

**NOTICE OF INTENT TO MODIFY A PERMIT AUTHORIZING
USE OF WATER FOR AIR CONDITIONING, HVAC,
AND GENERAL BUILDING
AND PROPERTY OPERATIONAL PURPOSES
IN DUBUQUE COUNTY, IOWA**

Notice is hereby given that pursuant to Iowa Code Chapter 455B, there is now on file with the Iowa Department of Natural Resources, Water Supply Section, 6200 Park Avenue, Suite "200" Des Moines, Iowa 50321 an application as described below.

The Dubuque County Court House, Iowa DNR Log No. 34,784 requests a newly-modified permit authorizing withdrawal of water from one previously-constructed Mississippi River alluvium well, about 91 feet deep, located on land generally described as SE ¼ of the SE ¼ of Section 24, T89N, R2E, Dubuque County, Iowa for withdrawals in the maximum quantity of 200 million gallons per year (mgy) at a maximum rate of 300 gallons per minute (gpm) throughout each year for use in the geothermal heating and cooling system at the downtown facility on said land and property.

This permit represents an authorization in yearly withdrawal quantity and in the instantaneous pumping rate for an alluvial well which will provide geothermal heating/cooling, 'pump and dump (discharge) to the City of Dubuque's 16th Street Detention Basin, and add system/building operational flexibility.

The Department has determined following a pumping test that this use of water conforms to the relevant criteria (Iowa Code Chapter 455B and Iowa Administrative Code Chapter 567) and recommends the permit be granted. A copy of the summary report for the application is available upon a request to the Department at the address listed above. Comments on the report and on this use of water must be received by October 21, 2026, and should be addressed "ATTN.: Water Supply Engineering Section" and should specify the applicant's log number.

(By Michael K. Anderson, P.E., Senior Environmental Engineer)

**IOWA DEPARTMENT OF NATURAL RESOURCES
WATER USE PERMIT SUMMARY REPORT**

Applicant: Dubuque County Court House
720 Central Avenue
Dubuque, IA 52001

Iowa DNR Application Log No.: 34,784

The Dubuque County Court House, Iowa DNR Log No. 34,784 requests a newly-authorized permit authorizing withdrawal of water from one previously-constructed Mississippi River alluvium well, about 91 feet deep, located on land generally described as SE ¼ of the SE ¼ of Section 24, T89N, R2E, Dubuque County, Iowa for withdrawals in the maximum quantity of 200 million gallons per year (mgy) at a maximum rate of 300 gallons per minute (gpm) throughout each year for use in the geothermal heating and cooling system at the downtown facility on said land.

This permit represents an authorization in yearly withdrawal quantity and in the instantaneous pumping rate for an alluvial well which will provide geothermal heating/cooling, 'pump and dump (discharge) to the City of Dubuque's 16th Street Detention Basin, and add system/building operational flexibility.

1. Applicant's facility is a governmental type facility, refurbished structure, in downtown Dubuque. The court house is located in proximity to the Mississippi River and the Mississippi alluvium. Its location is 720 Central Avenue in the southeast part of the lower downtown part of Dubuque, within the municipal limits of the City of Dubuque, Iowa.
2. 567 IAC 51.5(455B) of the Iowa Administrative Code states: "A permit shall not be granted for the withdrawal of ground water for use solely as a coolant in a closed system without returning such ground water to the aquifer from which it came unless Applicant demonstrates compelling reasons for not returning the water." The Applicant's proposed wells will be withdrawing water for use as a coolant from the alluvial aquifer at a location approximately 3000 feet from the 16th Street Detention Basin and approximately 3500 feet from the main channel of the Mississippi River. Applicant proposes to comply with the code by discharging said water to the City's Detention Basin, a source of rapid recharge of the aquifer.
3. No problems with this present application have been noted since the original well was drilled in June of 1996. During the 30 years this current application was active, the department received no complaints of well interference.
4. According to department records, the nearest neighboring water user other than the Applicant which requires the diversion of water in sufficiently large quantities to require a water use permit is located about one ¼ mile north-northwest of the Applicant's facility. This neighboring water user utilizes three wells that draw water from the alluvial aquifer and four wells that draw water from the Jordan sandstone aquifer. Drawdown of the alluvial aquifer from pumping the Applicant's wells should be limited to the vicinity of the pumping wells and should not impact this neighboring water user. Other nearby water users should not experience any impacts resulting from use of Applicant's wells at the volume and rates proposed.
5. According to department records, alluvial wells were used to provide cooling water for the air conditioning systems in some commercial buildings, located within ½ to one mile of the Applicant's facility. These users have gone out of business, switched to the use of water from the municipal water supply, or reduced their water use to a rate that no longer requires a permit.
6. There are no known nearby privately owned domestic wells. Based on reported yields in the alluvial aquifer, it is unlikely that properly constructed nearby wells in the same or deeper aquifer will experience any impacts from the withdrawals by the Applicant. In any event, the interests of individuals using water for domestic purposes, as

well as those persons benefiting from the permits mentioned above, are amply protected, in the event of substantial injury, pursuant to Section 455B.271, Code of Iowa.

7. The applicant is devoting a reasonable amount of water to a beneficial use (geothermal heating/cooling). There is no evidence that the use of water pursuant to a permit granted in accordance with the conclusions contained herein will constitute a waste of the water resources of the State, will be incompatible with the state comprehensive plan for water resources, will impair the effect of pollution control laws of this State or the navigability of and navigable watercourse, or will be detrimental to the public interest or to the interests of property owners with prior or superior rights who might be affected.

THEREFORE:

The requested use of water conforms to the relevant criteria in Division III, Part 4, Chapter 455B, Code of Iowa and Chapter 50 of Part 567, Iowa Administrative Code. No adverse effect upon other water users is foreseen at this time. Following publication of notice and subject to revisions in response to comments that may be submitted, the attached draft permit should be issued for a period of ten years.

Water Supply Engineering Section

Date: September 16, 2026

**IOWA DEPARTMENT OF NATURAL RESOURCES
WATER USE PERMIT**

Permit issued to:

Permit Number: 9806-M2

DUBUQUE CO COURTHOUSE
MAINTENANCE DIRECTOR
720 CENTRAL AVE
DUBUQUE IA 52001-7079

Effective: yyyy

Expires: yyyy

The Permittee is authorized to:

withdraw water from one previously-constructed Mississippi River alluvium well, about 91 feet deep, located on land generally described as SE ¼ of the SE ¼ of Section 24, T89N, R2E, Dubuque County, Iowa for withdrawals in the maximum quantity of 200 million gallons per year (mgy) at a maximum rate of 300 gallons per minute (gpm) throughout each year for use in the geothermal heating and cooling system at the downtown facility on said land and property. This authorization to withdraw water has been granted pursuant to the provisions of Part 4 of Division III of Chapter 455B, Code of Iowa, and Chapters 50, of Part 567, Iowa Administrative Code, and is further subject to the general permit conditions within this permit.

Conditions of this permit may be appealed as provided in rule 567--50.9, Iowa Administrative Code. Appeal must be in writing and must be received at the Iowa Department of Natural Resources, Water Supply Engineering Section, 6200 Park Avenue, Suite "200" Des Moines, Iowa 50321 within thirty days of the date of the certification of the mailing of the permit.

FOR THE DIRECTOR

By: _____ Date Executed: _____
cc: Permit File

CERTIFICATE OF MAILING

On the date shown below, a copy of the foregoing permit was mailed to the Permittee and to each person entitled to receive a copy as provided by rule 567--50.8(2), Iowa Administrative Code.

Certified by (initials): _____ Date: _____

GENERAL PERMIT CONDITIONS

1. Permittee shall maintain accurate and up-to-date records of monthly water use from each authorized source and submit them annually to the Department.
2. Permittee may be required to submit other information related to the regulation of this use of water as directed by the Department.
3. Permittee shall be responsible for securing and complying with all applicable provisions of state law, the rules and regulations of this Department, and of all federal and local health and water pollution control agencies in the operation of this facility.
4. Permittee shall be responsible for notifying the Department when there are changes to any conditions and authorizations given in this permit, including additional water source(s), well(s), intake(s), an expansion of the facility, or any other listed condition.
5. Permittee shall construct, maintain, and monitor observation wells as directed by the Department to define the effects of Permittee's water withdrawals on groundwater resources or on other water users who might be affected by the withdrawals authorized herein.
6. Each well authorized as a source of water in this permit must be constructed to allow for accurate measurement of water levels.
7. Withdrawals from permitted wells may be made only after the Permittee has made the following information available to the Department: well location(s), well log(s), and results of yield tests. Required chip samples shall be submitted to the Iowa Geological Survey.
8. Permittee shall be responsible for accurately measuring depth to water under non-pumping (static) conditions, and pumping rate(s) for all active wells listed in this permit, at a minimum of one measurement per year. These records shall be submitted annually to the Department.
9. Water withdrawn pursuant to this permit shall be discharged to Ice Harbor, tributary to the Mississippi River, and a wetland located on said land in accordance with all applicable rules and regulations, shall be of suitable quality, and shall be so discharged as to preclude flooding, erosion, or other adverse effects.
10. Permittee shall submit to the Department within 90 days of being notified by the Department or no later than the expiration date of this permit, whichever first occurs, a plan for implementing routine day-to-day water conservation measures and for implementing emergency water conservation measures during periods of water shortage. Until such a plan has been submitted to and approved by the Department, Permittee shall implement those emergency water conservation measures determined to be necessary by the Department pursuant to Iowa Code Sections 455B.265 and 455B.266.
11. Permittee must apply to renew this water use permit using the appropriate DNR form prior to the expiration date of the current permit version.
12. If water withdrawals or uses authorized under this permit are determined by the Department, based on available monitoring data, field observations, or other credible evidence, to be the cause of adverse effects on surface water streams, springs, or ponds, or the ecosystems attached or adjacent thereto, then the Department shall notify the Permittee in writing and may require the Permittee to reduce withdrawal rates, conduct

additional hydrogeologic investigations, or take other corrective measures deemed necessary to protect the ecological integrity of those surface waters. The Permittee shall respond to any such notice within 30 days with a proposed corrective action plan, subject to Department approval. For purposes of this condition, "adverse effects" include but are not limited to reductions in baseflow, degradation of cold-water or other designated uses, or harm to species or their habitat.

13. This permit supersedes Water Use Permit No. 9806-R1.

CAVEAT

Permittee is advised that pursuant to Section 455B.271, Code of Iowa, the authority to withdraw water provided by this permit may be modified, canceled or suspended in case of any breach of the terms or conditions herein, in case of any violation of state law pertaining to the permit, or if found necessary to prevent substantial injury to private or public interests.