

**PUBLIC NOTICE OF PROPOSED DETERMINATION TO ISSUE
A CLASS IIR UNDERGROUND INJECTION CONTROL (UIC) PERMIT TO
RESOLUTE NATURAL RESOURCES COMPANY**

Purpose of Public Notice

The U.S. Environmental Protection Agency Region IX (EPA) is soliciting public comments on its proposal to issue an Underground Injection Control (UIC) Permit No. NN208000001. The permit will be issued to Resolute Natural Resources Company for the injection of produced water and CO₂ into the Aneth Unit H-434 Class IIR enhanced recovery well in the Paradox formation. The surface location of the well is 700 feet FSL and 500 feet FEL of Section 34, Township 40S, Range 24E, San Juan County, Utah. A complete permit application has been submitted by the company. The permit will be issued for a period of twenty (20) years and will be reviewed by USEPA every five years.

The address of the applicant is:

**Patrick E. Flynn
Resolute Natural Resources Company
1675 Broadway, Suite 1950
Denver, Colorado 80202
Phone (303) 534-4600, ext. 145**

Background

EPA has completed its review of the application for an UIC permit to allow conversion of the Aneth Unit H-434 multilateral oil production well to a Class IIR injection well, submitted by Resolute Natural Resources Company (Resolute). The applicant has applied for a permit to allow conversion from oil production to alternate injection of produced water and carbon dioxide (CO₂) for purposes of enhanced oil recovery (EOR).

The well was recently re-entered to drill two horizontal boreholes into the Desert Creek member of the Paradox Formation, one of which is 2,600 feet in length to the west and the other is 3,300 feet in length to the east. Resolute proposes to operate the well at average injection rate of 350 barrels of water per day (BWPD) and 800 thousand cubic feet of CO₂ per day (MCFPD) and maximum rates of 3,000 BWPD and 2,000 MCFPD, respectively, at a maximum wellhead injection pressure of 3,000 psig. The well will be constructed and operated in a manner to minimize the potential for any well failure and migration of fluids into underground sources of drinking water (USDWs). The applicant has notified all interested parties within the 1,218 acre Area of Review (AOR) and there are no drinking water wells in the AOR that will be impacted by injection in the Aneth Unit H-434 well.

The purpose of the well is to inject CO₂ and produced water, which is directly associated with the production of oil and natural gas from Paradox Formation wells, operated by Resolute, into the Desert Creek member of the Paradox Formation at depths of approximately 5400 to 5684 feet.

The maximum allowable injection pressure at the wellhead (2,900 psig) was calculated by multiplying the actual depth to the top of the injection interval by a formation fracture gradient of 1.0 psi/foot less the hydrostatic pressure of injection fluid at that depth, and may be later revised based on results from an approved step-rate test. The well will be constructed in accordance with UIC regulatory requirements and will be required to pass a mechanical integrity test (MIT) to the satisfaction of EPA prior to commencing injection and every five years thereafter. The purpose of the MIT is to ensure there are no significant leaks in the tubing, packer, and casing. Demonstrations of mechanical integrity will also be conducted within 30 days after any workovers or alterations of the wellbore and prior to resuming injection. Injection will not result in the movement of fluid into a USDW.

Demonstration of financial responsibility for plugging and abandonment of the well will be provided in the form of a surety performance bond, with an associated standby trust agreement. The bond amount will be based on a third-party estimate of the cost to plug and abandon (P&A) the well, which will be reviewed and updated periodically to account for increased P&A costs. Issuance of the final permit is subject to EPA receipt and acceptance of the financial responsibility instruments.

EPA has made a preliminary determination to approve this permit application. This action is being taken as provided by Part C of the Safe Drinking Water Act and pursuant to the Underground Injection Control Regulations, found in Title 40 of the Code of Federal Regulations (CFR) Parts 124, 144, 146, and 147.

Public Comments

All non-proprietary data submitted by the applicant and the Draft Permit prepared by EPA are contained in the administrative record for this injection well. EPA's Statement of Basis and the Draft Permit are available for public inspection online at <http://www.epa.gov/region9/water/groundwater/uic-permits.html>, as well as at the locations listed below:

**Farmington Public Library
2101 Farmington Ave
Farmington, NM 87401
Phone 505-599-1270**

**United States Environmental Protection Agency, Region IX
Ground Water Office, Mail Code WTR-9
75 Hawthorne Street
San Francisco, CA 94105-3901
Phone 415-972-3541 or e-mail: harper.jim@epa.gov**

Public comments are encouraged and accepted, in writing, for a period of thirty (30) days after publication of the notice of preliminary decision on the permit application.

A request for a public hearing may be made during the 30-day comment period. It should be in writing and should state the nature of the issues proposed to be raised at the hearing. A public hearing will be held only if significant interest is shown.

Final Permit Decision and Appeal Process

After the close of the public comment period, EPA will issue a Final Permit decision, and will notify all participants regarding this decision. The final decision will be to issue, deny or modify the permit. The final decision shall become effective thirty (30) days after the Final Permit is issued, unless no participant requests a change in the Draft Permit and no changes are made to the Draft Permit, in which case the Draft Permit shall become the Final Permit, effective immediately upon issuance.

Within thirty (30) days after the Final Permit decision has been issued, any person who has filed comments on the Draft Permit, participated in a public hearing, or takes issue with any changes in the Draft Permit, may petition the Environmental Appeals Board to review any condition of the permit decision. Participants are referred to the Safe Drinking Water Act for procedural requirements of the appeal process.