.

001.02(H). A narrative describing alternate sources of accessible surface and ground water and reasons for choosing the proposed source.

001.02(I). Maps, plans or drawings showing:

001.02(I)(i). Location of project wells and project facilities including pipelines, pumping stations, treatment plants, wastewater disposal sites or other facilities.

001.02(I)(ii). Location of use.

001.02(I)(iii). Location of other wells within the review area.

001.02(I)(iv). Location of surface water rights within the review area.

001.02(I)(v). A water table map.

001.02(I)(vi). The geologic structure of the review area.

001.02(I)(vii). Hydrologic conditions in the review area.

001.03. ECONOMIC ANALYSIS. The economic analysis shall include:

001.03(A). The economic benefit of the applicant's proposed use.

001.03(B). The economic benefits of existing uses of surface or ground water in the area of the applicant's proposed use and any transfer.

001.04. ENVIRONMENTAL IMPACT ANALYSIS. This analysis shall discuss the environmental impacts of the project.

001.05. SOCIAL IMPACT ANALYSIS. This analysis shall discuss the possible social benefits and detriments of the project.

002. CORRECTION. An application that is incomplete or incorrect shall be returned to the applicant for correction. Failure to return the corrected application within the time limit specified shall cause the application to be dismissed.

003. HEARING. Any hearing under Neb. Rev. Stat. § 46-680(2) will be conducted according to the Department's Rules of Practice and Procedure, Title 454 and Neb. Rev. Stat. § 61-206.

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CHAPTER 5 – GEOTHERMAL RESOURCE DEVELOPMENT PERMIT

001. PLANS. Plans submitted shall meet the following minimum standards:

001.01. Plans may be made on sheets with minimum dimensions of 21 inches by 30 inches or maximum dimensions of 24 inches by 36 inches. Drawings must be of such clarity and with distinct characters of such size as to retain clarity and resolution when reduced to one-half size. Characters and significant figures should not be smaller than one-eighth inch on the original plan. If the applicant desires to submit its plans in an electronic format and/or in dimensions other than described previously in this paragraph, it may do so only if granted permission by the Department in advance.

001.02. Plans must include a detailed description of each proposed well, setting forth the intended depth, screen type and casing size, and pump capacity. All pipelines, pumping stations, treatment plants, location of use, location of injection wells or discharge, and other facilities must be depicted.

001.03. Plans must also include a summary of geologic and hydrologic data.

002. CONFERENCE. The applicant or a representative must attend a conference with the Department and the Department of Environment and Energy. At this conference the permit requirements under the Nebraska Environmental Protection Act will be determined, as well as the scope of any studies that may be required to support the permit application.

003. NOTICE. If the Director determines a hearing is necessary, the Notice of Hearing shall be published once a week for three consecutive weeks in a newspaper of general circulation in the county or counties where the system will be located. The last notice will be published no later than ten days prior to the hearing.

004. DECISION. After the conclusion of a hearing, or based upon the application, the Director will issue a written order. A copy of the order will be delivered or mailed to all parties of record.

005. APPEAL. Parties to a hearing may request a rehearing as described in the Department's Rules of Practice and Procedure, Title 454 or may appeal to the Court of Appeals. If a decision was entered without a hearing, parties may request a hearing as described in the Department's Rules of Practice and Procedure, Title 454.

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CHAPTER 6 – PERMIT TO TRANSFER GROUND WATER TO ADJOINING STATE

001. REQUIREMENTS. The application must be on a form provided by the Department. The application must consist of all items requested on the application form provided by the Department. The form may be found on the Department's website and in the Department's offices. If the applicant desires to submit its plans in an electronic format and/or in dimensions other than described previously in this paragraph, it may do so only if granted permission by the Department in advance.

002. REVIEW. Additional information, consultation, maps or technical reports may be required after review of initial application. An application that is incomplete or incorrect will be returned to the applicant for correction. Failure to return the corrected application within the time limit specified may cause the application to be dismissed.

003. MODIFICATION. A permit granted pursuant to Neb. Rev. Stat. § 46-613.01 may be revoked, following a hearing, if the Department determines that the permit holder has failed to exercise the right to withdraw ground water within three years of the date the permit was approved, or for a period of three consecutive years thereafter. Permits may not be modified to include additional amounts of withdrawal or additional wells. New permits will be required for such modifications.

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CHAPTERS 7 - 10 – (Repealed)

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CHAPTER 11 – GROUND WATER MANAGEMENT PLANS

001. REQUIREMENTS. Pursuant to Neb. Rev. Stat. § 46-711, natural resources districts (NRDs) must submit new or proposed modifications of their ground water management plans to the Department for review in the following manner:

001.01. On an electronic file device as a word document and pdf, or

001.02. Via email attached as a word document and pdf and addressed to DNR.legalfile@nebraska.gov, or

001.03. On paper clearly printed, including extra copies printed for the following agencies that the Department may be required to consult:

Department of Health and Human Services
Department of Environment and Energy
University of Nebraska, Conservation and Survey Division
Game and Parks Commission

001.04. Submittals must be received by the Department not less than 120 days prior to any hearing scheduled under Neb. Rev. Stat. § 46-712.

001.05. Submittals must contain a descriptive listing of, and provide if requested, all public comments, all research, data, studies or any other information that the NRD utilized pursuant to Neb. Rev. Stat. § 46-710 during the preparation or modification of the plan.

001.06. When submitting a modification to an existing plan, the changes added must be shown in red text or be underlined, and deleted portions must be shown in strike-out text.

001.07. Submittals must include a cover letter stating the NRD's intent to make the changes and a brief summary of the substantive changes.

001.08. Within 60 days after the hearing under Neb. Rev. Stat. § 46-712, the NRD must submit to the Department the final approved ground water management plan document in the format described above in 001.01 to 001.03.

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CHAPTER 12 – GROUND WATER WELL REGISTRATIONS

001. The Department will register ground water wells intended as production wells but in which the pump has not yet been installed as inactive status water wells. Such wells must be maintained in accordance with Neb. Rev. Stat. § 46-1207.02. To register a well as an inactive status water well the water well owner and/or water well contractor must provide on the registration form the intended water well capacity for purposes of determining registration fees. The water well owner must also state an estimated date when the pump will be installed.

001.01. When a pump is installed in an inactive, registered water well, the water well owner and pump installation contractor must, within 30 days, complete a “Water Well Registration Pump Installation and Construction Modification” form for contractors, or “Water Well Registration Modification” form for owners, provided by the Department on its website or in Department offices.

002. Water well registration and pump installation information must be updated by the water well owner on the “Water Well Registration Modification” form, or by licensed water well professionals on the “Water Well Registration Pump Installation and Construction Modification” form and submitted to the Department when:

002.01. The original information provided is determined to be inaccurate or incomplete.

002.02. The water well is modified in any substantial way making the original information inaccurate in its description of the water well.

003. The Department must be notified of any change in the ownership of any registered well by the new owner of the well filing in the Department a “Notice of Change of Ownership/Water Resources Update Notice” form. The form is provided by the Department on its website or in Department offices.