



Pete Ricketts  
Governor

# STATE OF NEBRASKA

DEPARTMENT OF ENVIRONMENTAL QUALITY  
**Jim Macy**

Director

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MAR 31 2015

Ron Burrows  
United States Nuclear Regulatory Commission  
11154 Rockville Pike  
Rockville, MD 20850

**Re: Crow Butte Resources, Inc.  
Class I Non-Hazardous Injection Well  
Major Modification to Permit**

Dear Mr. Burrows:

The Nebraska Department of Environmental Quality (Department) is proposing to issue a major modification for a permit for an existing Class I Non-Hazardous injection well at Crow Butte Resources, Inc. (CBR). This permit is for one of two existing wells currently operating at the facility. These injection wells are intended to aid in the disposal of restoration fluids. The proposed permit provides conditions and limitations on injection parameters.

The Department proposes to use conditions and limitations that are essentially identical to the emergency permit issued by the Department on February 11, 2015. The emergency permit was identical to CBR's existing permit, except that it permitted CBR to place the packer 56 feet higher, in the Lower Dakota. Enclosed is a copy of the Public Notice for your review.

If you have any questions or comments concerning this matter, please contact me at (402) 471-4290.

Sincerely,

Nancy Harris  
UIC Program Coordinator  
Groundwater Unit  
Water Quality Division

ENCLOSURE

PUBLIC NOTICE OF PERMIT MODIFICATION  
Nebraska Department of Environmental Quality  
Water Quality Division

Pursuant to Title 122, Rules and Regulations for Underground Injection and Mineral Production Wells, Chapters 30, 32 and 33, the Nebraska Department of Environmental Quality is proposing to modify permit (NE0211670) and re-issue the permit (as NE0211670) to Crow Butte Resources, Inc. (CBR). CBR operates two Class 1 non-hazardous waste injection wells designed to accept waste fluids generated at its in-situ uranium mining operation. The injection well under this permit (DW#1) is located in the Northwest Quarter of Section 19, Township 31 North, Range 51 West, Dawes County, Nebraska.

The injection well has been operational under four previous permits, NE0206369 between September 30, 1994 and July 2, 2004, NE0210457 between July 2, 2004 and June 12, 2014, NE0211670 between June 12, 2014 and February 11, 2015, and NE0211670 Emergency from February 11, 2015 until present. The Department is proposing to modify permit NE0211670 Emergency and re-issue it under permit number NE0211670. This modified permit provides conditions and limitations on injection parameters, which are essentially identical to the emergency permit.

Currently the geologic formations receiving injected waste are the Morrison and Sundance Formations, which are located below the lowermost underground source of drinking water. The Morrison and the Sundance Formations exhibit water quality that is considered unacceptable under State and Federal Regulations as underground sources of drinking water due to naturally high concentrations of total dissolved solids. The proposed modification would allow injection into the Lower Dakota Formation which meets the same criteria as the Morrison and Sundance Formations.

The modified permit requires the operator to monitor concentrations of specific parameters in the injection fluids to insure that only non-hazardous wastes are being injected. In addition, the injection well is monitored on a continuous basis to record the injection process and ensure compliance with permit conditions.

Persons may request a fact sheet, may comment upon or object to the proposed permit modification, or may request a public hearing by writing to Jim Macy, Director, Nebraska Department of Environmental Quality, P.O. Box 98922, Lincoln, Nebraska 68509-8922, prior to May 5, 2015. A request for public hearing shall state the nature of the issues proposed to be raised at a hearing. The Department, prior to making a decision regarding a public hearing shall consider all comments. If the Department receives substantive comments regarding this modification, a public hearing may be scheduled.

Copies of the fact sheet and all information pertaining to the permit modification will be available for viewing and copying at the Nebraska Department of Environmental Quality, Suite 400, 1200 N Street, The Atrium, in Lincoln and the Nebraska Department of Environmental Quality 430 East Second, in Chadron between 8:00 am and 5:00 pm weekdays, mailed upon request, or available on the NDEQ website ([deq.ne.gov](http://deq.ne.gov)) under public notice. Further information may be obtained by contacting Nancy Harris, UIC Program Coordinator, (402) 471-4290 or via email at [nancy.harris@nebraska.gov](mailto:nancy.harris@nebraska.gov).

Individuals requiring special accommodations or alternate formats of materials should notify the Department by calling (402) 471-2186. TDD users should call (800) 833-7352 and ask the relay operator to call the Department at (402) 471-2186.