



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

STATEMENT OF BASIS

FOR

U. S. EPA'S UNDERGROUND INJECTION CONTROL (UIC) PROGRAM
DRAFT CLASS IID PERMIT MODIFICATION -
PERMIT NUMBER PAS2D217BWAR

FOR

Bear Lake Properties, LLC
3000 Village Run Road, Unit 103, #223
Wexford, Pennsylvania 15090

FOR

The modification of the permit for the Class II-D injection well Bittering #2, which authorizes the disposal of fluids produced in association with oil and gas production operations. The injection well is located in:

Columbus Township
Warren County, Pennsylvania
Latitude 41° 59' 50.20" Longitude -79° 32' 7.50"

On November 10, 2014 the Environmental Protection Agency (EPA) issued a permit under the Safe Drinking Water Act, 42 U.S.C. §§ 300f *et seq.*, authorizing Bear Lake Properties, LLC ("Bear Lake") to use the Bittering #2 well to dispose of fluids produced in association with oil and gas production. In addition to the Bittering #2, Bear Lake also operates two other permitted injection wells in Columbus Township, the Bittering #1 and #4 wells. On March 24th, 2015, Bear Lake submitted UIC permit applications for two additional injection wells, Bittering #3 (proposed PAS2D218BWAR) and Smith-Ras #1 (proposed PAS2D219BWAR). On December 9, 2015, in response to a request by EPA, Bear Lake submitted documentation proposing a monitoring well network in response to the expansion of its injection well operations.

To allow for modification of Bear Lake's monitoring well network, and to synchronize review of the Permittee's injection wells, EPA is proposing to modify the Bittering #2 permit. The proposed changes are described in detail below:

Monitoring Requirements: If EPA issues injection permits for the Bittering #3 and Smith-Ras #1, the Bear Lake operations will include a total of five injection wells in Columbus Township. Bear Lake has designated a network of five monitoring wells chosen to form a comprehensive monitoring network around the five injection wells. The purpose of this monitoring well network is to monitor fluid movement. Bittering #3, Smith-Ras #1, and R. Trisquet #2 are currently designated as monitoring wells for the Bittering #2 injection well. Should Bittering #3 and Smith-Ras #1 receive final permits the monitoring well network will be modified to include: R. Trisquet #1, R. Trisquet #2, T. Reed #4, D. Wright #1, and R. Craker #1. In the event that in the future Bear Lake seeks to convert T. Reed #4 from a monitoring well to a UIC-Permitted well, both the W.W. Hammond #1 and T. Reed #2 wells will replace the T. Reed #4 as monitoring wells.

Area of Review: Pursuant to the applicable regulations, 40 C.F.R. §§ 144.3, 144.55 and 146.6(b), the “area of review” is an area surrounding a well which the applicant must first research then develop a program for corrective action to address any wells which penetrate the injection zone and which may provide conduits for fluid migration. When it first issued a UIC permit for the Bittering #2, EPA calculated a zone of endangering influence (ZEI) to determine whether the one-quarter mile area of review proposed by Bear Lake Properties was adequate. EPA has re-evaluated a one-quarter mile fixed-radius area of review taking into account the operations of the three current Bear Lake injection wells (Bittering wells #1, #2 and #4) as well as the addition of the two new proposed wells (Bittering #3 and Smith-Ras #1). EPA has conducted a ZEI calculation using geologic information pertinent to the injection zone, the operational parameters of the three permitted wells and the anticipated operational parameters in the draft permits for the two new proposed wells. The calculation was based on a 15-year period of operations. EPA determined, based on the ZEI calculation, that a one-quarter mile fixed-radius area of review around Bittering #2 is protective. The permit requires Bear Lake to perform corrective action on any unplugged/abandoned wells that penetrate the injection zone within the area of review if such wells are identified at a future date.

Expiration Date: Pursuant to 40 C.F.R. § 144.36, Class II permits can be effective for up to the operating life of the facility. EPA issued the Bittering #2 permit for an initial term of five years, set to expire on November 10, 2019. After reviewing the potential effects of operations of the five wells for a term of 15 years, as described above, EPA is proposing to extend the term of this permit for ten years from the date of the modification. EPA is concurrently proposing modifications that would result in all of the Bear Lake injection wells in Columbus Township having concurrent permit terms. Pursuant to 40 C.F.R. § 146.36, EPA expects to review this permit, and the other Bear Lake UIC permits, at least once every five years to determine whether a permit should be modified, revoked and reissued, terminated or a minor modification made as provided in 40 C.F.R. §§ 144.39, 144.40 or 144.41.

Additional Information: Questions, comments and requests for additional information on the three proposed modifications may be directed to:

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215-814-5498

Only the permit conditions being modified (relating to the term of the permit and the monitoring wells) are subject to public comment. These are the conditions that are highlighted in yellow in the draft modified permit. The Administrative Record for this draft permit modification is available for public inspection during normal business hours at the offices of U.S. EPA Region III, at the address shown above. Links to online publications that compose the Administrative Record are also available via our online public notice located at the web address <http://www.epa.gov/aboutepa/epa-pennsylvania>. The Administrative Record for this action will remain open for public comment until ***Wednesday, March 16th, 2016.***

A joint public hearing on the draft modifications to this and the other Bear Lake permits and on the draft permits for the Bittinger #3 and the Smith-Ras #1 well has been tentatively scheduled for ***Wednesday, March 16th at 7:00PM*** at the ***Columbus Volunteer Fire Department located at 4 West Main Street, Columbus, PA 16405.*** Requests to hold a public hearing must be received in writing by EPA by ***March 9, 2016.*** When requesting a public hearing, please state the nature of issues proposed to be raised. EPA expressly reserves the right to cancel this hearing unless a significant degree of public interest, specific to these proposed UIC brine disposal injection operations, is evidenced by March 9, 2016.