

**PERMIT**  
**Under the Environmental Conservation Law (ECL)**

**Permittee and Facility Information**

**Permit Issued To:**  
CARGILL INCORPORATED  
15407 MCGINTY RD W  
WAYZATA, MN 55391-2399  
(518) 477-1702

**Facility:**  
CAYUGA SALT MINE  
191 PORTLAND PT RD  
SOUTH LANSING, NY 14882

**Facility Location:** in SEVERAL COUNTIES THROUGHOUT THE STATE

**Facility Principal Reference Point:** NYTM-E: 374.213 NYTM-N: 4710.099  
Latitude: 42°31'59.0" Longitude: 76°31'54.0"

**Authorized Activity:** This permit authorizes mining activity on approximately 13,579.3 surface and underground acres during the permit term. Mining activity affects 79.97 surface acres within a 318.84 acre surface parcel and 13,307 underground acres on lands owned by Cargill Incorporated, the State of New York under Cayuga Lake and several private landowners. All processing equipment is located underground and salt storage occurs at the surface.

**Permit Authorizations**

**Mined Land Reclamation - Under Article 23, Title 27**

Permit ID 0-9999-00075/00001

(Mined Land ID 70052)

Renewal

Effective Date: 4/24/2019

Expiration Date: 4/23/2024

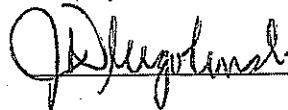
**NYSDEC Approval**

**By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, and all conditions included as part of this permit.**

Permit Administrator: JOSEPH M DLUGOLENSKI, Deputy Regional Permit Administrator

Address: NYSDEC Region 7 Cortland Sub-Office  
1285 Fisher Ave  
Cortland, NY 13045-1090

Authorized Signature: \_\_\_\_\_



Date 04/24/2019



**Permit Components**

MINED LAND RECLAMATION PERMIT CONDITIONS

GENERAL CONDITIONS, APPLY TO ALL AUTHORIZED PERMITS

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

**MINED LAND RECLAMATION PERMIT CONDITIONS**

1. **Post Permit Sign** The permit sign enclosed with this permit shall be posted in a conspicuous location on the worksite and adequately protected from the weather.
2. **Provide Person during DEC Inspection** The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when notification is provided, be it written or verbal, at least 24 hours prior to such inspection.
3. **Conformance With Plans** All activities authorized by this permit must be in strict conformance with the approved plans submitted by the applicant or applicant's agent as part of the permit application. Such plans were approved by the Department on various dates and consist of the following items:
  - \* Mining Permit Application Form dated October 2, 2017.
  - \* Shawn Wilczynski's renewal cover letter to David Bimber dated August 29, 2017.
  - \* Mining Plan Renewal titled "Cayuga Mine 5 YR Mine Plan 2017/2018 Fiscal Yr" prepared by Cargill Deicing Technology dated August 2017.
  - \* Stormwater Pollution Prevention Plan prepared by Spectra Environmental Group, Inc. dated January 2016.
  - \* Response to Notice of Incomplete Application dated January 26, 2016.
  - \* Response to Notice of Incomplete Application dated March 7, 2016.
  - \* Response to Notice of Incomplete Application dated March 23, 2016.
  - \* Response to Notice of Incomplete Application dated April 13, 2016.
  - \* Clarification of Technical Details dated May 13, 2016.
  - \* Organizational Report Form dated October 15, 2015.
  - \* Full Environmental Assessment Form dated October 15, 2015.

- \* Modification Application For Permit to Mine prepared by Spectra Environmental Group, Inc. dated October 2015.
- \* January 15, 2015 letter from Spectra Environmental Group to David Bimber, response to Notice of Incomplete Application.
- \* Surface Mining Plan Map prepared by Spectra Environmental Group, Inc. dated October 9, 2015.
- \* Subsurface Mining Plan Map prepared by Spectra Environmental Group, Inc. dated October 10, 2015.
- \* Surface Reclamation Plan Map prepared by Spectra Environmental Group, Inc. dated October 13, 2015.
- \* Modification Application For Permit to Mine dated June 2014, revised January 2015.
- \* October 21, 2014 letter to David Bimber from John Klucsik, including September 25, 2014 response to John T. Boyd's Review from RESPEC.
- \* Expected Subsidence over Cayuga Mine Amended Area dated July 2013.
- \* Letter to David Bimber, Region 7 Permit Administrator from Russell S. Givens, Mine Manager dated August 21, 2012.
- \* Cargill Cayuga Mine, Mined Land Use Plan, Volume I, prepared by Spectra Environmental Group, Inc., in collaboration with Sear-Brown and RESPEC, dated December 22, 2000; revised March 15, 2002.
- \* Cargill Cayuga Mine Expanded Environmental Assessment, Volume II, prepared by Spectra Environmental Group, Inc., in collaboration with Sear-Brown and RESPEC, dated December 22, 2000.
- \* Cargill Cayuga Mine Expanded Environmental Assessment, Volume II plates, prepared by Spectra Environmental Group, Inc., in collaboration with Sear-Brown and RESPEC; dated December 22, 2000.
- \* Revised November 1988 and submitted with application for modification dated February 21, 1989.
- \* Plans prepared by Cargill, Incorporated dated February 19, 1975.

**4. No Deviation From Approved Plan** The permittee shall not deviate or depart from the approved mined land use plan without approval by the Department of an alteration or modification thereto.



**5. Bond, Surety to Remain in Force** Any required reclamation bond or other surety, in an amount determined by the Department, shall be maintained in full force and effect. Such a bond or other surety shall not be terminated until the reclamation of the mined area is approved by the department in writing.

**6. Financial Security and Liability Insurance**

- a. Cargill, Incorporated is responsible for maintaining financial security in a form acceptable to the Department throughout the life of this project for purposes of reclamation of all affected surface areas within the mine and proper closure of all shafts. For the permit term, the amount of such security shall be \$3,500,000.00.
- b. Cargill, Incorporated shall, during the permit term, maintain general liability insurance coverage in the minimum amount of \$1,000,000.00 for bodily injury and property damage which may arise from the operation of the Cayuga Mine. Cargill, Incorporated shall provide proof of such insurance upon the request of the Department.

**7. File Termination Notice** If the permittee discontinues operation, a termination notice must be filed within 60 days of termination of mining activities to the address below:

Regional Mined Land Reclamation Specialist  
NYSDEC Region 7 Headquarters  
615 Erie Boulevard W.  
Syracuse, NY 13204 -2400

**8. Maintain Area Markers for Permit Term** The permittee shall provide permanent markers such as stakes, posts or other devices acceptable to the Department to identify and delineate the permit area, as outlined on the approved Mining Plan Map. These markers are to be installed prior to the start of mining and shall be maintained for the duration of the permit term.

**9. Further Investigations**

- a. Cargill shall conduct further investigations of the disturbed salt zone, identified by seismic survey and shown on No. 6 Salt Structure contours (top of salt), which may exist near the west shore of the lake in the northern extended mineral lease area. Mine projections show that present plans are to extract this area sometime between 2016 and 2020. Further investigation of this disturbance needs to be completed and submitted to the Department for review before mining proceeds in this area.
- b. Cargill shall conduct further investigations and report on the adequacy of the thin rock overburden at the northern extent of the mineral lease area where the solid rock overburden becomes thinner where the glacial till and lake sediments thicken and lake depth increases and where mining is proposed for this area after 2030. This condition must be thoroughly analyzed for stability by Cargill and reviewed by the Department before mining proceeds in this area.

**10. Licensed Blaster Required** All blasting shall be undertaken, monitored and recorded by a blaster licensed by the New York State Department of Labor. The permittee shall maintain copies of all blasting records. Such records shall be made available to the Department (NYSDEC) upon request.

**11. Storage of Explosives** Storage of explosives on site shall conform to State of New York, Department of Labor Industrial Code Rule 39, found at 12 NYCRR 39:



Part 39.6 General Provisions for the Storage and Handling of Explosives  
Part 39.8 Construction and Maintenance of Magazines  
Part 39.9 Location of Magazines

**12. Prevent Injury** Blasting shall be conducted in a manner to prevent injury to persons and damage to public or private property outside the permit area.

**13. Blasting Conditions During Construction of the #4 Shaft** The following blasting conditions, in addition to the above blasting conditions, shall be enforced during the construction of the #4 shaft:

**1. Seismograph Monitoring**

All blasts shall be monitored with a properly calibrated seismograph. Seismographs shall be installed at the nearest residential receptor and any locations identified within the approved Mined Land Use Plan or locations determined by the Department. Seismograph records shall be provided to the Department upon request.

**2. Air Blast Limits**

Air blast shall not exceed 133 dB at the location of any dwelling, public building, school, church, or community or institutional building outside the permit area.

**3. Ground Vibration Limits**

Ground vibration shall not exceed the limits as per the attached ground vibration limits graph from the U. S. Bureau of Mines Report of Investigation 8507 (Figure B-1, Safe levels of blasting vibration for houses using a combination of velocity and displacement). Maximum peak particle velocity shall not exceed these limits at the location of any dwelling, public building, school, church, or community or institutional building outside the permit area.

**4. No Flyrock Beyond the Property Line**

There shall be no flyrock beyond the property line including flyrock that travels in the air or along the ground. In the event of flyrock beyond the property line, all blasting shall cease immediately and the flyrock incident shall be reported within 24 hours to the Regional Mined Land Reclamation Specialist. Blasting shall not resume until written approval to resume blasting is obtained from the Department.

**5. Blasting Hours**

Blasting may only be conducted between the hours of 9:00 a.m. to 5:00 p.m. Monday thru Saturday. Exceptions to these hours will require prior Department approval. Blasting is not allowed on Sundays or legal holidays.

**14. Operation**

- a. No surface mining activity of any kind, including clearing, stripping, grubbing, or berm construction other than that as shown on the approved plans shall occur within 25 feet of any adjacent surface property line without prior written approval from the Department's Region 7 Mined Land Reclamation Specialist.



- b. No underground mining activity shall occur beyond the boundary of Cargill's underground mineral rights without notice and approval by the adjoining property owner and only with the prior written approval of the Department's Region 7 Mined Land Reclamation Specialist.
- c. Off-site migration of dust resulting from surface operations, including salt processing, loading salt, on-site transport of salt, or use of heavy equipment, shall be controlled by using dust suppression methods including wetting with water, suitable mechanical or operational methods, paving, or approved chemical methods. Oils or petroleum products shall not be used to suppress dust.
- d. Cargill shall ensure that mine activities do not affect the quantity or quality of available ground and surface water except as may be authorized by the SPDES permit for the mine site. Cargill shall restore or replace water supplies determined by the Department to be no longer usable due to effects caused by Cargill's mining operation. Cargill shall undertake such tests or investigations as deemed necessary by the Department to aid in making its decision.
- e. Cargill shall notify the Department prior to any drilling of wells or boreholes it may undertake and shall provide the Department with copies of data obtained and a map depicting surface locations of such wells or boreholes. Where applicable, Cargill shall apply to the Department for any required permits.
- f. Surface equipment shall be operated in a manner to minimize noise levels.

**15. Reporting, Monitoring, and Notifications**

- a. For each year the mine is in operation, Cargill shall submit to the Department an Annual Report. The report shall be due on or before each anniversary date of the issuance of the permit. The Annual Report shall include:
  - (1) Certification signed by the Cargill Lansing Mine Manager that all mining related activities, to the best of his knowledge, conducted during the reporting year were in conformance with this permit and the approved plans, or that variances have been reported and managed.
  - (2) A summary of non-routine mining incidents as defined in Part b. of this Special Condition and any action taken by Cargill in response thereto or resolution thereof.
  - (3) An updated Mining Plan Map depicting the current extent of mining activities, and the proposed advancement of the working faces for the subsequent three years.
  - (4) The summary of in situ measurements of rock mechanics required by Part f. of this Special Condition.
  - (5) The summary of subsidence monitoring data required by Part e. of this Special Condition.
  - (6) Information regarding the source and volume of any water inflow into the mine, and the disposition of such water.



- (7) A summary of all other monitoring data required under the terms of this permit or Department SPDES permit issued to Cargill.
  - (8) Cargill is responsible for the funding of Consultant Services for a qualified mining engineering, geotechnical consultant, as may be required by the Department. The consultant shall assist the Department in its review of the Annual Report, permit modifications or alterations involving specific technical expertise, and shall attend the annual site meeting/underground inspections. There shall be a \$15,000 cap for services relating to the review of the Annual Report. Funding relating to permit modifications or alterations requiring consultant review shall not be capped due to the varying nature of potential future applications. Cargill shall fund the cost of the annual meeting/underground inspections, and will share the cost of joint inspections with American Rock Salt Co., LLC. The choice of the consultant shall rest in the sole discretion of the Department. The Department reserves the right to change its choice of consulting firm at any time upon written notice to Cargill specifying the new consultant and effective date of the new services. Cargill shall promptly process and pay invoices submitted by the Department's designated consultant. The Department shall cause the consultant to submit its invoices in a format and with such detail as Cargill may require of its own consultants. Cargill's commitment to fund the consultant services shall remain in effect as long as the permit remains in effect.
- b. Cargill shall immediately notify the Department's Region 7 Mined Land Reclamation Specialist of any non-routine mining incidents both surface and subsurface associated with activities related to this permit. Non-routine mining incidents shall mean incidents during mining, processing, or other mine-related activities that may adversely affect mine stability, ground and surface water and other natural resources, or the health, safety, welfare or property of the general public. The Department shall require Cargill to record any data which the Department believes may be of future value for adequate evaluation of a non-routine mining incident.
  - c. Upon transmittal or receipt, Cargill shall submit to the Department copies of all correspondence with the Mine Safety and Health Administration involving non-routine mining incidents as defined above.
  - d. Prior to undertaking any material change in the approved mining methods or techniques described in the documents listed in Special Conditions #3 & 4, Cargill shall submit to the Department a description of such modification in accordance with all applicable laws including the Uniform Procedures Act and State Environmental Quality Review Act.
  - e. Subsidence monitoring shall be conducted in accordance with the approved subsidence monitoring plan contained in the approved Mined Land Use Plan. Summaries of data collected shall be submitted to the Department as part of the Annual Report. Exceptions to anticipated trends shall be noted and explained to the Department after the data is collected and the exceptions to anticipated behavior are established.
  - f. In situ measurements of rock mechanics shall be collected in accordance with the approved Mined Land Use Plan. A summary of the data collected shall be submitted to the Department



as part of the Annual Report. Data including plots of relevant graphs shall be submitted to the Department upon request. Exceptions to anticipated trends in rock behavior shall be noted and explained to the Department after the data is collected and the exceptions to the anticipated behavior are established. If closure rates are higher than anticipated, then Cargill shall increase the frequency of measurement in the affected area and submit for review and approval by the Department a plan and implementation schedule for corrective action.

- g. Cargill must maintain a written record, and make it available to the Department upon request, of all written citizen complaints received by Cargill and any responses by Cargill thereto.
- h. Reports and Notifications required by this permit shall be submitted to the attention of the Region 7 Mined Land Reclamation Specialist.

**16. Strip and Stockpile Soils for Reclamation** Prior to the excavation of previously undisturbed areas, topsoil and overburden shall be stripped, stockpiled separately, and used for reclamation of mined areas. These stockpiles shall be seeded to establish a vegetative cover within 30 days, or as soon as practicable following their construction. The permittee shall locate all overburden stockpiles within the permitted area of the approved Life of Mine. Sufficient quantities of topsoil must be retained on the site for use in reclamation, unless prior approval is granted by the Department.

**17. No Unpermitted Discharge Outside Limits of Mine** There shall be no natural swales or channels or constructed features such as ditches, pipes, etc., that are capable of discharging waters to any offsite areas or to any areas outside the limits of the Life of Mine except those explicitly described and shown in the narrative and graphic portions of the approved Mined Land Use Plan. All silt laden water and storm water generated on, or running across, the site shall be retained within the approved project area. The permittee must comply with all applicable State Pollutant Discharge Elimination System (SPDES) permit requirements and provide necessary notifications for off-site point source discharges.

**18. Groundwater Protection** Without restricting the right of the Department to take any other alternative action it is authorized by law to take, if, after an initial assessment by the Department, it is suspected that shaft construction operations have impacted the quantity or quality of groundwater at or in the vicinity of the site, the Department may direct the permittee to take any or all of the following steps to address the situation:

- A. The permittee must immediately supply water at its expense to the impacted property or properties, and must continue to supply water to the impacted property or properties unless and until the permittee can demonstrate to the satisfaction of the Department that the mining operation is not a contributing cause to the identified impacts. In the event that the impacted water supply is utilized as a drinking water source, potable water must be supplied.
- B. The permittee shall undertake tests or investigations as deemed necessary by the Department to aid in determining the cause of the identified impacts.
- C. If the Department concludes that the shaft construction operation has negatively impacted groundwater at or in the vicinity of the site, the permittee must, at its expense, and with consent of the landowner, provide an alternate, permanent source of water to the impacted property or properties. In the event that the impacted water supply is utilized as a drinking water source, the permittee must connect any impacted property or properties to a municipal water supply system, if available, or, if a municipal



water supply system is unavailable to the impacted property or properties, a permanent potable water source must be supplied.

**19. Permit Does Not Apply to Structures and Safety Aspects** Unless expressly provided for, the issuance of this permit does not apply to any structures contained on the plans or in the specifications, nor does this permit apply to safety aspects of the operation and/or reclamation plan.

**20. Human or Archaeological Remains** If any human remains or archaeological remains are encountered during excavation, the permittee must immediately cease, or cause to cease, all work in the area of the remains and notify

Regional Permit Administrator  
NYSDEC Region 7 Cortland Sub-Office  
1285 Fisher Ave  
Cortland, NY 13045 -1090

Work shall not resume until written permission to do so has been received from the Department.

**21. Fueling of Equipment and Reporting of Spills** Fueling of equipment shall be controlled to prevent spillage. Any spillage of fuels, waste oils, other petroleum products or hazardous materials shall be reported to the Department's Spill Hotline number (1-800-457-7362) within 2 hours. The permittee shall retain the Department's Spill Response number for immediate access in the permittee's office and at the mine site.

**22. Load Trucks in Conformance with Vehicle and Traffic Law Section 380-a(1)** The permittee shall ensure that all trucks are loaded in conformance with Vehicle and Traffic Law Section 380-a(1). Open trucks or trailers utilized for the transportation of minerals shall be equipped with a cover, tarpaulin or other device which completely closes in the opening of the truck while in operation, unless the load is arranged so that no mineral can fall from or blow out of such truck.

**23. Dust Control** Water or other approved dust palliatives must be applied to haulageways and other parts of the mine, as often as necessary, to prevent visible dust from leaving the mine property.

**24. Right to Require Additional Protective Measures** Neither the issuance of this permit, nor the grant of any approval hereunder, shall prejudice any right of the Department including but not limited to the right to require that additional protective measures be implemented as may be necessary to protect the natural resources of the State or the health, safety and welfare of the general public.

**GENERAL CONDITIONS - Apply to ALL Authorized Permits:**

**1. Facility Inspection by The Department** The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.



A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

**2. Relationship of this Permit to Other Department Orders and Determinations** Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

**3. Applications For Permit Renewals, Modifications or Transfers** The permittee must submit a separate written application to the Department for permit renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing. Submission of applications for permit renewal, modification or transfer are to be submitted to:

Regional Permit Administrator  
NYSDEC Region 7 Cortland Sub-Office  
1285 Fisher Ave  
Cortland, NY13045 -1090

**4. Submission of Renewal Application** The permittee must submit a renewal application at least 30 days before permit expiration for the following permit authorizations: Mined Land Reclamation.

**5. Permit Modifications, Suspensions and Revocations by the Department** The Department reserves the right to exercise all available authority to modify, suspend or revoke this permit. The grounds for modification, suspension or revocation include:

- a. materially false or inaccurate statements in the permit application or supporting papers;
- b. failure by the permittee to comply with any terms or conditions of the permit;
- c. exceeding the scope of the project as described in the permit application;
- d. newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
- e. noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

**6. Permit Transfer** Permits are transferrable unless specifically prohibited by statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.



## NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

### **Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification**

The permittee, excepting state or federal agencies, expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees, and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under Article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

### **Item B: Permittee's Contractors to Comply with Permit**

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

### **Item C: Permittee Responsible for Obtaining Other Required Permits**

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

### **Item D: No Right to Trespass or Interfere with Riparian Rights**

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.