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. NN208000003. The permit will be issued to Resolute Natural Resources Company for the injection of produced water and carbon dioxide (CO2) into the Aneth Unit Phase I and II Class IIR enhanced recovery injection wells located on Navajo Nation land. The Aneth Unit is located in San Juan County, Utah, near the town of Montezuma Creek. Phase I area wells are located almost entirely within Township 40S, Range 24E and Phase II area wells are located almost entirely within Township 40S, Range 23E. 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 (5) years.

The address of the applicant is:

Dwight E. Mallory
Resolute Natural Resources Company
1675 Broadway, Suite 1950
Denver, Colorado 80202
Phone (303) 534-4600

Background

EPA has completed its review of the applications for UIC permits to allow construction, conversion, and operation of Class IIR injection wells in the Phase I and II areas of the Aneth Unit, submitted by Resolute Natural Resources Company (Resolute). The applicant has applied for two area permits to allow injection of produced water and carbon dioxide (CO2) for purposes of enhanced oil recovery (EOR) in fifty-two (52) existing and future Class IIR injection wells on Navajo Nation land in the western portion of the Aneth Unit. The areas overlap in part and are combined as one area for the purposes of this permit. Much of the Phase II area is located on non-Navajo (federal) land and therefore seventeen (17) existing Class II injection wells on that land are subject to the State of Utah UIC permitting authority, and are not authorized by this permit. The Aneth Unit has been operated as an enhanced recovery project since the early 1960's, as a waterflood operation. In addition, a pilot CO2 injection project has been in operation for the past ten (10) years. Resolute proposes to expand CO2 injection to the full Unit and drill horizontal boreholes in selected wells within the Unit. Most of the existing Aneth Unit injection wells have been authorized by rule since the inception of the Navajo UIC regulations in 1988. A permit is required to authorize the construction and conversion of new Class IIR injection wells to CO2 /water injection and for expansion of CO2 injection to the entire Unit.

Resolute proposes to operate the wells at an average injection rate of 500 barrels of water per day (BWPD) and 1,420 thousand cubic feet of CO2 per day (MCFPD) and maximum rates of

3,000 BWPD and 5,000 MCFPD, respectively, at a maximum wellhead injection pressure of 3,000 psig. The new wells will be constructed or converted, and all wells will be 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 11,134 acre Area of Review (AOR) and there are no drinking water wells in the AOR that will be impacted by injection in the existing and new injection wells located on Navajo land in the AOR.

The purpose of the wells 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 and Ismay members of the Paradox Formation at depths of approximately 5,500 to 6,000 feet. The permitted injection interval will be set at approximately 5,100 to 6,000 feet to allow horizontal boreholes to be drilled through the lower Honaker Trail Formation before horizontal orientation is reached in the borehole in the Paradox Formation injection interval. The actual depths will be determined from wireline logs run in each well. The maximum allowable injection pressure at the wellhead is set at the McElmo Creek Unit maximum allowable pressure of 3,000 psig, which is based on the results of step-rate tests conducted in eight McElmo Creek Unit injection wells in 1999, none of which reached the formation parting pressure at 3,000 psig wellhead injection pressure. The maximum injection pressure may be revised based on results from a step-rate test conducted by the operator and witnessed and approved by the EPA.

The existing wells were constructed in accordance with UIC regulatory requirements and are required to pass a mechanical integrity test every three years. Newly constructed or converted wells will also be constructed in accordance with UIC requirements and will be required to pass a mechanical integrity test (MIT) to the satisfaction of EPA prior to commencing injection and every three 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 wells 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 415-972-3506 or e-mail: basinger.david@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. Please submit written comments to EPA at the address above.

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 40 CFR Part 124 for procedural requirements of the appeal process.