

EXHIBIT 15



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

**Responsiveness Summary to Public Comment
for
The Issuance of an Underground Injection Control (UIC) Permit
for
Stonehaven Energy Management, LLC**

On May 1, 2012, the U.S. Environmental Protection Agency (EPA) Region III issued a public notice requesting comment and the opportunity for a public hearing for the proposed issuance of an Underground Injection Control (UIC) permit, PAS2D010BVEN, for Stonehaven Energy Management, LLC (Stonehaven). EPA received numerous requests to hold this hearing and the hearing was held on June 12, 2012 at the Seneca Volunteer Fire Department in Seneca, Pennsylvania. Over 100 people attended this public hearing and EPA received oral comments from 12 people in attendance at the hearing. At the conclusion of the public hearing, EPA extended the public comment period until June 19, 2012, and invited any additional written comments.

The responsiveness summary which follows provides responses to questions and issues raised from people who either sent written public comment to the attention of EPA Region III, or who provided comment at the hearing. EPA wishes to thank the public for their informative and thoughtful comments and to thank the people from the Seneca Volunteer Fire Department that assisted EPA in hosting the public hearing.

1) What does EPA's UIC program have jurisdiction and authority to regulate?

Some people raised concerns over which the EPA UIC program does not have the regulatory jurisdiction to address in the UIC permitting process. Some of these concerns included the potential for increased truck traffic, the potential for damage to the roads, increased noise, diminishment of property values, wildlife protection and surface water spill prevention plans. When making the decision whether to issue a UIC permit for Stonehaven, EPA's jurisdiction rests solely in determining whether the proposed injection operation will safely protect underground sources of drinking water (USDWs) (i.e., aquifer systems containing less than 10,000 milligrams per liter total dissolved solids). Although these other concerns may be relevant, they cannot be addressed within a UIC permit. The public would need to seek assistance through local Township or County ordinances for traffic, road and noise concerns and state or other federal agencies for concerns regarding wildlife protection and surface water spill prevention.

It is relevant to note that every UIC permit that EPA Region III issues contains several permit conditions that require the permittee to meet all other local, state or federal laws that are in place. Part I. A. of the proposed permit contains a clause that states, "Issuance of this permit does not convey property rights or mineral rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, an invasion of other property rights or any infringement of State or local law or regulations." In addition, Part I. D. 12 of the proposed permit indicates, "Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established

pursuant to any applicable state law or regulation.” Therefore, EPA’s UIC permit is only one of several authorizations that a permittee may be required to obtain before it is allowed to commence operation.

2) EPA should require the operator to find another location for disposal.

Similar to the response above, EPA does not have the jurisdiction to direct an operator to a particular geographic location within a state. The location chosen by an operator is based on many factors: economics, property ownership, geologic suitability, etc.. It is EPA’s responsibility to review each UIC permit application it receives and make a determination as to whether USDWs will be protected from the proposed operation, not to identify suitable injection sites. Likewise, EPA cannot deny a permit because of residents’ opposition to the location.

3) Construction of the injection well should require cementing of the long string casing above the Venango Sands or to the surface.

Section 147.1955(b)(5) of the UIC regulations requires the long string casing in an injection well to isolate the injection zone by placing a sufficient volume of cement behind the long string casing to fill the annular space to a point 50 feet above the injection zone. The long string casing annular space is the outermost annular space within the injection well (i.e., the space between the casing and the wellbore). Stonehaven has proposed cementing the long string casing to 100 feet above the injection zone, which exceeds the UIC regulatory requirement.

It is important to also mention that the injection well’s injection tubing/casing annulus (i.e., the innermost annulus within the injection well) will be monitored continuously during the injection operation. A positive pressure will be placed on this annulus and if the tubing or packer in the well were to leak, it would be this casing/tubing annulus that would detect a pressure change and result in the injection well to stop operating.

4) The monitoring wells Stonehaven has proposed to utilize to monitor the injection operation should completely isolate the Speechley formation (the injection zone) and a ring of monitoring wells should be required around the facility.

EPA does not believe that a ring of monitoring wells, circumscribing the facility, will be any more protective than the monitoring Stonehaven has proposed. Stonehaven has proposed using three production wells that have been drilled into the Speechley formation as monitoring wells. These wells will be used to monitor the fluid level in the Speechley formation during the injection operation. Monitoring the fluid level in these locations will provide sufficient information on the pressure response from the injection operation and ensure that fluids in the Speechley formation do not migrate upwards into USDWs.

The proposed monitoring wells, as currently constructed (Latshaw #12, Latshaw #15 and Latshaw #25), do not currently isolate the Speechley formation. The wells have open-hole intervals which extend upwards to the Venango Sands, so each proposed monitoring well could be influenced by fluid contribution from other formations above the Speechley. EPA will therefore require that each monitoring well completely isolate the Speechley formation from the rest of the wellbore by placing a monitoring string on a packer set immediately above the Speechley formation. (See Part II. C.2. of the permit.) Also, please refer to comment #7 for additional information regarding fluid level monitoring.

5) Is this proposed injection activity in an earthquake prone area?

EPA has no evidence the location proposed for this injection operation is located in a seismically active area. Evidence indicates that there are no deep-seated transmissive faults that intersect the proposed injection zone or that could be influenced by the proposed injection operation in the future. It is important to keep in mind that the reservoir proposed for injection, the Speechley Formation, produced, and continues to produce oil and natural gas. During production, oil and natural gas have been removed from the pore space within this reservoir, depleting the formation of much of the oil and natural gas it contained as well as reducing the formation's reservoir pressure. Earthquakes can occur when a geologic formation becomes under-pressurized (i.e., through geologic formation collapse causing the structure of the formation to shift) or when it becomes over-pressurized. Although the Speechley Formation in this location is presently under-pressurized from decades of oil and natural gas production, there has been no evidence of earthquakes due to the removal of the oil and natural gas. In addition, the proposed injection operation will not over-pressurize the formation. Because of the removal of the oil and natural gas, pore space has been created to accept the injection of fluid. The permit is also conditioned to prevent the over-pressurization, or fracturing, of the formation through the maximum injection pressure limitation set by this permit.

6) Are the fluids being injected toxic, hazardous and/or radioactive?

Individual constituents within the fluid produced from an oil or gas production reservoir can be determined to be toxic, hazardous or radioactive. However, these fluids, when produced in association with oil and gas production, are exempt from hazardous waste regulation and are not classified as hazardous under the Resource Conservation and Recovery Act. Therefore, the UIC program does not regulate fluids produced in association with oil and gas production activities as hazardous waste. Disposal of these fluids is permissible down a Class II brine disposal injection well. Commenters raised the issue that the disposal of these fluids underground is not safe. However, other commenters also mentioned that the injection of these fluids deep underground is safer than allowing them to be discharged into a stream or a river or allowing them to overflow or seep into the ground from above-ground containment pits. One of the major functions of the UIC regulations is to provide a regulated alternative whereby oil and gas related fluids may be safely managed.

7) Abandoned wells may pose a risk to drinking water supplies.

It is a fact that abandoned wells can pose a risk to USDWs by providing a conduit for the migration of fluid out of an injection zone. There are several requirements that the UIC regulations, as well as a UIC permit, impose on an operator to ensure that abandoned wells will not pose a risk to USDWs. The operator is required to conduct a thorough evaluation within a specified area around his proposed operation to determine whether any abandoned wells exist within that area which could pose a threat to USDWs. This area is termed the area of review. The area of review can be a fixed radius of not less than one-quarter mile around an injection well or injection wells (i.e., for an area permit) or may be a calculated "zone of endangering influence." The zone of endangering influence calculation is based on geologic parameters found in the injection zone, such as permeability, porosity, etc. and proposed operational conditions, such as injection volumes, rates, length of injection, etc.. The operator must review all information of public record or information that they have knowledge of to determine whether any abandoned wells or other potential conduits exist within the area of review or zone of endangering influence, that penetrate the proposed injection zone, in this case, the Speechley

Formation. If abandoned wells are found to exist, then corrective action, in the form of plugging and abandonment of those wells, must be taken or the applicant can propose that certain wells be used for monitoring.

Stonehaven used a fixed radius of one-quarter mile for their area of review. EPA conducted a zone of endangering influence calculation which verified that the fixed radius of one-quarter mile for the area of review was acceptable. The only wells found that penetrate the Speechley Formation within the one-quarter mile area of review are the Latshaw #12 and the Latshaw #25 production wells. The Latshaw #15 production well is located approximately 300 feet outside the one-quarter mile area of review. All three of the Latshaw wells will be used as monitoring wells to monitor any changes in the fluid level in the Speechley formation associated with the proposed injection operation. EPA recently monitored the fluid level in the Latshaw #15 and Latshaw #25 production wells to gather background fluid level information. The fluid levels were approximately 1780 feet and 1845 feet below land surface, respectively. Since this fluid level is deep, approximately 680 feet below the deepest Venango Sand and approximately 1300 feet below the lowermost USDW, these wells will provide an excellent monitoring system to ensure that fluid levels will not migrate upward into USDWs. By monitoring fluid level, and making sure that it remains safely below the lowermost USDW, even if an abandoned well were to be discovered in the future (i.e., a well that might have been drilled in the past without having information of public record), the monitoring will detect and prevent fluid migration into the lowermost USDW.

During the public hearing, commenters indicated to EPA that they did not think that all abandoned wells near the proposed injection site had been documented. It is clear that in the past this area was heavily drilled for oil and gas production. Maps produced at the public hearing, dating back to 1944, showed evidence of significant drilling in the area. Commenters indicated that it's likely that many abandoned wells have been plowed over or that well casing was removed to assist in providing steel to the war effort during World War II. The applicant has put forth a good faith effort to provide abandoned well information of public record. EPA requested, during the public hearing, that if the public knew specifically about other abandoned wells in the area of review they provide that information to EPA so corrective action could be taken prior to injection. Attempts were made by both EPA and Stonehaven to field verify additional abandoned wells. No additional abandoned wells, in the Speechley formation or in the shallower Venango Sands, within the area of review, were identified by the public or during the field verification. However, as discussed above, the fluid level monitoring program required as a condition in the permit is designed to help ensure that fluids will not migrate into USDWs. If in the future an abandoned well is discovered within the area of review, the permit requires that immediate corrective action, in the form of plugging and abandonment, be taken on that well by the operator.

8) A cement bond log should be performed on the injection well.

The permittee will be installing 5 ½ inch surface casing to 450 feet, which will be cemented back to the surface. The permittee will also be installing 3 ½ inch long string casing (also referred to as production casing) to approximately 1923 feet, which will be cemented back to at least 100 feet above that depth. In both cases, a cement bond log will be run to verify cement bonding and isolation of the injection zone. Cementing records will also be submitted. In addition, prior to allowing injection to commence, an internal mechanical integrity pressure test will be performed to ensure that the well's casing, tubing and packer does not leak. Once injection is authorized, the well will be monitored continuously for injection pressure, annular pressure and injection volume.

9) Stonehaven must demonstrate financial resources should a well failure occur.

Under the UIC regulations, owners and operators of injection wells are required to demonstrate financial responsibility in order to properly plug and abandon the injection well when the operation ceases and the well is no longer used for injection. Stonehaven has submitted a \$10,000 letter of credit with a standby trust agreement for the plugging and abandonment of the Latshaw #9 injection well. This submission was reviewed and has been approved by EPA Region III.

Although a separate issue from the financial responsibility required as part of the UIC permit, EPA also has emergency authorities in place under the Safe Drinking Water Act (SDWA) if endangerment to USDWs should result from injection activities. Section 1431 under the SDWA allows EPA to take an action against a responsible party if the potential for endangerment exists. This action can include a requirement that the responsible party provide alternative drinking water to a citizen affected by the endangerment.

10) Wastewater entering the facility for injection should be more fully characterized.

EPA believes that the conditions in Part II, C.3. and C.4., within the permit, are sufficient to adequately characterize and monitor the wastewater for injection purposes. If this wastewater were to be disposed in a different manner (i.e., disposed directly into the environment by a stream discharge) then a more extensive characterization would be necessary. However, this wastewater will be injected well below land surface into an existing oil and gas bearing formation similar in nature to where the wastewater is generated. Stonehaven is operating this well as a private injection well, so only fluid produced during Stonehaven's production operations will be permitted to be injected down the Latshaw #9 injection well. EPA will periodically sample the injection fluid from Stonehaven's injection operation. If Stonehaven were to be found injecting fluids not authorized by the permit, they would be in violation of their permit and subject to enforcement action.

11) The UIC permit is issued for ten years. What happens after that, can the operator just walk away?

The UIC permit would be in effect for ten years from the date of issuance. After ten years, the operator may apply to EPA Region III for permit reissuance. EPA will make a determination as to whether the permit should be reissued at that time. If a determination is made to reissue the permit, EPA would public notice the permit reissuance and offer an opportunity for a public hearing. If the operator determines that they no longer wish to operate the injection well, the well must be plugged and abandoned in accordance with the UIC permit requirements and abide by all other closure requirements that have been imposed by local or state jurisdictions. The owner's financial responsibility is not released by EPA until the well is properly plugged and abandoned. As long as the well continues to operate, the monitoring and reporting requirements specified in the permit remain in-place.

12) The bottom-hole pressure during injection will be greater than the maximum injection pressure specified.

Yes, the bottom-hole pressure during operation will be greater than the maximum injection pressure. The maximum operating injection pressure specified in the permit has been calculated taking into account what the bottom-hole pressure will be. The bottom-hole pressure is the sum

of the maximum operating pressure and the hydrostatic pressure. Both the maximum operating injection pressure and the bottom-hole pressure were developed to prevent the fracturing of the injection formation during operation.

13) There are endangered species and other wildlife that could be affected by the injection operation.

Four federally endangered fresh water mussel species have been identified and found to reside in the Allegheny River near Oil City, PA. These mussels are highly sensitive to high salinity water, particularly to elevated chloride concentrations. At its closest reach, the Allegheny River is located approximately four miles from the location of the injection well. The injection well is located in an area where oil and gas production has been occurring for the past 150 years. The fluid being injected will be disposed approximately 2000 feet below land surface and will have no impact on the river environment. If the fluid proposed to be injected down this injection well was disposed through the direct discharge to surface water, it would pose a greater threat to the fresh water mussels identified. Surface spills are regulated by the Pennsylvania Department of Environmental Protection. Stonehaven will need to comply with State spill prevention requirements at this injection well facility. In the case of any surface spill at the injection well facility, the spill prevention requirements are designed to prevent any fluid migration into any nearby surface water body, tributary, and especially to the Allegheny River located over four miles away.

Other commenters brought to EPA's attention the Eastern Massasauga Rattlesnake, which is listed as an endangered species by the Pennsylvania Fish and Boat Commission and as a candidate for listing under the federal Endangered Species Act. Populations of this snake are distributed throughout several counties in western Pennsylvania, including Venango County. As mentioned above, the area where the injection well is located has been, historically, a heavily drilled oil and gas production area for 150 years. The Latshaw #9 injection well was at one time an active production well. The well is simply being converted to an injection well, so the presence and operation of this well should not disrupt the habitat of the Eastern Massasauga Rattlesnake anymore than current oil and gas production taking place in the area. In addition, handling the produced fluid onsite will reduce truck traffic currently required to haul the produced fluid offsite to another disposal location.

14) Fluid injection into the Speechley formation could affect oil and gas production from Speechley wells owned by other property owners.

EPA does not anticipate that disposal into the Speechley formation will affect oil and gas production outside the area of review. The fluid level monitoring required by the permit will help to determine whether any fluid movement is occurring outside the area of review. Latshaw #15, one of the monitoring wells which will be utilized to monitor fluid level, is actually located approximately 300 feet outside the area of review. Since this monitoring well is the closest Speechley well to the disposal operation outside the area of review, it will help to determine whether other Speechley wells located outside the area of review will be affected by the disposal operation.

**Federal Underground Injection Control Program
Permit Appeals Procedures**

The provisions governing procedures for the appeal of an EPA permitting decision are

defined at 40 CFR Part 124.19. The appeals process allows for a written petition of appeal from any person who commented on the draft permit, either in writing during the comment period or orally at the public hearing. Persons who have not previously been involved in the comment period are limited in their appeal rights to those points which have been changed between the draft and final permits. Appeals may be made by citizens, groups, organizations, governments and the permittee within this procedural framework.

A petition for appeal must be filed within thirty (30) days of the date of the accompanying announcement of EPA's permit decision. Such written requests are to be addressed to EPA at the address listed below with a copy sent to EPA Region III.

The Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue Northwest
Washington, DC 20004

The petition should specify the reasons supporting the appeal of the permit and a demonstration that the petitioner had raised the issue previously during the comment period or at the hearing. If the appeal is based on a change between the draft and final permit conditions, it should be so stated explicitly. 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 Administrator should, at his or her discretion, review.

Within a reasonable time of receipt of the Appeals Petition, the Administrator will either grant or deny the appeal. Denials are considered final agency action, upon which the permit becomes effective, and the Agency will so notify the petitioner. The petitioner may, thereafter, challenge the permit decision in Federal District Court.

If a petition for appeal is granted, EPA must so notify the public in accordance with the notification requirements of 40 CFR 124.10. The public notice shall set forth a timetable by which the person(s) making an appeal and EPA, as the permitting authority, must submit written briefs and shall also specify that any interested party may submit an amicus brief within these deadlines.

When a petition for appeal is granted, the permit conditions appealed are not deemed to be in effect and if these permit conditions are essential to the operation, the activity may not commence. Individually contested permit conditions are also stayed (not in effect) but other permit conditions are still in effect if they are legally severable from the contested condition.

The EPA Administrator will decide the appeal on the basis of the written briefs and the total administrative record of the permit action. If the Administrator decides the appeal on its merits, he or she will direct the Region III office to implement his or her decision by permit issuance, modification or denial. The Administrator may order all or part of the permit decision back to the EPA Region III office for reconsideration. In either case, a final agency decision has occurred when 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 District Court.