Fact Sheet

For issuance of Underground Injection Control Permit Number NE0212007 to construct and operate a Class V Aquifer Storage and Recovery (ASR) system. This permit issuance does not involve discharges to the land surface or surface waters of the State of Nebraska.

Issuing Office:	Nebraska Department of Environmental Quality (NDEQ) Suite 400, The Atrium 1200 N Street, P.O. Box 98922 Lincoln, Nebraska 68509-8922
Applicant:	City of Hastings, NE and Hastings Utilities 1228 North Denver Avenue Hastings, NE 68901

1. The Hastings Utilities ASR project is designed to supply the City of Hastings, NE, Village of Trumbull, NE and Hastings wholesale customers with a sustainable supply of potable water. The Hastings Utilities ASR project utilizes a number of components: local and regional nitrate management planning, a dual pumping technique (DPT), focused water treatment, irrigation reuse and management, and blending and storage.

2. The Hastings Utilities ASR project will be located in the NW¼ and NE¼ of Section 2, Township 7 North, Range 10 West, Adams County, Nebraska.

3. A co-occurrence of nitrate and uranium contamination within the regional alluvial aquifer has been documented as far west as the Platte River, and is likely the result of urban and rural fertilizer use accelerated by irrigation. As an effort to control and amend the high levels of these contaminants, the City of Hastings Utilities has designed this ASR project. Five ASR wells are proposed in this project which will utilize a DPT to target the more concentrated contaminants in the upper alluvial aquifer. This water will then pass through a focused water treatment system. Water from the lower aquifer will be able to bypass the main treatment system if contaminant levels are low enough. Treated water will be blended with lower aquifer water and stored until injection, which will occur as needed up-gradient of the Hastings Utilities municipal water supply wells. The projected time of travel from the Hastings Utilities ASR wells to the closest municipal water supply wells is approximately six months.

4. On the basis of preliminary staff review, the NDEQ has made a tentative determination to issue permit number NE0212007.

5. The following is a brief explanation of the statutory and regulatory provisions on which the proposed permit issuance is based.

    a. Permit Application for a Class V injection well, received by NDEQ on January 24, 2017.
    b. Email from Amanda Jones, NDEQ, to Hastings Utilities submitting a draft permit, dated September 8, 2017.
    c. Email from Amanda Jones, NDEQ, to Hastings Utilities submitting a draft permit, dated October 13, 2017.
    d. Nebraska Environmental Protection Act and related laws.
    e. NDEQ Title 122 - Rules and Regulations for Underground Injection and Mineral Production Wells.

6. The following is an explanation of the calculations and derivations of the specific Operational Parameters and Limitations set forth in the draft permit, and the reasons why they are applicable to the injection proposal:

    a. Reason for the Permit: The draft permit has been prepared in accordance with specific regulations contained within Nebraska Title 122 – Rules and Regulations for Underground Injection and Mineral Production Wells.
    b. Water Quality Considerations: The proposed injection activity will, by definition, emplace treated water into subsurface aquifers, which are considered to be Underground Sources of Drinking Water (USDW) under State and Federal regulations. Drinking Water Quality effluent limitations, therefore, apply to the proposed discharge and are included in the permit.
    c. Draft Permit Effluent Limitations and Considerations: The draft permit establishes Operational Parameters and Limitations for treated water discharged to the injection well system. The injection well will receive treated water that meets Drinking Water Quality effluent limitations and standards. The draft permit utilizes effluent parameters and limitations to characterize the water discharged to the injection well. All limitations are based on the knowledge of the treatment process, and other ASR systems.
        d. Draft Permit Injection Pressure, Injection Volume, and Injection Rate: The draft permit requires continuous recording devices or gauges to be utilized to measure injection pressure, as well as the volume and rates. These operational limitations are based on the knowledge of the construction well, and other ASR systems.

7. Variances

    The applicant has not requested any variance or alternatives to any required standards or operational parameters.

8. Written Comments

Copies of public information pertaining to this issue (Permit Issuance) are available for review and copying at the Department's office, Suite 400, The Atrium, 1200 N Street, Lincoln, Nebraska 68508 between 8:00 a.m. and 5:00 p.m., weekdays.

The public may comment upon or object to the proposed surety release, in writing, prior to December 20, 2017. All substantive comments and/or objections shall be considered prior to making the final decision regarding this surety release. Any interested person may request a public hearing, if no hearing has already been scheduled. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised at the hearing.

All comments may be sent to Marty Link, Nebraska Department of Environmental Quality, Groundwater Unit, P.O. Box 98922, Lincoln, Nebraska 68509-8922. Further requests for information should be sent to Amanda Jones, Department of Environmental Quality, P.O. Box 98922, Lincoln, Nebraska 68509-8922, (402) 471-4290.