

STATE OF VERMONT
AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

ENVIRONMENTAL PROTECTION RULES, CHAPTER 11
UNDERGROUND INJECTION CONTROL REGULATIONS

UNDERGROUND INJECTION WELL CLOSURE PERMIT

Permit Number: 6-0035

PIN: SJ96-0286

Contact: Ms. Robin Reilly, Land and Reclamation Manager

Permittee: Imerys Talc America, Inc. (Formerly known/permitted Luzenac America - Troy Talc Mine)
73 East Hill Road
Ludlow, Vermont

Project: Troy Mine

Description: Closure of open pit talc mine UIC drainage system

Project Location: Loop Road, South and East of VT 100, Troy, Vermont

Latitude/Longitude: 44.83385, -72.39324

I. Project Technical Documentation:

On June 5, 2017, the Vermont Underground Injection Control Program received notification of the intent to close a UIC injection well at the Troy Talc Mine. The UIC Program received the following documents:

- Underground Injection Control Program, UIC Permit #6-0035, Imerys Talc America, Inc. – Final Closure Plan, prepared by Geomapping Associates, LTD., dated May 30, 2017.
- UIC System Final Closure Plan, Troy Mine Site, Imerys Talc America, Inc., Troy, Vermont, prepared by James Purdy, dated May 1, 2017.

In accordance with all the “Conditions” hereinafter specified, the above-named permittee is hereby authorized to commence closure activities which consists of dismantling and removing various system components from the mine site, in accordance with the above referenced technical documents, as follows:

1. Dismantle and remove +/- 2200 ft. of 6" steel drainage pipeline installed on the ground surface from the former sump area to the infiltration basins (no excavation required);
2. Abandon the infiltration basins in-place and maintain the existing basin shoreline vegetation in an undisturbed condition. It is recognized that the infiltration basins will serve wetland functions and will be allowed to revegetate;
3. Abandon the (5) 2" monitoring wells located both upgradient and downgradient from the infiltration basins. Abandonment procedures are to conform with the Procedures for Closure of Abandoned Wells", Vermont Water Supply Rule, Part 12, Section 12.3.5;
4. Abandon the (3) 8" observation wells located adjacent to the former 940 level sump near the northern entrance of the mine. Abandonment procedures are to conform with the Procedures for Closure of Abandoned Wells", Vermont Water Supply Rule, Part 12, Section 12.3.5;

II. Conditions

1. The issuance of this permit by the Secretary relies upon the data, designs, judgement and other information supplied by the applicant, the applicant's consultants and other experts who have participated in the preparation of the application. The Secretary makes no assurance that the proposed closure plan will meet the compliance objectives of the applicant and no warranties or guarantees are given or implied.
2. The owner or operator shall characterize, dispose of or otherwise manage any soil, gravel, sludge, liquids, or other materials removed from or adjacent to the well in accordance with all applicable Federal, State, and local regulations and requirements.
3. Injection wells shall be plugged, abandoned and closed in a manner that assures future compliance with the Groundwater Protection Rule and Strategy.
5. The (2) deep 6" bedrock monitoring wells located adjacent to the former 940 level sump near the northern entrance of the mine are to remain in place. If these wells are to be abandoned, closure procedures shall conform with the Procedures for closure of abandoned wells contained in the Vermont Water Supply Rule.
4. The permittee shall not cause an increase of the State of Vermont's Drinking Water Standards or Groundwater Quality Standards, in the receiving groundwater. In the case of naturally occurring elements, the permittee shall not cause an exceedance of background groundwater concentrations.
5. Within 30 days of plugging or abandoning an injection well, the permittee shall provide a statement that the well (and associated appurtenances) was closed in accordance with the plan previously submitted to the Secretary; or where actual plugging or abandonment differed from the plan previously submitted, an updated version of the plan specifying the differences shall be submitted.

6. Upon notification of the closure of the injection well to the satisfaction of the Secretary, the permit may be administratively revoked by the Secretary, without a public hearing, with a written request signed by the permittee.
7. All applicable fees associated with the project remain due until the above referenced statements are received.
8. All reports and any other notification required by any condition of this permit shall be submitted to the UIC Program at:

Underground Injection Control Program
Department of Environmental Conservation
Drinking Water & Groundwater Protection Division
One National Life Drive – Main 2,
Montpelier, VT 05620-3521

9. Effect of this permit: The issuance of this permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of other State or local law or regulations.
10. This permit is effective this 31st day of August 2017.

Emily Boedecker, Commissioner
Department of Environmental Conservation

By: Bryan R. Redmond
Bryan R. Redmond, Division Director
Drinking Water and Groundwater Protection Division