



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

Response to Comments  
for  
The Issuance of an Underground Injection Control (UIC) Permit  
for  
Sliverville Oil Company, LLC

On May 7, 2018, the U.S. Environmental Protection Agency Region III (EPA or the Region) issued a public notice requesting comment and announcing the opportunity for a public hearing for the proposed issuance of an Underground Injection Control (UIC) permit, PAS2R930BMCK, to Sliverville Oil Company (Sliverville Oil) for one Class II-R underground injection well. A tentative hearing was scheduled for June 13, 2018 at the Lafayette Municipal Building in Lewis Run, Pennsylvania. However, only two requests were made for a hearing which didn't demonstrate a significant degree of public interest to hold a hearing. In total, EPA received one written comment. During the public comment period, all the information submitted by the applicant was available for review at the Bradford Area Public Library located at 67 West Washington Street in Bradford, Pennsylvania and at the EPA regional office in Philadelphia.

The following responds to the one comment received:

- 1) The injection well may pose a risk to my drinking water well or other drinking water supplies.

In order to protect underground sources of drinking water (USDWs), the UIC regulations at 40 C.F.R. 147.1955(b)(1) require that an injection well surface casing be placed to a depth of 50 feet below the determined lowermost USDW. Sliverville Oil identified the lowermost USDW where the injection well will be located to be at a depth of approximately 300 feet, based on historical drilling log records for the already existing production well (see Permit Application Attachment E). The bottom of the surface casing for the existing production well is located at a depth of 456 feet. Additionally, the EPA permit requires the surface casing to be cemented back to the ground surface. This exceeds the regulatory criteria of 40 C.F.R. §§ 146.22 and 147.1955(b)(1).

After the injection well is completed and cemented, but before the injection begins, the permittee is required by the permit to submit to EPA a construction completion report providing details about the drilling, completion and testing of the well. This requirement applies to a newly constructed well as well as to a converted well (a gas or oil production well converted into an injection well) such as this one. The completion report must include the injection well drilling records, logging information, cementing records and mechanical integrity testing information. EPA will review this information to verify that the injection well was properly constructed and cemented to prevent leaks during operation and fluid movement out of the injection zone through the injection wellbore.



EPA will review the cementing logs to verify proper cementing without voids between the casing and the wellbore that could provide a conduit for fluid movement. Also, the required mechanical integrity test must show that there are no internal failures in the tubing, casing, or packer installed within the well before injection operations take place. If new information obtained from the completion report warrants changes to the permit, EPA will modify the permit conditions as appropriate.

Without certain precautions, abandoned wells near an injection well can pose a risk to USDWs by providing a conduit for the migration of fluid out of an injection zone. Therefore, the UIC regulations and the permit impose certain requirements on an injection well operator to protect USDWs from that risk. Specifically, the operator is required to determine whether any abandoned wells exist within a specified area, calculated and defined as the Area of Review (AOR) around the proposed well, which could pose a threat to USDWs. If abandoned wells are found within a one-quarter mile AOR, then the permittee must either perform corrective action, which requires plugging those wells, or use other wells in the same vicinity for monitoring the injection formation during operation.

Sliverville Oil proposed a fixed radius of one-quarter mile (1320 feet) for the AOR and a maximum injection volume of 500 barrels per day. To review the proposed fixed radius, EPA took into consideration that Sliverville Oil would be operating as an enhanced recovery facility. Enhanced recovery is a process whereby fluid is injected into a geologic formation to help produce additional oil within the formation that was not produced during the original, primary production process. Therefore, along with the injection of produced fluids into the Lewis Run formation, Sliverville Oil will also be producing oil from the formation, relieving the overall pressure.

Sliverville Oil indicated in the permit application that there are three wells in the AOR with unknown total depths. The permittee is addressing these three unknown wells by installing three monitoring wells in the same vicinity and monitoring the fluid level in those wells on a quarterly basis. The draft permit also requires Sliverville Oil to perform corrective action on any other unplugged/abandoned wells that penetrate the injection zone within the AOR if they are identified at a future date.

According to the information supplied in the permit application from Sliverville Oil, no surface water intakes or groundwater wells exist within a quarter mile of the AOR.

At the location of the injection well, a confining zone approximately 60 feet thick is directly above the injection zone. Numerous other confining zones exist between the injection zone and the formations that supply drinking water to shallow wells.

Furthermore, the permit does not allow the injection pressure to exceed the injection formation's fracture pressure and thereby prevents fracturing that could allow fluid to migrate out of the injection zone. To confirm that the injected fluid remains in the receiving formation, the permit requires continuous monitoring of pressure conditions within the injection well.

## Federal Underground Injection Control Program Permit Appeals Procedures

The provisions governing procedures for the appeal of an EPA UIC permit are specified at 40 C.F.R. Part 124.19 (Please note that changes to this regulation became effective on March 26, 2013. See 78 Federal Register 5281, Friday, January 25, 2013.) Any person who commented on the draft permit can appeal the final permit by filing a written petition for review with the Clerk of the EPA Environmental Appeals Board (EAB).

A petition for review must be filed within thirty (30) days of the date of the notice announcing EPA's permit decision. This means that the EAB must receive the petition within 30 days. (Petitioners receiving notice of the final permit by mail have 3 additional days in accordance with 40 C.F.R. 124.20(d).) The petition for review can be filed by regular mail sent to the address listed below with a copy sent to EPA Region III at the address listed below.

Environmental Appeals Board  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue N.W.  
Mail Code 1103M  
Washington, DC 20460-0001

U.S. Environmental Protection Agency Region III  
Ground Water & Enforcement Branch (3WP22)  
Water Protection Division  
1650 Arch Street  
Philadelphia, PA 19103-2029

See the Federal Register notice cited above or the EAB website:  
([http://yosemite.epa.gov/oa/EAB\\_Web\\_Docket.nsf](http://yosemite.epa.gov/oa/EAB_Web_Docket.nsf)) for how to file with the EAB electronically or by hand delivery.

The petition must clearly set forth the petitioner's contentions for why the EAB should review the permit. The petition must identify the contested permit conditions or the specific challenge the permit decision. The petitioner must demonstrate the issues raised in the petition had been raised previously during the comment period. The petitioner must also state whether, in his or her opinion, the permit decision or the permit's conditions appealed are objectionable because of:

1. Factual or legal error, or
2. The incorporation of a policy consideration which the EAB should, at its discretion, review.

If a petition for review of this permit is filed, the permit conditions appealed would be deemed not to be in effect pending a final agency action.

Within a reasonable time of receipt of the Appeals Petition, the EAB will either grant or deny the appeal. The EAB will decide the appeal on the basis of the written briefs and the total administrative record of the permit action. If the EAB denies the petition, EPA will notify the petitioner of the final permit decision. The petitioner may, thereafter, challenge the permit decision in Federal Court. If the

EAB grants the appeal, it may direct the Region III office to implement its decision by permit issuance, modification or denial. The EAB may order all or part of the permit decision back to the EPA Region III office for reconsideration. In either case, if the permit is appealed, a final agency decision occurs when after appeal the permit is issued, modified or denied and an Agency decision is announced. After this time, all administrative appeals have been exhausted, and any further challenges to the permit decision must be made to Federal Court.