

STATEMENT OF BASIS
for
U.S. Environmental Protection Agency's
Underground Injection Control (UIC)
Class IID Permit Number NYU119401

for

One active Class IID injection well used for brine disposal located at:

National Fuel Gas Supply Corporation
Allen Whitesell SC-546
Hallsport - Independence Road
Independence, NY 14806

National Fuel Gas Supply Corporation (“National Fuel” or “Permittee”) is currently operating under UIC permit NYU119401 to inject brine and hydrochloric acid solution into one active Class IID brine disposal injection well. The brine comes from wells owned and/or operated by the Permittee, utilized for either gas storage activities in the Beech Hill and Independence gas storage fields or for natural gas production, and completed in the Oriskany Formation. A maximum of 2,000 gallons of hydrochloric acid solution may be injected once per calendar year as necessary to maintain the injection well. Injection occurs into the Oriskany Sandstone.

The Permittee has applied to renew permit operation of the Class IID brine disposal well. The current permit expired on December 31, 2025, but was administratively continued. Several of the requirements incorporated into the previous permit have been modified, and new requirements have been added, as detailed below.

1. The signature page has been modified:
 - a. The well name was updated to “Allen Whitesell SC-546.”
 - b. Attachment #2 (Facility Map (Area of Review)) and Attachment #3 (Seismicity Response) have been added to the list of attachments.

PART I. GENERAL PERMIT COMPLIANCE

1. Part I Sections A, D, E, F, and J of the draft permit have been reworked to add detail to the regulatory requirements and cite specific Code of Federal Regulations (“C.F.R.”) sections.
2. Part I Section E has been modified:
 - a. Paragraph 3.e has been updated to match language in 40 C.F.R. §144.37(d) (State Continuation).
 - b. Paragraph 12.g has been added to address Oil Spill and Chemical Release Reporting. Subsequent paragraphs have been re-lettered.

- c. Paragraph 12.h (Conversion) of the existing permit has been eliminated; well conversion reporting requirements were moved to Part I Section F.1.
- d. Paragraph 12.j has been modified to clarify report submittal contacts.

3. Part I Section F of the draft permit has been renamed “Conversion or Plugging and Abandonment” and modified:

- a. Paragraph 1 has been modified to include conversion reporting requirements.
- b. Paragraph 2 has been modified to clarify that plugging and abandonment may be subject to additional federal, state, or local laws and regulations, and to specify that EPA Form 7520-19 should be used to report on plugging and abandonment.
- c. Paragraph 3 has been modified to require 30-day notification before operation of a temporarily abandoned well may resume.

4. Part I Section G of the draft permit has been modified:

- a. Paragraph 2 has been updated to provide the date of the most recent successful mechanical integrity demonstration for the well: August 27, 2025.
- b. Paragraph 3 has been modified to clarify the types of well workovers that require a mechanical integrity test. Additionally, the requirement to notify EPA at least five days prior to a workover-related mechanical integrity demonstration has been replaced by a 30-day notification requirement that can be shortened if it would be sufficient to enable EPA to witness the demonstration.
- c. Paragraph 4 has been revised to reiterate 24-hour reporting requirements and establish a 180-day deadline after a loss of mechanical integrity has been detected to either properly plug and abandon the well or repair and re-test the well to demonstrate that mechanical integrity has been restored.

5. Corrective Action Requirements (Part I Section H of the draft permit) were moved above Financial Responsibility (Part I Section I of the draft permit).

6. Part I Section I of the draft permit was modified to require an annually updated financial responsibility mechanism and remove mention of the specific mechanism to minimize future permit revisions.

7. Part I Section J of the draft permit was modified to clarify that a petition to review the permit is successfully filed when it is received by the Clerk of the Environmental Appeals Board.

8. Part I Section K of the draft permit was modified to add the definition of Abandoned Well as Paragraph 1, subsequent paragraphs were renumbered, and clarifying language was added to paragraphs 15 and 28 of the draft permit.

PART II. WELL-SPECIFIC CONDITIONS FOR UIC PERMITS

1. Part II Section A has been modified:

- a. Paragraph 2 has been modified to update the well name to “Allen Whitesell SC-546,” update the depth of the 7 inch long string casing from 4,735 feet to 4,775 feet,

- update the tubing diameter from 2 7/8 inch to 2 3/8 inch, and require calibration of gauges prior to mechanical integrity demonstrations.
 - b. Paragraph 3 has been eliminated, and the subsequent paragraph was re-numbered. Formation data were moved to Part II Section B.1.
- 2. Part II Section B has been modified:
 - a. Paragraph 1 has been modified to include formation data.
- 3. Part II Section C has been renamed “Monitoring Requirements” and modified:
 - a. Paragraph 1 has been renamed “Injection Fluids” and modified to add annular pressure to the list of monitoring requirements for consistency with Section A.3 of the draft permit, and to include fail safe shutdown requirements.
 - b. Paragraph 2 has been modified to remove fail safe shutdown requirements, which were moved to Paragraph 1.
- 4. Part II Section D has been renamed “Reporting Requirements” and modified:
 - a. Paragraph 1 has been modified to clarify report submittal contacts.
 - b. Paragraph 2.c has been added to require the use of EPA Form 7520-19 for submittal of well rework and plugging and abandonment information.
 - c. Paragraph 2.d has been added to require submittal of information for new or existing wells within area of review if not previously submitted.
- 5. Attachment #1 has been modified to incorporate the revised plugging and abandonment plan and plugged well schematic submitted by the applicant as part of its permit application.
- 6. Attachment #2 has been added to show the facility map and area of review.
- 7. Attachment #3 has been added to describe seismicity response requirements.

The draft permit specifies conditions for the operation, monitoring, reporting, and plugging and abandonment of the injection well. These conditions will serve to prevent the movement of fluids into underground sources of drinking water (USDWs) which may cause a violation of primary drinking water regulations under 40 C.F.R. §§141 and 142 or otherwise adversely affect the health of persons. General provisions for EPA UIC permit requirements are found at 40 C.F.R. §§124, 144, 146 and 147. Permit conditions specific to this project are as follows:

Area of Review (AOR): A one-quarter mile AOR was used to characterize the potential impact of injection wells within the facility boundary on ground water. The Permittee previously provided documentation demonstrating that there are no known improperly constructed or abandoned wells within the AOR. Nonetheless, should injection activities authorized by this permit result in fluid movement into a USDW through any wellbore, the Permittee is required to undertake appropriate corrective action to prevent such fluid migration.

Underground Sources of Drinking Water: USDWs are defined by the UIC regulations as aquifers or portions thereof that contain waters having 10,000, or less, parts per million of total

dissolved solids and are being, or could be used, to supply a public water system. The Permittee has identified all USDWs above and below the injection zone.

Injection Zone: Injection is limited to the Oriskany Sandstone. The top of the Oriskany lies at an approximate depth of 4,678 feet below the surface.

Injection Fluid and Pressure: Only brines produced from wells owned and/or operated by the Permittee, utilized for either gas storage activities in the Beech Hill and Independence gas storage fields or for natural gas production, and completed in the Oriskany Formation, may be injected. Injection pressure, measured at the surface with a full column of brine in the well, shall not exceed a maximum of 10 psig.

Monitoring and Reporting Requirements: Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The Permittee is required to continue to monitor the injected fluids as follows:

<u>Parameter</u>	<u>Frequency</u>	<u>Sample type</u>
Injection Pressure	Continuous	Recorder
Annular Pressure	Continuous	Recorder
Injection Volume	Daily	Measured
Specific Gravity	Monthly	Composite
Temperature	Daily	Grab
Chlorides	Monthly	Composite
Specific Conductance	Continuous	Recorder
pH	Continuous	Recorder
Sodium	Monthly	Composite

Plugging and Abandonment: The facility has a plugging and abandonment plan that will result in an environmentally protective well closure at the time of cessation of operations. The Permittee has also made a demonstration of financial responsibility indicating that adequate resources will be maintained for well closure, designed to preclude the possibility of abandonment without proper closure.

EPA has received no information indicating that operation of the injection well has posed any threat to underground sources of drinking water or that continued operation of the injection well will pose such a threat.

40 C.F.R. §144.4 Federal Law Considerations

1. **Wild and Scenic Rivers:** The only designated Wild and Scenic River in the State of New York is the Upper Delaware River in Delaware and Sullivan Counties. This facility will have no impact on that river.
2. **National Historic Preservation Act of 1966:** EPA Region 2's NHPA Coordinator indicated that, since this is a permit reissuance and involves no construction, no ground surface disruption, nor any other infrastructure disturbances, there are no NHPA concerns with the permitting of this well.
3. **Endangered Species Act:** One endangered, one proposed endangered, and one proposed threatened species were found in the quarter-mile area of review. No critical habitats were identified. The permit renewal will not result in any new construction or activity - it will only extend the applicant's existing authority to operate the disposal well for another ten years. EPA determined that permit reissuance does not require consultation with the Fish and Wildlife Service at this time.
4. **Coastal Zone Management Act:** This facility's location in Allegany County is not within or near the designated Coastal Zones on the Atlantic Ocean, Hudson River, St. Lawrence River, Lake Ontario, Niagara River, and Lake Erie, so submittal of a Federal Consistency Assessment Form to the New York Department of State by applicant is not required.