November 12, 2019

FACT SHEET

The U.S. Environmental Protection Agency Region 4 is proposing to approve a petition (Petition) by Chemours Company, FC, LLC (Chemours) for reissuance of an exemption to the land disposal restrictions of the Hazardous and Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6901, *et. seq.*, for the following underground injection well facility:

Applicant:	Chemours Company, FC, LLC
Street Address:	7685 Kiln-DeLisle Road Pass Christian, Harrison County, Mississippi 39571
Mailing Address:	P.O. Box 430 Pass Christian, Mississippi 39571
Wells:	Nos. 2, 3, 4, and 5
Issuing Office:	U.S. Environmental Protection Agency, Region 4 Sam Nunn Atlanta Federal Center 61 Forsyth Street Northeast Atlanta, Georgia 30303

The EPA granted DuPont de Nemours, Inc. (DuPont) an exemption allowing injection into the Washita-Fredericksburg injection interval, via Wells 2, 3, 4, and 5 and unconstructed Well 6 of the Chemours DeLisle Plant (DeLisle Plant), on May 5, 2000. That exemption was modified on January 23, 2015, to approve alternative well construction techniques and location of proposed Well 6, and on June 6, 2016, to change the exemptee name from DuPont to Chemours, and it expires on December 31, 2020. The Petition requests that the EPA reissue the exemption through the year 2050 and allow injection into the Washita-Fredericksburg and Tuscaloosa Massive Sand injection intervals via Wells 2, 3, 4, and 5.

Decision

The EPA proposes to approve the Petition for reissuance of an exemption to the land disposal restrictions as follows:

1. Approve the DeLisle Plant injection Wells 2, 3, 4, and 5 for injection into the Washita-Fredericksburg Formation and Tuscaloosa Massive Sand Formation injection intervals.

2. Define injection intervals and injection zones with the following correlative depths:

Well	Injection Zone Depths (feet)	Injection Interval Formation	Injection Interval Depths (feet)
2	8,035' – 10,042'[1]	Tuscaloosa Massive Sand	9,392' – 9,597'[1]
2	8,035' – 10,042'[1]	Washita-Fredericksburg	9,802' – 10,042'[1]
3	8,045' – 10,038'[1]	Tuscaloosa Massive Sand	9,315' – 9,590'[1]
3	8,045' – 10,038'[1]	Washita-Fredericksburg	9,796' – 10,038'[1]

4	8,003' – 10,023'[1]	Tuscaloosa Massive Sand	9,344' – 9,550'[1]
4	8,003' – 10,023'[1]	Washita-Fredericksburg	9,750' – 9,980'[1]
5	8,003' – 10,043'[1]	Tuscaloosa Massive Sand	9,268' – 9,560'[1]
5	8,003' – 10,043'[1]	Washita-Fredericksburg	9,746' – 10,043'[1]

3. Define the surface density range of the waste stream for the requested injection intervals as 1.04 to 1.36 grams per cubic centimeter (g/cm^3) at a surface temperature and pressure of 70^0F and 1 atmosphere equivalent to surface specific gravity range of 1.04 to 1.36 at a surface temperature and pressure of 70^0F with a reference temperature of 70^0F.

4. Define the individual well injection rate maximums, site-wide instantaneous injection rate maximum, and site-wide monthly volumetric injection maximum as follows:

   Well 2 Rate Maximum: 550 gpm
   Well 3 Rate Maximum: 550 gpm
   Well 4 Rate Maximum: 550 gpm
   Well 5 Rate Maximum: 1000 gpm
   Site Instantaneous Maximum: 2200 gpm
   Monthly Volumetric Maximum: (2200 gpm) x (1440 minutes/day) x (# of days in that month)

5. Define the operational life of site wells to December 31, 2050.

6. Define the list of exempted waste codes as:

   D002, D004, D005, D006, D007, D008, D009, D010, and D011.

7. Define the limiting concentration reduction factors as 1×10^{-9} for the Washita-Fredericksburg injection interval and 1×10^{-8} for the Tuscaloosa Massive Sand injection interval.

Below is an explanation for the EPA's proposed decision, categorized according to the criteria outlined in 40 C.F.R. Part 148.

Summary

The land disposal restrictions promulgated under the RCRA prohibit the injection of restricted hazardous waste unless a petitioner demonstrates that there will be no migration of hazardous constituents from the injection zone for as long as the waste remains hazardous, defined by 40 C.F.R. § 148.20 as 10,000 years. These no migration demonstrations must meet the regulatory standards promulgated in 40 C.F.R. 148 Subpart C. The demonstration includes a description of the proposed injection well operations, geologic siting, and waste stream characteristics. The demonstration also includes modeling strategies which incorporate all the previously mentioned information and utilizes mathematical equations to predict pressure buildup and waste movement. Chemours successfully demonstrated that there would be no migration of hazardous waste from the injection wells at the DeLisle Plant. In accordance with 40 C.F.R. § 148.22(a)(4), Chemours also submitted a signed certification statement from an authorized representative verifying that all submitted materials are true, accurate, and complete.

([1] Injection zone and injection interval depths are approximate and referenced to ground surface from well-specific dual injection/laterolog geophysical well logs.)

The Petition described the operation of site wells through a discussion of well construction, injection pressures, and injection volumes. The site location and geologic conditions were presented through a discussion of the depositional environments, well logs, cross-sections, fluid and core data, well tests, geologic maps, and well records. The characteristics of the waste stream were described and evaluated for compatibility with the injection and confining zones and well construction materials. Chemours incorporated all of this information into a modeling strategy which predicted the pressure buildup and waste movement for the requested injection intervals at the DeLisle Plant. The injection intervals evaluated were the Washita-Fredericksburg and Tuscaloosa Massive Sand formations and injection was simulated with consideration for Wells 1, 2, 3, 4, 5, 6, and 7. Wells 2, 3, 4, and 5 are currently exempted and used for injection, whereas Well 1 (proposed converted monitoring well) and Wells 6 and 7 (proposed for construction) were included in the analyses to facilitate consideration of future addition to the exemption.

The proposed well injection intervals and injection zones are defined with the following correlative depths:

Well	Injection Zone Depths (feet)	Injection Interval Formation	Injection Interval Depths (feet)
1	8,021' – 10,043'[2]	Tuscaloosa Massive Sand	9,395' – 9,635'[2]
1	8,021' – 10,043'[2]	Washita-Fredericksburg	9,745' – 10,043'[2]
6	8,003' – 10,100'[3]	Tuscaloosa Massive Sand	9,268' – 9,560'[3]
6	8,003' – 10,100'[3]	Washita-Fredericksburg	9,700' – 10,100'[3]
7	8,003' – 10,100'[3]	Tuscaloosa Massive Sand	9,268' – 9,560'[3]
7	8,003' – 10,100'[3]	Washita-Fredericksburg	9,700' – 10,100'[3]

The proposed injection well individual well injection rate maximums are:

Well 1 Rate Maximum: 550 gallons per minute (gpm)
Well 6 Rate Maximum: 1200 gpm
Well 7 Rate Maximum: 1200 gpm

In accordance with the Petition, addition of Well 1, 6, or 7 will not involve modification of site-wide instantaneous injection rate maximum.

Chemours simulated the waste plume migration under worst-case conditions for both injection intervals, and for low density and high density (with respect to native formation fluid) injectate. The modeling accounts for injection interval pressurization during the operational period, buoyancy induced flow, diffusive processes, and assumes that the contaminants are conserved (no sorption or degradation). A nine (9) order of magnitude concentration reduction factor was used to delineate plume boundaries for lateral transport simulations. The post-injection, map-view plume distribution was roughly circular about the centroid of the injection wells with a 21,500 ft radius in the Washita-Fredericksburg and a

([2]Well 1 injection zone and injection interval depths are approximate and referenced to ground surface from well-specific dual injection/laterolog geophysical well logs.)
([3]Well 6-7 injection zone and injection interval depths are approximate and referenced to ground surface from Well 5 dual injection/laterolog geophysical well logs.)

18,500 ft radius in the Tuscaloosa Massive Sand. Effective dip angle for the simulations were ~72 feet per mile (ft/mi) SSW for the Tuscaloosa Massive Sand and ~60 ft/mi SSW for the Washita-Fredericksburg.

The Chemours low density injectate, 10,000-year post injection, contaminant transport simulations predicted 32,000 feet (ft) up-gradient and 18,000 ft down-gradient plume extents for the Washita-Fredericksburg and 34,500 ft up-gradient and 13,500 ft down-gradient plume extents for the Tuscaloosa Massive Sand. The high density injectate, 10,000-year post injection, contaminant transport simulations predicted 96,000 ft down-gradient and 11,000 ft up-gradient plume extents for the Washita-Fredericksburg and 82,500 ft down-gradient plume extent for the Tuscaloosa Massive Sand.

Analytical model results indicate that vertical transport due to advection and diffusion will be 406.7 ft above the injection interval over a 10,000-year post-injection period, which would be well within the permitted injection zone for both injection intervals. Additional analysis characterized maximum vertical migration in the case that an improperly plugged, mud-filled borehole was open within the injection interval. This analysis indicated the potential for 1,356 ft of vertical migration for the Washita-Fredericksburg scenario (concentration reduction factor = $1x10^{-9}$) and 1,272 ft of vertical migration for the Tuscaloosa Massive Sand scenario (concentration reduction factor = $1x10^{-8}$). These estimates put the worst-case diffusion front well within the permitted injection zone for the Washita Fredericksburg and within the permitted injection zone by ~10 ft for the Tuscaloosa Massive Sand.

Therefore, after a detailed and thorough review of the Petition, the EPA proposes to find that Chemours has demonstrated, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the injection zone for as long as the waste remains hazardous.

The factors considered in the formulation of the EPA's proposed decision are described below.

Hydrogeology

Pursuant to 40 C.F.R. § 148.20(a), a petitioner must submit hydrogeologic information in order to study the effects of injection well activity. Chemours provided hydrogeologic information in the Petition which demonstrates that Underground Sources of Drinking Water (USDWs) are properly protected. The base of the lowermost USDW is at approximately 2,750 ft below ground surface.

Artificial Penetrations

Chemours submitted updated information on all artificial penetrations (wells) which penetrated the injection or confining zones within the area of review, which is defined by 40 C.F.R. § 146.63 as the area encompassed by a 2-mile-radius of injection wells, and the extended area of review based on a pressure-based cone of influence evaluation (4.3-mile-radius). The only applicable wells identified within the 2-mile-radius are the DeLisle Plant wells included in the Petition. There were eight applicable wells identified within the extended area of review, all of which are plugged and abandoned. Records were obtained and provided to demonstrate that all of these wells were constructed and plugged using methods that would prevent waste from migrating from the injection zone due to pressure, buoyancy, or molecular diffusion. *See* 40 C.F.R. § 148.20(a)(1) and (2)(i-iii).

Mechanical Integrity Testing (MIT) Information

Pursuant to 40 C.F.R. § 148.20(a)(2)(iv), to assure that the waste will reach the injection interval, a petitioner must submit the results of pressure and radioactive tracer tests demonstrating the mechanical

integrity of the well's long string casing, injection tubing, annular seal, and bottomhole cement. The tests confirm that all injected fluids are entering the approved injection interval and that no fluids are channeling up the wellbore out of the injection zone near the wellbore. The Petition demonstrates that Chemours' current disposal wells were tested and satisfy the above criteria:

Well Number	Pressure Test	Radioactive Tracer Survey
2	04/04/18	04/04/18
3	11/13/18	11/13/18
4	04/10/18	04/12/18
5	04/08/18	04/08/18

Regional and Local Geology

Class I hazardous waste injection wells must be located in areas that are geologically suitable. The injection zone must have sufficient permeability, porosity, thickness, and areal extent to prevent migration of fluids into USDWs. The confining zone must be laterally continuous and free of transmissive faults or fractures to prevent the movement of fluids into a USDW and must contain at least one formation capable of preventing vertical propagation of fractures. An evaluation of the structural and stratigraphic geology of the local and regional area determined that the Chemours DeLisle Plant is located at a geologically suitable site. The injection zones are of sufficient permeability, porosity, thickness, and areal extent to meet requirements stated in 40 C.F.R. Part 148. The containment interval is laterally continuous and free of transecting, transmissive faults or fractures over an area sufficient to prevent the movement of fluids out of the injection zone.

The geologic conditions for the Chemours site were presented with extensive discussions of the depositional environments, well logs, cross-sections, cores, well tests, and geologic maps. The geologic cross-sections demonstrated the lateral relationships of the injection and confining zones. This information justified pressure buildup and 10,000-year plume modeling assumptions. Historical injection well pressure falloff test analyses support the injection interval permeability values used in the demonstration modeling.

Modeling Strategy

Pursuant to 40 C.F.R. § 148.21(a)(3), in demonstrating no migration of hazardous constituents from the injection zone, predictive models shall have been verified and validated, shall be appropriate for the specific site, waste streams, and injection conditions of the operation, and shall be calibrated for existing sites. The modeling strategy for the Petition consisted of a combination of numerical and analytical models. All the models used were identified as being verified and validated according to the information submitted in the Petition. This information consisted of actual model documentation or references of methods or techniques that are widely accepted by the technical community. The Petition described the predictive models used and demonstrated the above criteria are met.

Pursuant to 40 C.F.R. § 148.21(a)(5), reasonably conservative values shall be used whenever values taken from the literature or estimated on the basis of known information are used instead of site-specific measurements. Many variables were required to be quantified in order to use the models used in the Petition for reissuance request. All parameters were conservatively assigned to produce worst case conditions for pressure buildup and waste movement.

Pursuant to 40 C.F.R. § 148.21(a)(6), a petitioner must perform a sensitivity analysis in order to determine the effect of uncertainties associated with model parameters. Chemours provided this sensitivity analysis in the Petition by varying geological and reservoir parameters in modeling scenarios for the requested injection interval. Through conservative model parameter assignments within this analysis, worst case scenarios for pressure buildup and waste movement were investigated and reported.

Chemours incorporated two timeframes, the operational and post-operational periods, to complete the modeling demonstration for the Petition for the requested injection intervals. The operational period consisted of a historical injection period for the injection interval followed by a projected worst-case injection forecast period.

The operational period in the Washita-Fredericksburg Formation incorporated historical injection from October 1979 to December 2015, which includes Wells 2, 3, 4, and 5. Future injection volume was characterized as continuous injection through December 31, 2050 at the cumulative permitted maximum (2,200 gpm) into various combinations of existing and proposed wells to predict worst case pressure buildup conditions. Maximum cumulative projected injected waste volumes for site wells were also used for worst case plume movement projections. The 10,000-year post injection period for the requested injection intervals was modeled to predict the maximum vertical molecular diffusion, advection, and horizontal transport of low and high-density waste plumes.

To determine appropriate values to be used in the no migration demonstration, Chemours reviewed site-specific data acquired during drilling and coring, logging, geologic mapping, well testing, and mechanical integrity testing of onsite wells. Chemours also reviewed offset well information and applicable literature. Appropriate estimation techniques and testing protocols were used in accordance with 40 C.F.R. § 148.21(a)(2). A range was assigned to some parameters to maximize their impact on the demonstration. For example, the lower extreme of porosity values was selected when characterizing lateral waste plume movement, while the lower extreme of permeability values was assigned to maximize the predicted pressure buildup from injection operations in the requested injection intervals.

A vertical diffusion demonstration was also included in the Petition that calculated the maximum vertical movement into intact strata and a mud-filled wellbore. This along with a lateral plume and diffusion analysis demonstrated that the injected waste stream will not migrate vertically upward out of the injection zone or laterally within the injection zone to a point of discharge or interface with a USDW for the required 10,000-year demonstration period.

Quality Assurance

Pursuant to 40 C.F.R. § 148.21(a)(4), a petitioner must demonstrate that proper quality assurance and quality control plans were followed in preparing the Petition demonstrations. Specifically, Chemours followed appropriate protocol in identifying and locating records for artificial penetrations within the Area of Review. Information regarding the geology, waste characterization, hydrogeology, reservoir modeling, and well construction was adequately verified or bounded by worst-case scenarios within the no migration petition reissuance demonstration.

Geochemistry and Injected Waste Compatibility

Pursuant to 40 C.F.R. § 148.21(b)(5), a petitioner must describe the geochemical conditions of the well site. The physical and chemical characteristics of the injection zone and the formation fluids in the injection zone were described in the Petition. This description included a discussion of the compatibility

of the injected waste with the injection zone. Chemours also provided evaluations which demonstrated that the waste stream would not adversely alter the confining capabilities of the injection and confining zones.

Characteristics of Injected Fluids

Pursuant to 40 C.F.R. § 148.22(a), the characteristics of the injection waste stream must be adequately described. These characteristics are described in the Petition and the descriptions are adequate and complete. The demonstration included injectate waste analysis that conformed to the standards outlined in 40 C.F.R. § 148.21(a)(1).

Modeling Parameters and Results

1. Operational Life

   End of Operational Life: December 31, 2050

   Maximum Incremental Pressure Buildup: 1,326 pounds per square inch (psi) in the Washita-Fredericksburg
   467 psi in the Tuscaloosa Massive Sand

2. 10,000 Year Post-Injection Period

   Background Flux: 0.0 feet per year (ft/yr) for light[1] simulations (maximizes up-dip transport)
   0.5 ft/yr for heavy[1] simulations (maximizes down-dip transport)

   ([1]"Light" refers to models that simulated injectate with density less than that of the native formation fluid, in which preferential up-dip transport would be expected. "Heavy" refers to models that simulated injectate with density greater than that of the native formation fluid, in which preferential down-dip transport would be expected.)

   Waste Density Effects Considered: Yes

   Movement Due to Hydrocarbon Production Included: No, because no known hydrocarbon production was found in the injection interval.

   Washita Fredericksburg Injection Interval Waste Concentration Reduction Factor: $1x10^{-9}$
   Tuscaloosa Massive Sand Injection Interval Waste Concentration Reduction Factor: $1x10^{-8}$

   Maximum Waste Movement (by interval and simulated injectate density):

   - Washita-Fredericksburg Light Lateral Plume - Approximately 32,000 feet (6.1 miles) up-dip in a northerly direction from site center
   - Washita-Fredericksburg Heavy Lateral Plume - Approximately 96,000 feet (18.2 miles) down-dip in a southerly direction from site center
   - Tuscaloosa Massive Sand Light Lateral Plume - Approximately 34,500 feet (6.5 miles) up-dip in a northerly direction from site center
   - Tuscaloosa Massive Sand Heavy Lateral Plume - Approximately 82,500 feet (15.6 miles) down-dip in a southerly direction from site center
   - General Light Vertical Waste Movement - Approximately 406.7 feet through intact strata
   - Washita-Fredericksburg Light Vertical Waste Movement - Approximately 1,356 feet through a mud-filled borehole

- Tuscaloosa Massive Sand Light Vertical Waste Movement - Approximately 1,272 feet through a mud-filled borehole

Proposed Petition Reissuance Approval Conditions

This proposed approval of the Petition is subject to the following conditions, which are necessary to ensure that the standard in 40 C.F.R. § 148.20(a) is met. Noncompliance with any of these conditions is grounds for termination of the exemption in accordance with 40 C.F.R. § 148.24. This proposed exemption is applicable to the Chemours injection Wells 2, 3, 4, and 5 located at the DeLisle Plant in Pass Christian, Mississippi.

1. Injection of restricted waste shall be limited to the following injection zone:

Well	Depth of Injection Zone
2	8,035' – 10,042'[4]
3	8,045' – 10,038'[4]
4	8,003' – 10,023'[4]
5	8,003' – 10,043'[4]

The injection interval shall be defined by the following correlative log depths:

Well	Injection Interval	Depth of Injection Interval
2	Tuscaloosa Massive Sand	9,392' – 9,597'[5]
2	Washita-Fredericksburg	9,802' – 10,042'[5]
3	Tuscaloosa Massive Sand	9,315' – 9,590'[5]
3	Washita-Fredericksburg	9,796' – 10,038'[5]
4	Tuscaloosa Massive Sand	9,344' – 9,550'[5]
4	Washita-Fredericksburg	9,750' – 9,980'[5]
5	Tuscaloosa Massive Sand	9,268' – 9,560'[5]
5	Washita-Fredericksburg	9,746' – 10,043'[5]

2. Individual well injection rates, site-wide instantaneous injection rate, and site-wide monthly volumetric injection shall not exceed:

   Well 2 Rate Maximum: 550 gpm
   Well 3 Rate Maximum: 550 gpm
   Well 4 Rate Maximum: 550 gpm
   Well 5 Rate Maximum: 1000 gpm
   Site Instantaneous Maximum: 2200 gpm
   Monthly Volumetric Maximum: (2200 gpm) x (1440 minutes/day) x (# of days in that month)

3. Chemours shall cease injection into Wells 2, 3, 4, and 5 by December 31, 2050.

([4]Injection zone depths are approximate and referenced to ground surface from well-specific dual injection/laterolog geophysical well logs.)
([5] Injection interval depths are approximate and referenced to ground surface from well-specific dual injection/laterolog geophysical well logs.)

4. The characteristics of the injected waste stream for exempted wells will conform to those discussed in Section 6 and Table 6-1 of the 2018 Petition Reissuance document for Wells 2, 3, 4, and 5. The density of the waste stream injected into each interval shall remain within the range of 1.04 g/cm^3 to 1.36 g/cm^3 measured at 70^{0}F and 1 atmosphere and equivalent to a specific gravity range of 1.04 to 1.36 measured at 70^{0}F and 1 atmosphere and referenced to 70^{0}F.

5. The proposed approval for injection is limited to the following hazardous waste codes:

Waste Code	Compound
D002	Corrosive
D004	Arsenic
D005	Barium
D006	Cadmium
D007	Chromium
D008	Lead
D009	Mercury
D010	Selenium
D011	Silver

6. Chemours must petition for approval to inject any additional hazardous waste not included in Condition No. 5, above. Chemours must also petition for approval to increase the concentration of any waste which would necessitate the recalculation of the limiting concentration reduction factor and the extent of the waste plume. Petition reissuances and modifications shall be made pursuant to 40 C.F.R. § 148.20 (e) or (f).

7. Chemours shall annually submit to the EPA the results of bottom-hole pressure surveys for injection wells. These surveys shall be performed after shutting in each well for a period of time sufficient to allow the pressure in the injection interval to reach equilibrium, in accordance with C.F.R. § 146.68(e)(1). This test shall be performed on a rotating basis annually so that each operational well is tested.

   The annual report should include a comparison of reservoir parameters determined from the falloff tests with parameters used in the Petition. The report should include a comparison of the current year's test results for the static and flowing bottomhole pressures with the values demonstrated in the Petition. The report should also include a comparison of the test results for transmissibility with the transmissibilities used in the Petition for the pressure buildup and 10,000-year plume modeling.

8. Chemours shall also annually submit to the EPA a waste sample report, radioactive tracer survey, and annulus pressure test for all injection wells.

   The analytical reports for one of the quarterly composite samples of the waste stream required by the Mississippi Department of Environmental Quality (MDEQ) UIC permit MSI-1001 Part I Section C.2 is acceptable for meeting this requirement. The report should contain results for the following analytes: Total Acidity, Specific Gravity, Total Iron, Total Chromium, Total Vanadium, Total Lead, Total Manganese and Volatile Organic Compounds. Test methods and procedures shall be as specified in 40 C.F.R. 136 or 40 C.F.R. 261 Appendix A.

9. In the event that an injection well covered by this exemption loses mechanical integrity, Chemours shall notify the EPA orally within 24 hours from the time Chemours becomes aware of such circumstances. A written submission shall also be provided within five (5) days of the time Chemours becomes aware of the circumstances. The written submission shall contain a description of the loss of mechanical integrity and its cause, the period during which the well lost mechanical integrity, including exact dates and times, and if the loss of mechanical integrity has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of such loss.

   Chemours shall also notify the EPA at least thirty (30) days prior to any work on, or plugging of, an injection well covered by this exemption, unless such work is necessary to minimize or correct any adverse impact on human health or the environment. In such a circumstance, Chemours shall submit to the EPA a report describing the work performed within five (5) days of commencing such work.

10. Occurrence of any of the following shall subject this exemption to review by the EPA:
    a. The expiration, cancellation, reissuance, or modifications of a MDEQ UIC permit for Wells 2, 3, 4, and 5;
    b. The modification of a permit to convert Well 1 to an injection well; or
    c. The modification of a permit to construct Well 6 or 7.

11. Prior to putting a new well into operation (Wells 1, 6, or 7) for injection of any substance, Chemours shall submit to the EPA a certification stating that operation of such well(s) will not impact any facts relevant to its demonstration in the Petition that to a reasonable degree of certainty, there will be no migration of hazardous constituents from the injection zone for as long as the waste remains hazardous.

12. After Well 1 conversion from a monitoring well to an injection well or construction of Well 6 or 7, but before any waste is injected, Chemours shall submit to the EPA an accurate bottom-hole completion diagram, a report containing all well logs, and the results of Mechanical Integrity Tests (MITs) for the new injection well.

13. Chemours is prohibited from injecting hazardous waste into any new injection wells, including Wells 1, 6, or 7, until the EPA takes further action to authorize such injection. The EPA reserves the right to hold public comment on the addition of a new injection well prior to taking such action.

    Chemours must notify the EPA if any of the events described in conditions 10-13 occur. A new demonstration may be required if information shows that the basis for granting the exemption is no longer valid under 40 C.F.R. § 148.23 and 148.24.

In addition to the above conditions, this proposed approval of the Petition is contingent on the validity of all information submitted by Chemours. Any exemption is subject to termination upon occurrence of any of the conditions listed in 40 C.F.R. § 148.24, including noncompliance with a condition of the exemption, failure to disclose fully all relevant facts or misrepresentation of any relevant facts, or a determination that new information shows that the basis for approval is no longer valid.