

STATE OF NEBRASKA
DEPARTMENT OF NATURAL RESOURCES

RULES FOR GROUND WATER

NOVEMBER 2020

NEBRASKA ADMINISTRATIVE CODE

TITLE 456 - DEPARTMENT OF NATURAL RESOURCES
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.

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 A well from which water is withdrawn for purposes of using the geothermal properties of the water.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 which 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 water well that is a good state of repair and for which the owner has provided evidence of intent for future use by maintaining the water well as provided by § 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 A well from which water is withdrawn for purposes of monitoring the possible presence of contaminants.

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

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 serve at least 25 individuals.

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

012. TEST HOLE. Hole designed to obtain information on hydrogeologic conditions.

ANNOTATION

ENABLING LEGISLATION: Section 46-209, R.R.S., Nebraska, 1943

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CHAPTER 2 - (Repealed)

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CHAPTER 3 – (Repealed)

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CHAPTER 4 – INDUSTRIAL GROUND WATER PERMIT

001. APPLICATION. All information shall 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 shall be a minimum one-mile radius (aerial extent) around the well site. The application shall consist of the following items:

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. NOTICE OF HEARING. As a minimum standard, the Notice of Hearing shall include a description of the amount of water requested, the location of the wells, the proposed use of water, and the location of use. The Notice of Hearing shall be published once a week for three consecutive weeks in a newspaper of general circulation in each county within the area of review and a newspaper of general circulation in Nebraska. The Notice shall state that any person may file a written request to be made a party to the hearing within two weeks from the date of final publication of the Notice.

004. HEARING. The hearing will be conducted according to the Department's Rules of Practice and Procedure, Title 454 and § 46-209, R.R.S., 1943, as amended.

005. DECISION. Following the hearing, the Director shall issue a written order. A copy of the order shall be delivered or mailed to all parties of record.

006. APPEAL. Parties to the hearing may request a rehearing as described in the Department's Rules of Practice and Procedure, Title 454, Chapter 11 or may appeal to the district court as described in § 84-917.

ANNOTATION

ENABLING LEGISLATION: Section 46-209, R.R.S., Nebraska, 1943
Section 46-688, R.R.S., Nebraska, 1943

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CHAPTER 5 – GEOTHERMAL RESOURCE DEVELOPMENT PERMIT

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

001.01. Plans shall be made on sheets with minimum dimensions of 21 inches by 30 inches or maximum dimensions of 24 inches by 36 inches. Drawings shall 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.

001.02. As a minimum, plans shall 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 shall be depicted.

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

002. CONFERENCE. The applicant or a representative shall attend a conference with the Department and the Department of Environmental Quality. At this conference the permit requirements under the Environmental Protection Act will be determined, as well as the scope of any studies which 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 shall 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 shall issue a written order. A copy of the order shall 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, Chapter 11 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, Chapter 9.

ANNOTATION

ENABLING LEGISLATION: Section 46-209, R.R.S., Nebraska, 1943
Section 66-1101, R.S. SUPP., Nebraska, 1982
Section 66-1105, R.S. SUPP., Nebraska, 1982

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CHAPTER 6 – PERMIT TO TRANSFER GROUND WATER TO ADJOINING STATE

001. REQUIREMENTS. The application shall be on a form provided by the Department. The application must be accompanied by the following additional information:

001.01. A map showing the location of the proposed well(s), the pipeline(s) or other means of transporting water, project facilities and location of use. The map must be neat, legible and on 8 ½ inch by 11 inch paper or folded to that size. It is suggested that the base map be a copy of a U.S.G.S. Quadrangle map. The map must show section lines, the state line, and be drawn to scale.

001.02. Information on the possible negative effects of the proposed withdrawal on ground water and surface water supplies in the area. This information shall include, but is not limited to:

001.02(A). A proposed operating schedule.

001.02(B). A map showing the location of all ground water wells (including domestic) within a one-mile radius of the proposed well site.

001.02(C). 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(D). A narrative evaluating the geologic and hydrologic conditions of the well site and area within a one-mile radius.

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). Map showing location of surface water rights within a one-mile radius.

002. REVIEW. Additional information, consultation, maps or technical reports may be required after review of initial application. 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. MODIFICATION. A permit granted pursuant to § 46-613.01 shall be revoked, following a hearing, if the Department determines that the permitholder 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 addition wells - new permits will be required for the additions.

ANNOTATION

ENABLING LEGISLATION: Section 46-209, R.R.S., Nebraska, 1943
 Section 46-613.01, R.R.S., Nebraska, 1943
 Section 84-909(1), R.R.S., Nebraska, 1943

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CHAPTER 7 - (Repealed)

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TITLE 456 - DEPARTMENT OF NATURAL RESOURCES

CHAPTER 8 - (Repealed)

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TITLE 456 - DEPARTMENT OF NATURAL RESOURCES

CHAPTER 9 – (Repealed)

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CHAPTER 10 – (Repealed)

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CHAPTER 11 – GROUND WATER MANAGEMENT PLANS

001. Natural resources districts shall submit proposed ground water management plans in the following manner:

001.01. Use three-ring, loose-leaf notebooks. Notebooks should be of the type that allow for labelling on the side or front.

001.02. Use labelled, tabbed dividers between sections.

001.03. When providing plans or modifications to the Department of Water Resources for approval, provide enough copies for the following agencies:

- 1 Department of Water Resources
- 1 Department of Health
- 1 Department of Environmental Quality
- 1 Conservation and Survey Division
- 1 Game and Parks Commission
- 1 Natural Resources Commission
- 1 To be returned to NRD stamped, if approved

7 TOTAL

001.04. All pages are to be numbered consecutively or by chapter (Example: 1-1000 or A-1, B-1).

001.05. Complete table of contents and indexes must be provided.

001.06. When submitting modifications, if changes cause need for additional pages, additional pages shall be identified by letters following the page number (Example: 1, 2, 3, 3a, 3b, or A-1, A-2, A-3, A-3a).

001.07. When submitting modifications, include a letter describing what modifications were made and all pages where modifications occur.

ANNOTATION

ENABLING LEGISLATION: Section 46-670, R.R.S., Nebraska, 1943
Section 46-673.03, R.R.S., Nebraska, 1943

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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 water wells. Such wells must be maintained in accordance with § 46-1207.02. To register a well as an inactive water well the water well owner and/or water well contractor shall provide on the registration form the intended water well capacity for purposes of determining registration fees. The water well owner shall also state an estimated date when the pump will be installed.

When a pump is installed in an inactive, registered water well, the water well owner and pump installation contractor shall, within 30 days, complete a Water Well Registration Pump Installation Update form. Such form will be provided by the Department. This form shall consist of the water well owner's name, address, and signature; the water well registration number; the pump installer's name, address, license number, and signature; the legal description of the well; pump and pump column information; pumping water level; rate and amount of time pumped, and yield of water well in gallons per minute.

002. Water well registration and pump installation information must be updated by the water well owner 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.

This information shall be submitted to the Department in writing.

ANNOTATION

ENABLING LEGISLATION: Section 46-602, R.R.S., Nebraska, 1943
Section 46-1207.02, R.R.S., Nebraska, 1943