



June 30, 2023

Kevin Balduzzi
Deputy Regional Permit Administrator
Division of Environmental Permits – Region 7
NYS Department of Environmental Conservation
5786 Widewaters Parkway
Syracuse, NY 13214-1867

Subject: Mining Permit Modification
Cargill, Inc.
Cayuga Salt Mine
DEC #0-9999-00075/00001, MLF #70052

Dear Mr. Balduzzi:

On behalf of Cargill, Inc. (IGN), JMT of New York, Inc. (JMT) is submitting three (3) copies of the enclosed Mining Permit Modification Application for the above referenced site at the request of the New York State Department of Environmental Conservation (NYSDEC). Cargill currently holds a NYSDEC Mining Permit (#0-9999-00075/00001) for the Cayuga Salt Mine (#70052). The submission of this application is made without prejudice to Cargill's position that the update to the water storage location does not require a modification to its permit.

This modification application includes Modification Application narrative, Mining Plan Maps, Mining Permit Application Form and Organizational Report, and a Full Environmental Assessment Form.

If you should have any questions or require further information, please do not hesitate to contact me at (518) 782-0882 or edavidson@jmt.com.

Sincerely,

JMT of New York, Inc.

Edward G. Davidson, PG
Associate Vice President

Attachments

ecc w/ att.: Z. Scopa, Cargill, Inc.
S. Wilczynski, Cargill, Inc.
K. Roe, Barclay Damon, LLP
P. Naughton, Barclay Damon, LLP
T. Rigley, NYSDEC Region 7



MODIFICATION APPLICATION FOR PERMIT TO MINE

**CARGILL, INC.
CAYUGA SALT MINE
LANSING, NEW YORK**

**NEW YORK STATE DEPARTMENT
OF ENVIRONMENTAL CONSERVATION
MLF # 70052**

Prepared for:

Cargill, Inc.
Post Office Box B
191 Portland Point Road
Lansing, New York 14822

Prepared by:

JMT of New York, Inc.
19 British American Boulevard
Latham, New York 12110

Submitted: June 2023

Project No. 20-01312N-003





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1.0 INTRODUCTION

Cargill, Inc. (Cargill) mines salt at the Cayuga Salt Mine in the Town of Lansing, Tompkins County, New York. Mining is conducted in underground salt seams beneath Cayuga Lake, within lands leased from the New York State Office of General Services (OGS), with supporting surface and sub-surface facilities located in the Town of Lansing. Virtually all the salt mined from Cargill's Cayuga Mine is sold as road salt for de-icing highways and bridges in the Mid-Atlantic, Northeast, and New England states.

Cargill is authorized to mine salt at the Cayuga Salt Mine under the Mined Land Reclamation Law (MLR) through a permit issued by the New York State Department of Environmental Conservation (NYSDEC ID: 0-9999-00075/00001). Mining is not prohibited at this site by state, county, or town law. Cargill controls 13,625 acres of land at the Cayuga Salt Mine, including land above and below the surface. Of those 13,625 acres, approximately 13,579 acres are within the current Life-of-Mine, and 9,410 acres are actively used for mining activities (storage, processing, bagging, etc.).

Cargill has engaged Johnson Mirman and Thompson, Inc. (JMT) to prepare this Modification Application at the request of NYSDEC to amend Cargill's current water storage practices.

2.0 MINE PLAN

2.1 SITE LOCATION AND HISTORY

Cargill's Cayuga Salt Mine is located in the Town of Lansing, Tompkins County, New York. The mine's surface facilities are located off Portland Point Road on the east side of Cayuga Lake, approximately as shown on the Site Location Map (Figure 1). The mine itself is located beneath a portion of Cayuga Lake and the surrounding area (including lands owned by Cargill and lands of others for which Cargill has obtained mineral rights). Cargill has historically mined salt from lands it owns and leases in other areas east and west of Cayuga Lake (see Plate 1).

This modification application proposes to amend water storage practices in the Cayuga Salt Mine.

2.2 ENVIRONMENTAL SETTING

2.2.1 Adjacent Land Use Features

Most of the current mining area is located under the Cayuga Lake, as shown on the Location Plan Map (Figure 1). Land-uses in the vicinity, in addition to the lake, include the Norfolk-Southern Railroad (along the eastern shore of the lake), Taughannock Falls State Park (on the west side of Cayuga Lake adjacent to the northernmost workings of the underground mine), Lansing Park (on the east side of the lake northwesterly of the surface operations of the Cayuga Salt Mine and easterly, southerly and northerly of the underground extraction areas).

Cargill's current OGS lease area extends under the Cayuga Lake to the limits shown on the Location Plan Map. The mine area extends easterly of the surface facilities to the area east of N.Y.S. Route 34. The majority



of this area is occupied by open space, farmland, rural residential or commercial land uses. Cargill also leases lands to the west of the Cayuga Lake as also shown on the Site Location Map.

2.2.2 Present Conditions of the Land

The surface lands at the Cayuga Salt Mine are occupied by operational features such as hoist houses, salt storage pads, conveyors, salt storage buildings, a bagging facility, corporate offices, a railroad siding (complete with rail-bulk loading facilities), surface exposures of shafts, truck-loading, and other facilities. The present condition of the land surface at the Cayuga Salt Mine is shown on the Surface Mining Plan Map (Plate 1).

2.3 MINING METHOD

2.3.1 Description of Facility and Mining Method

The Cayuga Salt Mine is an underground rock salt mine accessed by four (4) vertical shafts from Cargill's surface complex located at Portland Point Road, and Ridge Road in the Town of Lansing. The mine has its processing facility located underground. Bulk loading, bagging and bulk storage facilities are located at Cargill's surface complex. Cargill's surface facility as well as Shafts 1, 2 3, and 4 are indicated on the Subsurface Mining Plan Map (Plate 2).

There are no proposed changes to Cargill's existing and approved mining operations and methods.

During operations of the underground mine, groundwater inflow is managed by the facility. Inflow sources and rates are well understood, and water has been managed at various locations across the underground mine over decades of mining at the Cayuga Salt Mine. Although Cargill has managed water at the mine at various underground locations, a recently proposed update to the water storage location has led NYSDEC to request submission of this Modification Application. There are no other proposed changes to Cargill's existing and approved mining operations and methods.

2.3.2 Water Handling and Storage

To extend the mine's water storage capacity, Cargill plans to establish additional water storage area capacity within portions of 6-Level. Figure 2 illustrates the planned water storage area. Water will be pumped to this water storage area from other areas of the mine. The proposed storage area on 6-Level is estimated to have the capacity to provide at least 15 years of water storage at the current inflow rates.

2.4 ASSESSMENT AND MITIGATION OF POTENTIAL ENVIRONMENTAL IMPACTS

Cargill commissioned several studies to assess whether the use of the proposed water storage area could impact geotechnical parameters. These studies were provided to third-party expert mining and geologic consultant, JT Boyd Company (Boyd), for review. Boyd concluded that "installation of the sump will not cause global instability of the mine, the S3 Submain, or E5 panel," and recommended certain measures to monitor the activity. While Cargill has historically operated an extensive monitoring plan consistent with



Boyd's recommendations, Cargill has further developed its monitoring plan (Appendix C) to update and memorialize monitoring practices per Boyd's most recent recommendations.

The proposed modification regarding underground water storage location is an update to (change in location of) a thoroughly studied and long-approved operational practice at the Cayuga Salt Mine. There are no potential surface impacts associated with the proposed change in water storage location.

3.0 RECLAMATION PLAN

This modification application applies to a proposed change in underground water storage location within the mine, and no changes in Cargill's currently approved Reclamation Plan are proposed. Cargill's Surface Reclamation Plan is included in this application as Plate 3.

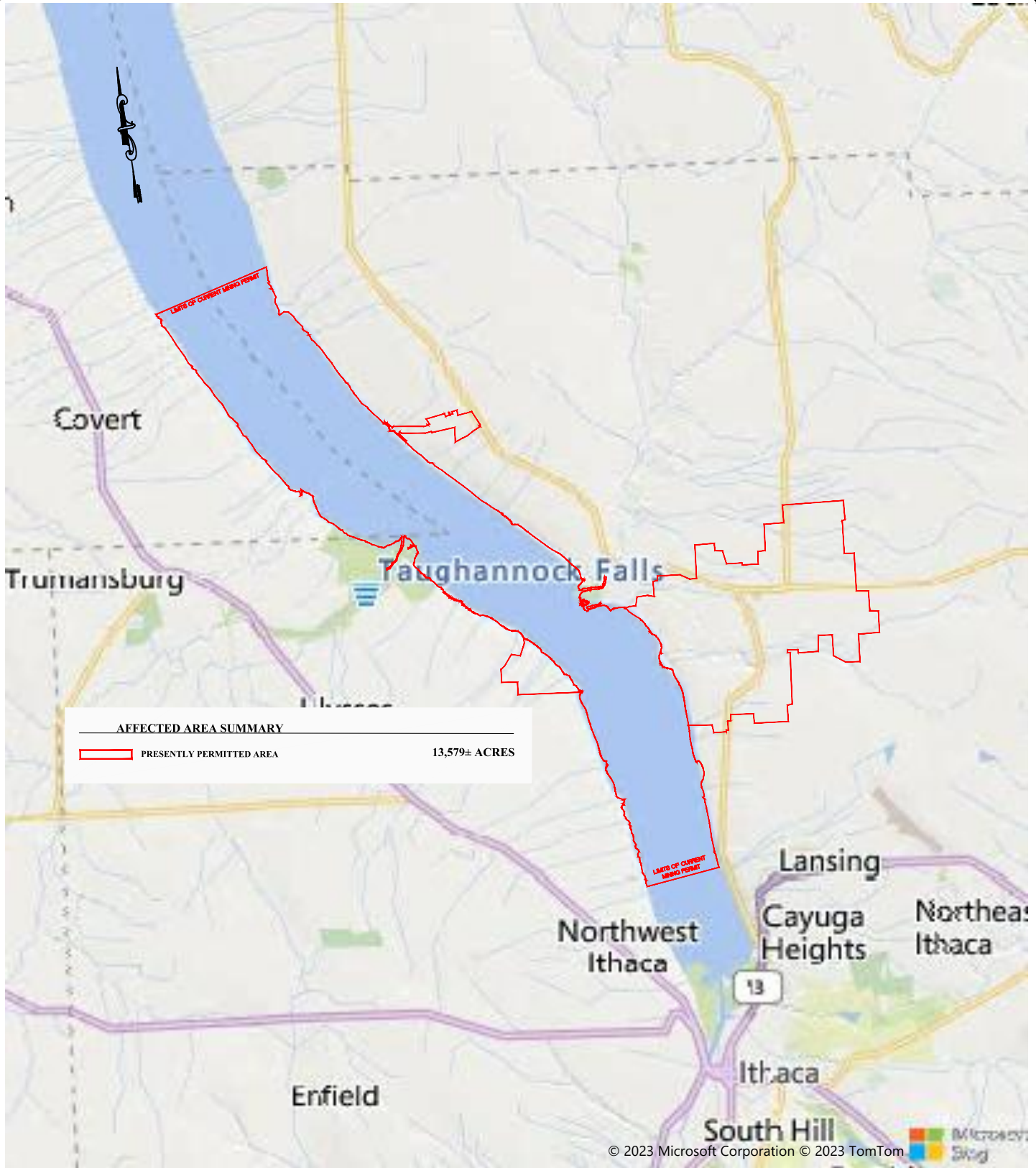


MODIFICATION APPLICATION FOR PERMIT TO MINE

MLF #70052

Cayuga Salt Mine, Lansing, NY

FIGURES

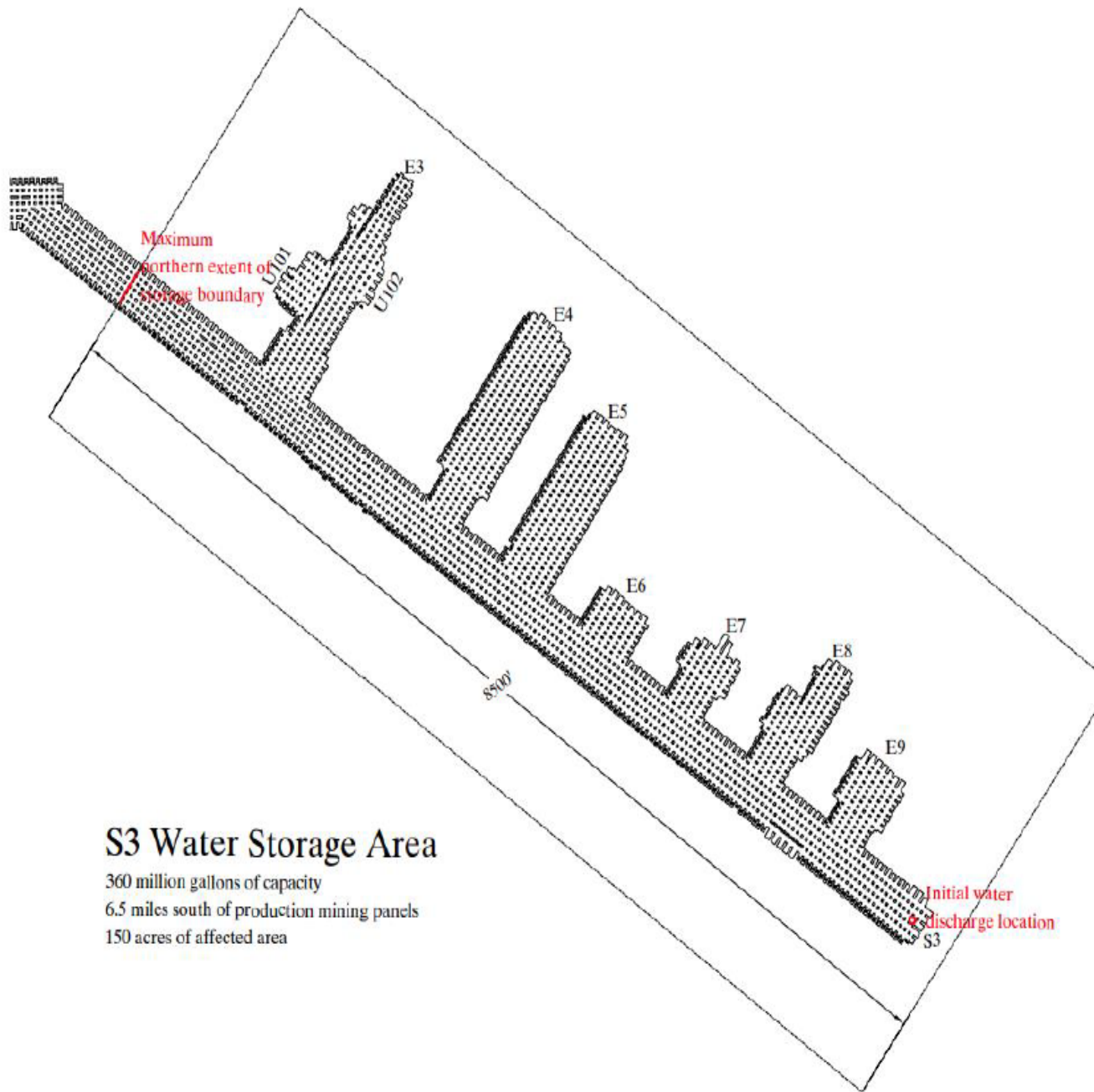


19 British American Blvd., Latham, New York 12110
 P: (518) 782-0882 F: (518) 782-0973 www.jmt.com

SITE LOCATION MAP
 CARGILL INC.
 CAYUGA SALT MINE

TOWN OF LANSING

CAYUGA CO., NY



S3 Water Storage Area
 360 million gallons of capacity
 6.5 miles south of production mining panels
 150 acres of affected area



19 British American Blvd., Latham, New York 12110
 P: (518) 782-0882 F: (518) 782-0973 www.jmt.com

WATER STORAGE AREA
 CARGILL, INC.
 CAYUGA SALT MINE
 TOWN OF LANSING TOMPKINS CO., NY

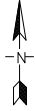


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Cayuga Salt Mine, Lansing, NY

PLATES



PORTLAND POINT ROAD



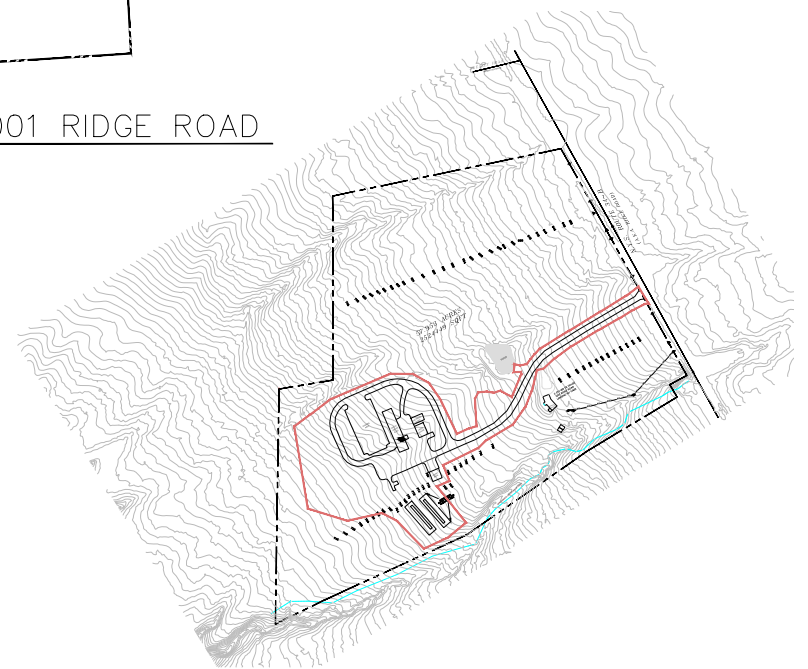
AFFECTED SURFACE AREA SUMMARY

PORTLAND POINT AFFECTED AREA ±67.67 ACRES
 1001 RIDGE ROAD AFFECTED AREA ±12.3 ACRES
 TOTAL SURFACE AFFECTED AREA ±79.97 ACRES

LEGEND

PROPERTY LINE

1001 RIDGE ROAD



NOTE: PROPERTY LINE AND PHYSICAL FEATURES SHOWN FOR 1001 RIDGE ROAD ARE TAKEN FROM A MAP ENTITLED "LANDS OF SANDRA STRUSKI (HOWEL)" PREPARED BY STOCKWIN SURVEYING OF HOMER, NEW YORK AND ARE NOT THE RESULT OF AN ACTUAL PROPERTY SURVEY PERFORMED BY SPECTRA ENGINEERING, ARCHITECTURE AND SURVEYING, P.C.

RECORD OF WORK					PROJECT		SURFACE MINING PLAN MAP	
NO.	DATE	DESCRIPTION	DESIGNED BY	DATE	PROJECT NO.	SCALE	TOWN	COUNTY
1	10/29/75	ADD 1001 RIDGE ROAD FACILITY	DTS		SP-0129H-003		TOWN OF LANSING	TOMPKINS CO., NY
2	11/21/21	TITLE BLOCK UPDATE	ADD					
					PREPARED BY: PAM			
					DRAWN BY: PAM			
					CHECKED BY:			
					APPROVED BY:			
					DATE:			
					CONTOUR INTERVAL = 5 FT FEET			
					SCALE: 1"=200'			

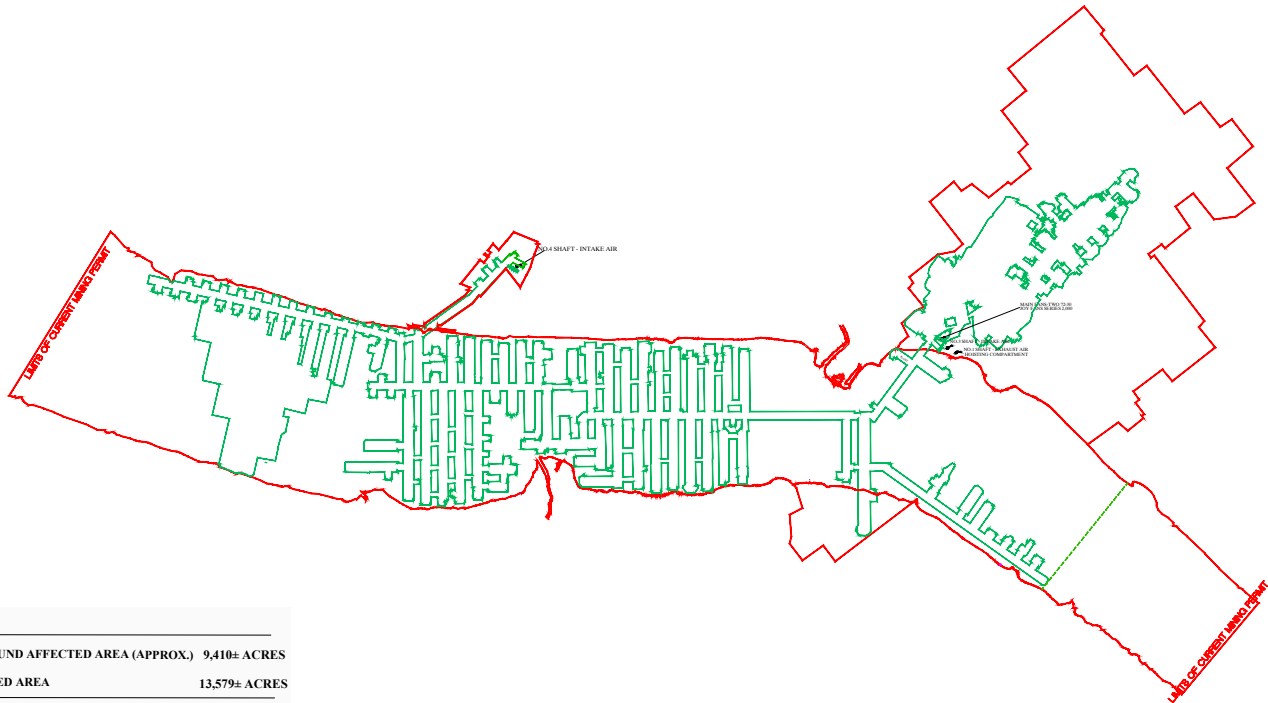
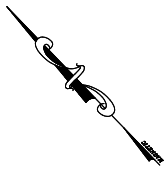
SURFACE MINING PLAN MAP

CARGILL, INC.
CAYUGA SALT MINE



TOWN OF LANSING TOMPKINS CO., NY



DATE: 12/16/2021 SCALE: 1"=200' (SHEET NO. 12120004) PLATE 1 OF 3



AFFECTED AREA SUMMARY

	CURRENT UNDERGROUND AFFECTED AREA (APPROX.)	9,410± ACRES
	PRESENTLY PERMITTED AREA	13,579± ACRES
TOTAL AFFECTED AREA		13,579± ACRES

NO.	DATE	RECORD OF WORK	DES	DD	APPV
1	4/28/14	LATERAL EXPANSION	EGG		
2	12/4/15	UPDATE AFFECTED AREA	EGG		
3	10/10/15	UPDATE AFFECTED AREA	DTIS		
4	11/23/20	TITLE BLOCK UPDATE	APP		
5	8/8/23	SUBSURFACE UPDATE	APP		

PROJECT	
PROJ. NO.	1519
PREPARED BY	EGG
DRAWN BY	EGG
CHECKED BY	
APPROVED BY	
DISTRICT	ML
CUSTOMER	
CONTOUR INTERVAL	FEET
2 500000 2000 4000	
1"=2000'	

SUBSURFACE MINING PLAN MAP

CARGILL INC.
CAYUGA SALT MINE

TOWN OF LANSING TOMPKINS CO., NY



13 Bland Avenue, Suite 200, Lansing, New York 13150
518.752.6827 | 518.752.6273 | www.jmt.com

DATE: 01/28/24 | SCALE: PG-2000 | PROJ. NO. 121910005 | PAGE 2 OF 3



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Cayuga Salt Mine, Lansing, NY

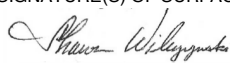
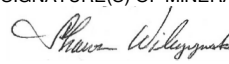
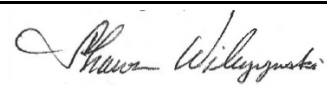
APPENDIX A

MINED LAND RECLAMATION PERMIT APPLICATION AND ORGANIZATIONAL REPORT FORM

Division of Mineral Resources MINING PERMIT APPLICATION



**Department of
Environmental
Conservation**

1. a. MINE FILE NUMBER 70052		1. b. DEC ID NUMBER 0-9999-00075/00001		7. MINED LAND PROJECT	
2. NAME OF APPLICANT Cargill Incorporated				a. Will the total acreage affected by mining for the entire mining site be equal to or greater than 5 acres? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
3. TELEPHONE NUMBER (607) 533-4221				b. Will the vertical depth from the top of the mine face to the floor exceed 20 feet? <input type="checkbox"/> Yes <input type="checkbox"/> No N/A	
4. PERMANENT ADDRESS: NUMBER & STREET NAME 191 Portland Point Road, Post Office Box B				c. Will there be on-site processing of mining products (eg. crushing, screening, washing) that requires an air permit? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
CITY Lansing		STATE NY	ZIP CODE 14882	d. Will mining occur within 100 feet of a surface water body (eg. stream, lake) or wetland area? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. CONTACT PERSON Zoe Scopa		6. a. TELEPHONE NUMBER (607) 533-3758		e. Will any consolidated materials be mined (eg. limestone, trap rock, sandstone)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
6. b. EMAIL ADDRESS zoe_scopa@cargill.com				f. Will mining occur within 500 feet of any dwelling? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
8. TAXPAYER ID (If other than individual, provide Federal Taxpayer ID Number) 14-0177680				g. Will mining ever occur below the water table? <input type="checkbox"/> Yes <input type="checkbox"/> No N/A	
10. a. PRESENT PERMIT TERM Expiration Date 4 / 23 / 2024		10. b. COMING PERMIT TERM <input checked="" type="checkbox"/> 5 years <input type="checkbox"/> Other ___ years		9. APPLICATION TYPE <input type="checkbox"/> New <input type="checkbox"/> Renewal <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Transfer	
12. LOCAL ORDINANCES a. Is mining prohibited at this location? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				11. NAME OF MINERAL/MATERIAL TO BE MINED Rock Salt	
13. a. ARE ANY OTHER STATE MINING PERMITS CURRENTLY HELD BY THE APPLICANT? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				12. b. Does the local government require any type of permit for mining at this location? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
14. Has any owner, partner, corporate officer or corporate director of your organization ever held any of these positions in another organization that has had a New York State mining permit SUSPENDED OR REVOKED or has had a New York State mined land reclamation bond FORFEITED ? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If YES, identify the person(s)				13. b. If YES, give Mine File Number(s)	
15. ACREAGE SUMMARY (To be filled in by applicant)				FOR OFFICIAL DEC USE ONLY	
a. Total acreage controlled by owner at this location		<u>13,625.8</u> acres		_____ acres	
b. Total acreage permitted by DEC prior to this application		<u>13,579.0</u> acres		_____ acres	
c. Total acreage affected since April 1, 1975		<u>9,410.0</u> acres		_____ acres	
d. Total acreage approved by DEC as reclaimed since April 1, 1975		<u>0.0</u> acres		_____ acres	
e. Current affected acreage (c minus d)		<u>9,410.0</u> acres		_____ acres	
f. Acreage included in this application, but not previously approved		<u>0.0</u> acres		_____ acres	
g. New acreage to be affected during the coming permit term		<u>0.0</u> acres		_____ acres	
h. Number of acres to be reclaimed during coming permit term		<u>0.0</u> acres		_____ acres	
16. NAME OF MINING OPERATION Cayuga Mine					
17. MINE LOCATION			18. MAP LOCATION		
Road <u>Portland Point Road</u>			a. Quadrangle Name <u>Ludlowville</u>		
Nearest Road Intersection <u>State Route 34B</u>			b. <input type="checkbox"/> 15 minute <input checked="" type="checkbox"/> 7 1/2 minute		
Town <u>Lansing</u>			FOR OFFICIAL DEC USE ONLY		
County <u>Tompkins</u>			LATITUDE: _____ LONGITUDE: _____ NAD 83		
19. NAME AND ADDRESS OF SURFACE LANDOWNER(S) Cargill, Incorporated PO Box 9300 Minneapolis, MN, 55440			20. NAME AND ADDRESS OF MINERAL OWNER(S) Cargill, Incorporated PO Box 9300 Minneapolis, MN, 55440		
21. The surface landowner(s) and the mineral owner(s) of the property that is to be mined by the above applicant have read the Mined Land Use Plan, which sets forth the applicant's mining and reclamation plan for the property to be mined, and hereby irrevocably consent and agree to the performance of the Mined Land Use Plan by the applicant, his surety or insurer, or the NYS Department of Environmental Conservation. The surface landowner(s) and mineral owner(s) further agree to allow access to the property to Department personnel for the purpose of conducting inspections or investigations in the regular course of their duties.					
SIGNATURE(S) OF SURFACE LANDOWNER(S) 		DATE 6/30/23	SIGNATURE(S) OF MINERAL OWNER(S) 		DATE 6/30/23
22. I hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.					
NAME, TITLE AND SIGNATURE OF APPLICANT OR AUTHORIZED REPRESENTATIVE Shawn Wilczynski, Mine Manager 				DATE 6/30/23	

ORGANIZATIONAL REPORT



**Department of
Environmental
Conservation**

INCOMPLETE FORMS ARE NOT ACCEPTABLE AND WILL BE RETURNED FOR COMPLETION

<p>1. FULL NAME AND COMPLETE MAILING ADDRESS OF THE ENTITY; INCLUDE NAME AND TITLE TO WHOM ALL CORRESPONDENCE SHOULD BE SENT.</p> <p>Cargill, Incorporated Salt Business Unit PO Box B 191 Portland Point Road Lansing, New York 14882</p> <p>EMAIL ADDRESS: TELEPHONE (607) 533-3736 FAX NUMBER (607) 533-4501</p>	<p>2. FULL NAME AND COMPLETE MAILING ADDRESS OF AGENT IN NEW YORK WHO CAN BE SERVED ORDERS, NOTICES AND PROCESSES OF THE DEPARTMENT OR ANY COURT OF LAW. POST OFFICE BOX ADDRESSES ARE NOT ACCEPTABLE.</p> <p>Shawn Wilczynski Mine Manager - Cayuga Mine Cargill Deicing Technology PO Box B191 Portland Point Road Lansing, New York 14882</p> <p>EMAIL ADDRESS: Shawn_Wilczynski@cargill.com TELEPHONE (607) 533-3700</p>
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3. TYPE OF ACTIVITY (Check those that apply)

<input type="checkbox"/> PRODUCTION—Oil, Gas, Injection or Geothermal Well(s)	<input type="checkbox"/> SOLUTION MINING—Own/Operate Facility
<input type="checkbox"/> STORAGE—Underground Gas or LPG Facility	<input type="checkbox"/> BRINE DISPOSAL—Own/Operate Facility
<input type="checkbox"/> PURCHASING—Of Oil or Gas from Others	<input type="checkbox"/> STRATIGRAPHIC—Own Well or Hole
<input type="checkbox"/> TRANSPORTATION—By Truck or Pipeline for Others	<input type="checkbox"/> SURFACE MINING—Own/Operate Facility
<input type="checkbox"/> PLUGGING—Plug and Abandon Wells for Others	<input checked="" type="checkbox"/> UNDERGROUND MINING—Own/Operate Facility
<input type="checkbox"/> DRILLING—Drill Wells for Others	

<p>4. STATE WHETHER THE ENTITY IS A CORPORATION, LIMITED LIABILITY COMPANY, ASSOCIATION, PARTNERSHIP, INDIVIDUAL, PUBLIC AUTHORITY OR GOVERNMENTAL AGENCY, OR TRUST. IF FOREIGN (OUT-OF-STATE) CORPORATION, GIVE STATE AND DATE OF INCORPORATION AND DATE OF AUTHORIZATION TO DO BUSINESS IN NEW YORK STATE. IF PARTNERSHIP, STATE WHETHER GENERAL OR LIMITED AND COUNTY OF FILING. IF DBA, GENERAL PARTNERSHIP OR ASSUMED NAME OF A LIMITED LIABILITY PARTNERSHIP, GIVE COUNTY OF FILING.</p> <p>Corporation (Delaware) Established 07/18/1930, and that a certificate of authority to do business in the State of New York was issued on 11/28/1936.</p>	<p>5. IF THE NAME ENTERED IN BOX 1 IS NEW, INCLUDE THE COMPLETE NAME AND ADDRESS OF THE PREVIOUS ENTITY.</p>
--	--

<p>6. IF ENTITY IS A CORPORATION OR ASSOCIATION, LIST ALL DIRECTORS AND ALL OFFICERS. IF A PARTNERSHIP, LIST ALL GENERAL AND ALL LIMITED PARTNERS. IF A LLC, LIST ALL MEMBERS. CHECK BOX IF ADDITIONAL SHEETS ARE ATTACHED. <input checked="" type="checkbox"/></p> <table border="0"> <thead> <tr> <th>NAME</th> <th>TITLE</th> </tr> </thead> <tbody> <tr> <td>Brian Sikes</td> <td>President and CEO</td> </tr> <tr> <td>See attached</td> <td></td> </tr> </tbody> </table>	NAME	TITLE	Brian Sikes	President and CEO	See attached		<p>7. LIST ALL PERSONS AUTHORIZED BY THE ENTITY TO SIGN ALL SUBMITTALS TO THE DEPARTMENT. AT LEAST ONE PERSON MUST BE LISTED.</p> <table border="0"> <thead> <tr> <th>NAME</th> <th>TITLE</th> </tr> </thead> <tbody> <tr> <td>Shawn Wilczynski</td> <td>Mine Manager - Cayuga Mine</td> </tr> <tr> <td>Steve Horne</td> <td>Mining Excellence Director</td> </tr> <tr> <td>Ryan Weese</td> <td>Underground Superintendent</td> </tr> <tr> <td>Peter Yunger</td> <td>Maintenance Superintendent</td> </tr> <tr> <td>Zoe Scopa</td> <td>Senior Mine Engineer</td> </tr> </tbody> </table>	NAME	TITLE	Shawn Wilczynski	Mine Manager - Cayuga Mine	Steve Horne	Mining Excellence Director	Ryan Weese	Underground Superintendent	Peter Yunger	Maintenance Superintendent	Zoe Scopa	Senior Mine Engineer
NAME	TITLE																		
Brian Sikes	President and CEO																		
See attached																			
NAME	TITLE																		
Shawn Wilczynski	Mine Manager - Cayuga Mine																		
Steve Horne	Mining Excellence Director																		
Ryan Weese	Underground Superintendent																		
Peter Yunger	Maintenance Superintendent																		
Zoe Scopa	Senior Mine Engineer																		

I affirm under penalty of perjury that the information provided in this report is true to the best of my knowledge and belief. I am aware any false statement made in this report is punishable pursuant to Section 210.45 of the Penal Law.

<p>TYPE OR PRINT NAME OF AUTHORIZED PERSON</p> <p>Zoe Scopa</p>	<p>SWORN TO AND SUBSCRIBED BEFORE ME, THIS <u>15th</u></p>	<p>JESSICA L. HALL Notary Public, State of New York No. 01HA6401119</p>
<p>SIGNATURE </p>	<p>DATE <u>6/15/2023</u></p>	<p>DAY OF <u>June</u> 20 <u>23</u> NOTARY PUBLIC </p> <p>Qualified in Tompkins County Commission Expires Dec. 2, 2023</p>

ORGANIZATIONAL REPORT ATTACHMENT

CARGILL EXECUTIVE TEAM

- Brian Sikes, President and CEO
- Julian Chase, Business Operations and Supply Chain
- Pilar Cruz, Chief Sustainability Officer
- Ross Hamou-Jennings, Chair of Asia Pacific
- Jennifer Hartsock, Chief Information and Digital Officer
- Ruth Kimmelshue, Animal Nutrition & Health
- Joanne Knight, Chief Financial Officer
- Stephanie Lundquist, Chief Human Resources Officer
- Jon Nash, Protein & Salt
- Philippa Purser, Head of Strategy and Global Process Leader
- Anna Richo, General Counsel, Chief Compliance Officer, Corporate Secretary
- Roger Watchorn, Agricultural Supply Chain and Corporate Trading
- David Webster, Food & Bio, Chief Risk Officer

CARGILL BOARD OF DIRECTORS

- James Brian Sikes, President and CEO
- Lucy C. MacMillan Stitzer
- Omar Ishrak
- Richard A. Cargill
- Richard H. Anderson
- Stephen J. Hemsley
- Virginia M. Rometty
- David D. MacMillan
- David Wood MacLennan
- John C. MacMillan, Jr.
- John S. Watson
- Katherine M. Rothschild
- Andrew C. Liebmann
- Bernard J. Poussot

CARGILL SALT BUSINESS LEADERS

- Sonya Roberts, Salt Group Leader
- Susan Haas, Business Operations & Supply Chain Salt Group Leader
- Christine Rupert, Road Safety Managing Director
- Michael Skoglund, Salt Group Lead Lawyer



MODIFICATION APPLICATION FOR PERMIT TO MINE

MLF #70052

Cayuga Salt Mine, Lansing, NY

APPENDIX B

FULL ENVIRONMENTAL ASSESSMENT FORM

Full Environmental Assessment Form
Part 1 - Project and Setting

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either “Yes” or “No”. If the answer to the initial question is “Yes”, complete the sub-questions that follow. If the answer to the initial question is “No”, proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1 is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project: Cargill Cayuga Mine - Modification Application - S3 Water Storage		
Project Location (describe, and attach a general location map): 191 Portland Point Road, Lansing, NY - See Attached Site Location Map		
Brief Description of Proposed Action (include purpose or need): Cargill is submitting a Mine Permit Modification Application to extend its water storage area to 6-Level of the Cayuga Salt Mine. Cargill plans to establish a water storage area within abandoned panels at the south end of the mine.		
Name of Applicant/Sponsor: Cargill, Inc.		Telephone: 607-533-4221
		E-Mail:
Address: 191 Portland Point Road, Post Office Box B		
City/PO: Lansing	State: New York	Zip Code: 14882
Project Contact (if not same as sponsor; give name and title/role): Zoe Scopa		Telephone: 607-533-3758
		E-Mail: zoe_scopa@cargill.com
Address: 191 Portland Point Road		
City/PO: Lansing	State: New York	Zip Code: 14882
Property Owner (if not same as sponsor):		Telephone:
		E-Mail:
Address:		
City/PO:	State:	Zip Code:

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. (“Funding” includes grants, loans, tax relief, and any other forms of financial assistance.)		
Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Council, Town Board, <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No or Village Board of Trustees		
b. City, Town or Village <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Planning Board or Commission		
c. City, Town or <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Village Zoning Board of Appeals		
d. Other local agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
e. County agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
f. Regional agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
g. State agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	NYSDEC - Mined Land Reclamation Permit	June 2023
h. Federal agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
i. Coastal Resources.		
i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? *		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
iii. Is the project site within a Coastal Erosion Hazard Area?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

C. Planning and Zoning

C.1. Planning and zoning actions.	
Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> • If Yes, complete sections C, F and G. • If No, proceed to question C.2 and complete all remaining sections and questions in Part 1 	
C.2. Adopted land use plans.	
a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes, identify the plan(s):	

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes, identify the plan(s):	

* The proposed action is within the mine entirely below Cayuga Lake.

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. Yes No
If Yes, what is the zoning classification(s) including any applicable overlay district?
NA - The operations proposed action are located in the mine under Cayuga Lake

b. Is the use permitted or allowed by a special or conditional use permit? Yes No

c. Is a zoning change requested as part of the proposed action? Yes No
If Yes,
i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? Lansing Central

b. What police or other public protection forces serve the project site?
Tompkins County Sheriff

c. Which fire protection and emergency medical services serve the project site?
Lansing (V, T)

d. What parks serve the project site?
Myers Park, Ludlowville Park

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Industrial

b. a. Total acreage of the site of the proposed action? _____ acres *
b. Total acreage to be physically disturbed? _____ acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 13625.84 acres

c. Is the proposed action an expansion of an existing project or use? Yes No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____

d. Is the proposed action a subdivision, or does it include a subdivision? Yes No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types) _____
ii. Is a cluster/conservation layout proposed? Yes No
iii. Number of lots proposed? _____
iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will the proposed action be constructed in multiple phases? Yes No
i. If No, anticipated period of construction: _____ months
ii. If Yes:
• Total number of phases anticipated _____
• Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
• Anticipated completion date of final phase _____ month _____ year
• Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

* No additional acres of land will be impacted. Cargill is currently to allowed to store brine water within the structure of the existing Cayuga Salt Mine.

f. Does the project include new residential uses? Yes No
 If Yes, show numbers of units proposed.

	<u>One Family</u>	<u>Two Family</u>	<u>Three Family</u>	<u>Multiple Family (four or more)</u>
Initial Phase	_____	_____	_____	_____
At completion	_____	_____	_____	_____
of all phases	_____	_____	_____	_____

g. Does the proposed action include new non-residential construction (including expansions)? Yes No
 If Yes,
 i. Total number of structures _____
 ii. Dimensions (in feet) of largest proposed structure: _____ height; _____ width; and _____ length
 iii. Approximate extent of building space to be heated or cooled: _____ square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? Yes No
 If Yes,
 i. Purpose of the impoundment: _____
 ii. If a water impoundment, the principal source of the water: Ground water Surface water streams Other specify: _____
 iii. If other than water, identify the type of impounded/contained liquids and their source. _____
 iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres*
 v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length *
 vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete): _____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? Yes No
 (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)
 If Yes:
 i. What is the purpose of the excavation or dredging? _____
 ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?
 • Volume (specify tons or cubic yards): _____
 • Over what duration of time? _____
 iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.

 iv. Will there be onsite dewatering or processing of excavated materials? Yes No
 If yes, describe. _____

 v. What is the total area to be dredged or excavated? _____ acres
 vi. What is the maximum area to be worked at any one time? _____ acres
 vii. What would be the maximum depth of excavation or dredging? _____ feet
 viii. Will the excavation require blasting? Yes No
 ix. Summarize site reclamation goals and plan: _____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? Yes No
 If Yes:
 i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

* Cargill is allowed to store brine within the Cayuga Salt Mine. The proposed action will not result in the creation of a new impoundment, instead using the existing S3 mains and adjacent panels, and is an approved use.

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

iii. Will the proposed action cause or result in disturbance to bottom sediments? Yes No

If Yes, describe: _____

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation? Yes No

If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____
- _____
- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

c. Will the proposed action use, or create a new demand for water? Yes No

If Yes:

i. Total anticipated water usage/demand per day: _____ gallons/day

ii. Will the proposed action obtain water from an existing public water supply? Yes No

If Yes:

- Name of district or service area: _____
- Does the existing public water supply have capacity to serve the proposal? Yes No
- Is the project site in the existing district? Yes No
- Is expansion of the district needed? Yes No
- Do existing lines serve the project site? Yes No

iii. Will line extension within an existing district be necessary to supply the project? Yes No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____
- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? Yes No

If, Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? Yes No

If Yes:

i. Total anticipated liquid waste generation per day: _____ gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): _____

iii. Will the proposed action use any existing public wastewater treatment facilities? Yes No

If Yes:

- Name of wastewater treatment plant to be used: _____
- Name of district: _____
- Does the existing wastewater treatment plant have capacity to serve the project? Yes No
- Is the project site in the existing district? Yes No
- Is expansion of the district needed? Yes No

<ul style="list-style-type: none"> • Do existing sewer lines serve the project site? <input type="checkbox"/> Yes <input type="checkbox"/> No • Will a line extension within an existing district be necessary to serve the project? <input type="checkbox"/> Yes <input type="checkbox"/> No <p>If Yes:</p> <ul style="list-style-type: none"> • Describe extensions or capacity expansions proposed to serve this project: _____ _____ _____ 	
<p>iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <ul style="list-style-type: none"> • Applicant/sponsor for new district: _____ • Date application submitted or anticipated: _____ • What is the receiving water for the wastewater discharge? _____ 	
<p>v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans):</p> <p>_____</p> <p>_____</p>	
<p>vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____</p> <p>_____</p> <p>_____</p>	
<p>e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p>i. How much impervious surface will the project create in relation to total size of project parcel?</p> <p style="padding-left: 40px;">_____ Square feet or _____ acres (impervious surface)</p> <p style="padding-left: 40px;">_____ Square feet or _____ acres (parcel size)</p> <p>ii. Describe types of new point sources. _____</p> <p>_____</p> <p>iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?</p> <p>_____</p> <p>_____</p> <ul style="list-style-type: none"> • If to surface waters, identify receiving water bodies or wetlands: _____ _____ • Will stormwater runoff flow to adjacent properties? <input type="checkbox"/> Yes <input type="checkbox"/> No 	
<p>iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	
<p>f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes, identify:</p> <p>i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)</p> <p>_____</p> <p>ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)</p> <p>_____</p> <p>iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)</p> <p>_____</p>	
<p>g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>ii. In addition to emissions as calculated in the application, the project will generate:</p> <ul style="list-style-type: none"> • _____ Tons/year (short tons) of Carbon Dioxide (CO₂) • _____ Tons/year (short tons) of Nitrous Oxide (N₂O) • _____ Tons/year (short tons) of Perfluorocarbons (PFCs) • _____ Tons/year (short tons) of Sulfur Hexafluoride (SF₆) • _____ Tons/year (short tons) of Carbon Dioxide equivalent of Hydrofluorocarbons (HFCs) • _____ Tons/year (short tons) of Hazardous Air Pollutants (HAPs) 	

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? Yes No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? Yes No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): _____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? Yes No

If Yes:

i. When is the peak traffic expected (Check all that apply): Morning Evening Weekend
 Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? Yes No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe: _____

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? Yes No

vii. Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? Yes No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? Yes No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? Yes No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other): _____

iii. Will the proposed action require a new, or an upgrade, to an existing substation? Yes No

l. Hours of operation. Answer all items which apply.

<p>i. During Construction:</p> <ul style="list-style-type: none"> • Monday - Friday: _____ • Saturday: _____ • Sunday: _____ • Holidays: _____ 	<p>ii. During Operations:</p> <ul style="list-style-type: none"> • Monday - Friday: _____ 24 hrs • Saturday: _____ Varies* • Sunday: _____ Varies* • Holidays: _____ Varies*
--	--

*No changes are proposed to existing hours of operation. Cargill operates several processes at different schedules, in accordance with their NYSDEC-approved Mined Land Use Plan. Generally, only "emergency" operations are conducted on holidays.

<p>m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If yes:</p> <p>i. Provide details including sources, time of day and duration:</p> <p>_____</p>
<p>ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Describe: _____</p> <p>_____</p>
<p>n. Will the proposed action have outdoor lighting? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If yes:</p> <p>i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:</p> <p>_____</p>
<p>ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Describe: _____</p> <p>_____</p>
<p>o. Does the proposed action have the potential to produce odors for more than one hour per day? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____</p> <p>_____</p>
<p>p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Product(s) to be stored _____</p> <p>ii. Volume(s) _____ per unit time _____ (e.g., month, year)</p> <p>iii. Generally, describe the proposed storage facilities: _____</p> <p>_____</p>
<p>q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Describe proposed treatment(s):</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>ii. Will the proposed action use Integrated Pest Management Practices? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Describe any solid waste(s) to be generated during construction or operation of the facility:</p> <ul style="list-style-type: none"> • Construction: _____ tons per _____ (unit of time) • Operation : _____ tons per _____ (unit of time) <p>ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:</p> <ul style="list-style-type: none"> • Construction: _____ _____ • Operation: _____ _____ <p>iii. Proposed disposal methods/facilities for solid waste generated on-site:</p> <ul style="list-style-type: none"> • Construction: _____ _____ • Operation: _____ _____

s. Does the proposed action include construction or modification of a solid waste management facility? Yes No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? Yes No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? Yes No

If Yes: provide name and location of facility: _____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility: _____

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

Urban Industrial Commercial Residential (suburban) Rural (non-farm)

Forest Agriculture Aquatic Other (specify): _____

ii. If mix of uses, generally describe: _____

The project site is located within Cargill's underground mine facility beneath Cayuga Lake.

b. Land uses and covertypes on the project site.*

Land use or Covertypes	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	NA	NA	NA
• Forested	NA	NA	NA
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	NA	NA	NA
• Agricultural (includes active orchards, field, greenhouse etc.)	NA	NA	NA
• Surface water features (lakes, ponds, streams, rivers, etc.)	NA	NA	NA
• Wetlands (freshwater or tidal)	NA	NA	NA
• Non-vegetated (bare rock, earth or fill)	NA	NA	NA
• Other Describe: _____	NA	NA	NA

*The area for the proposed action is within the Cargill Cayuga Salt Mine, which is located under Cayuga Lake. There is no current land use or cover for the area.

c. Is the project site presently used by members of the community for public recreation? Yes No
i. If Yes: explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? Yes No
If Yes,
i. Identify Facilities: _____

e. Does the project site contain an existing dam? Yes No
If Yes:
i. Dimensions of the dam and impoundment:
• Dam height: _____ feet
• Dam length: _____ feet
• Surface area: _____ acres
• Volume impounded: _____ gallons OR acre-feet
ii. Dam's existing hazard classification: _____
iii. Provide date and summarize results of last inspection: _____

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? Yes No
If Yes:
i. Has the facility been formally closed? Yes No
• If yes, cite sources/documentation: _____
ii. Describe the location of the project site relative to the boundaries of the solid waste management facility: _____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? Yes No
If Yes:
i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred: _____

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? Yes No
If Yes:
i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: Yes No
 Yes – Spills Incidents database Provide DEC ID number(s): _____
 Yes – Environmental Site Remediation database Provide DEC ID number(s): _____
 Neither database
ii. If site has been subject of RCRA corrective activities, describe control measures: _____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? Yes No
If yes, provide DEC ID number(s): _____
iv. If yes to (i), (ii) or (iii) above, describe current status of site(s): _____

v. Is the project site subject to an institutional control limiting property uses? Yes No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? Yes No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? _____ NA feet

b. Are there bedrock outcroppings on the project site? Yes No
 If Yes, what proportion of the site is comprised of bedrock outcroppings? _____ %

c. Predominant soil type(s) present on project site: * NA _____ %
 _____ %
 _____ %

d. What is the average depth to the water table on the project site? Average: _____ feet

e. Drainage status of project site soils: Well Drained: _____ NA % of site *
 Moderately Well Drained: _____ NA % of site
 Poorly Drained: _____ NA % of site

f. Approximate proportion of proposed action site with slopes: 0-10%: _____ NA % of site *
 10-15%: _____ NA % of site
 15% or greater: _____ NA % of site

g. Are there any unique geologic features on the project site? Yes No
 If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? Yes No

ii. Do any wetlands or other waterbodies adjoin the project site? Yes No
 If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? Yes No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name _____ Classification _____
- Lakes or Ponds: Name Cayuga Lake Classification ^A _____
- Wetlands: Name _____ Approximate Size _____
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? Yes No
 If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? Yes No

j. Is the project site in the 100-year Floodplain? Yes No

k. Is the project site in the 500-year Floodplain? Yes No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? Yes No
 If Yes:
 i. Name of aquifer: _____

* Not Applicable. The proposed action within the mine will be located below the lake bed of Cayuga Lake.

**All activity associated with this proposed action will take place subsurface and will have no impact on nearby surface waters.

m. Identify the predominant wildlife species that occupy or use the project site: * NA _____ _____ _____	_____ _____ _____
n. Does the project site contain a designated significant natural community? * <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes:	
<i>i.</i> Describe the habitat/community (composition, function, and basis for designation): _____ _____	
<i>ii.</i> Source(s) of description or evaluation: _____	
<i>iii.</i> Extent of community/habitat:	
<ul style="list-style-type: none"> • Currently: _____ acres • Following completion of project as proposed: _____ acres • Gain or loss (indicate + or -): _____ acres 	
o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No *	
If Yes:	
<i>i.</i> Species and listing (endangered or threatened): _____ _____ _____	
p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No *	
If Yes:	
<i>i.</i> Species and listing: _____ _____	
q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No * If yes, give a brief description of how the proposed action may affect that use: _____ _____	
E.3. Designated Public Resources On or Near Project Site	
a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, provide county plus district name/number: _____	
b. Are agricultural lands consisting of highly productive soils present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>i.</i> If Yes: acreage(s) on project site? _____ <i>ii.</i> Source(s) of soil rating(s): _____	
c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No * If Yes:	
<i>i.</i> Nature of the natural landmark: <input type="checkbox"/> Biological Community <input type="checkbox"/> Geological Feature	
<i>ii.</i> Provide brief description of landmark, including values behind designation and approximate size/extent: _____ _____ _____	
d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No * If Yes:	
<i>i.</i> CEA name: _____	
<i>ii.</i> Basis for designation: _____	
<i>iii.</i> Designating agency and date: _____	

* Not Applicable. The proposed action within the mine will be located below the lake bed of Cayuga Lake.

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? Yes No *

If Yes:

i. Nature of historic/archaeological resource: Archaeological Site Historic Building or District

ii. Name: _____

iii. Brief description of attributes on which listing is based: _____

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? Yes No *

g. Have additional archaeological or historic site(s) or resources been identified on the project site? Yes No *

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: _____

h. Is the project site within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? Yes No *

If Yes:

i. Identify resource: _____

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): _____

iii. Distance between project and resource: _____ miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? Yes No *

If Yes:

i. Identify the name of the river and its designation: _____

ii. Is the activity consistent with development restrictions contained in 6 NYCRR Part 666? Yes No

* Not Applicable. The proposed action within the mine will be located below the lake bed of Cayuga Lake.

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name Zoe SCOPA Date 6/15/23

Signature  Title Senior Mine Engineer



MODIFICATION APPLICATION FOR PERMIT TO MINE

MLF #70052

Cayuga Salt Mine, Lansing, NY

APPENDIX C

S3 MONITORING PLAN



Build, Operate & Maintain

Cayuga Mine –S3 Monitoring Plan

Z. Scopa
6-13-23

LOCATION: CARGILL CAYUGA MINE – LANSING, NY
SUBJECT: S3 WATER STORAGE MONITORING PLAN
DATE: 6/13/2023

1 S3 Water Storage Overview

1.1 Background

The Cayuga mine’s primary water storage has historically been in the abandoned workings on 4-Level. To extend the mine’s water storage capacity, Cargill plans to establish a water storage area in the abandoned S3 mains and adjacent E3-E9 panels at the south end of the mine. This S3 area has been monitored to determined convergence rates since it was first mined in the early 2000s. The geotechnical response to water storage in this year has been modelled, which doesn’t indicate any significant negative impact on the global stability of the mine. Cargill will validate these predictions by continuing to collect empirical ground behavior data in S3. All water stored in this area will be sufficiently saturated to minimize dissolution of the remaining salt pillars, floor, and roof. This document outlines the plan for monitoring global mine response.

1.2 Affected Area

The S3 area designated for water storage is approximately 150 acres at the southernmost point of the mine. The S3 mains and adjacent panels are at the lowest elevation of the mine that dips upward toward the north with an overall elevation change of approximately 120'. This area of the mine is where water would flow naturally, regardless of mine operator action. The closest active production panel at the time this document was generated (U78) is approximately 6.5 miles from the maximum fill point in S3. A map of the affected area is shown in Figure 1.

This new water storage location has been estimated to hold approximately 360 million gallons. This estimate was generated using LiDAR scanning technology and will fill at a rate of approximately 1.3-1.8 million gallons per month. This volume is expected to yield a 15-18 year storage capacity at current inflow rates which currently exceeds the life of currently permitted reserves on 6-level. Further work will include efforts to reduce inflow rates and exploration of other reserves within the Syracuse Salt Formation.

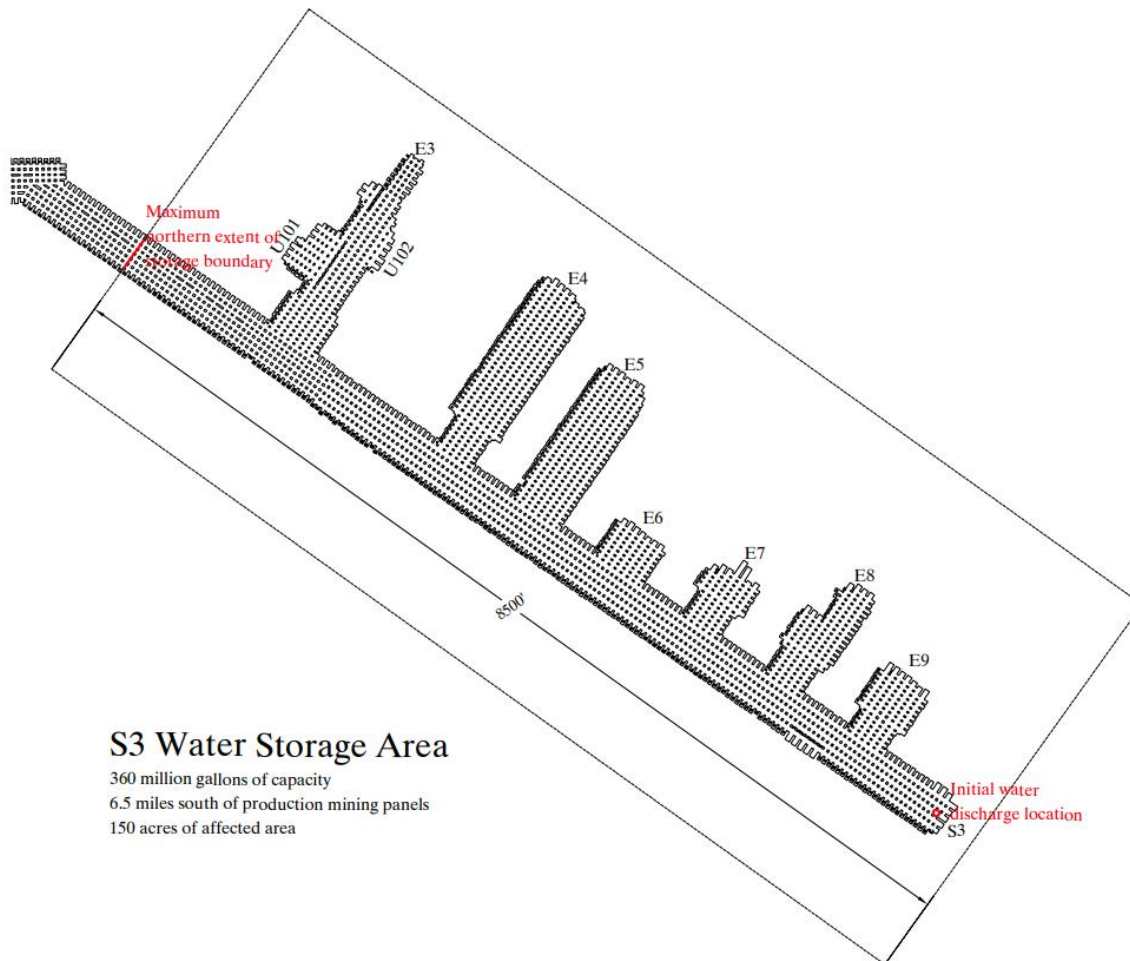


Figure 1

2 Monitoring Systems

2.1 S3 Area Inspections

Regular inspection of the water storage area in S3 will be conducted by a supervisor or engineer on a monthly basis. The purpose of this inspection will be to monitor ground conditions, check gas levels, and record advance of the water shoreline. This individual will be equipped with gas detector and will notify another individual of plan to enter the area and will report back to the same individual once the inspection is complete. All other access to the area will be restricted unless approved by management.

2.2 Convergence

Convergence is extensively monitored throughout the Cayuga Mine and convergence data has been actively collected in the S3 area for over two decades. The map in Figure 2 shows the 25 active analog convergence stations in the area in blue circles as well as the five new electronic convergence stations marked in green. The electronic convergence stations have been installed to provide real-time geotechnical monitoring for the area once water storage begins. Inactive convergence stations that were used during S3 production mining are marked in pink and can be used on an as needed basis. The active convergence stations are read semiannually. All data shows typical yield pillar convergence response and the average convergence rate for the last 10 years across all active stations was 0.18 in/year. Convergence data collection will continue as long as safe access to all stations exists and will be reviewed continuously by the Cayuga Mine's Engineering Team and third party consultants to identify any irregular behavior or cause for concern.

2.3 Humidity

A small increase in convergence rate may be anticipated due to increased humidity in the area once water storage begins. The extent of this change is unknown at this time but will be monitored. It is known that seasonal variation of humidity has an effect on the convergence rate of salt mines known as the Joffe effect. This effect has been locally reduced in the south end of the mine due to a major ventilation change that occurred in May 2022 with the commissioning of the #4 Shaft. The introduction of brine to the S3 panels will increase humidity in the area, but is not expected to cause adverse impacts beyond the historical seasonal variations in convergence. Monitoring of humidity and its effects on convergence will continue as water is stored in the S3 workings.

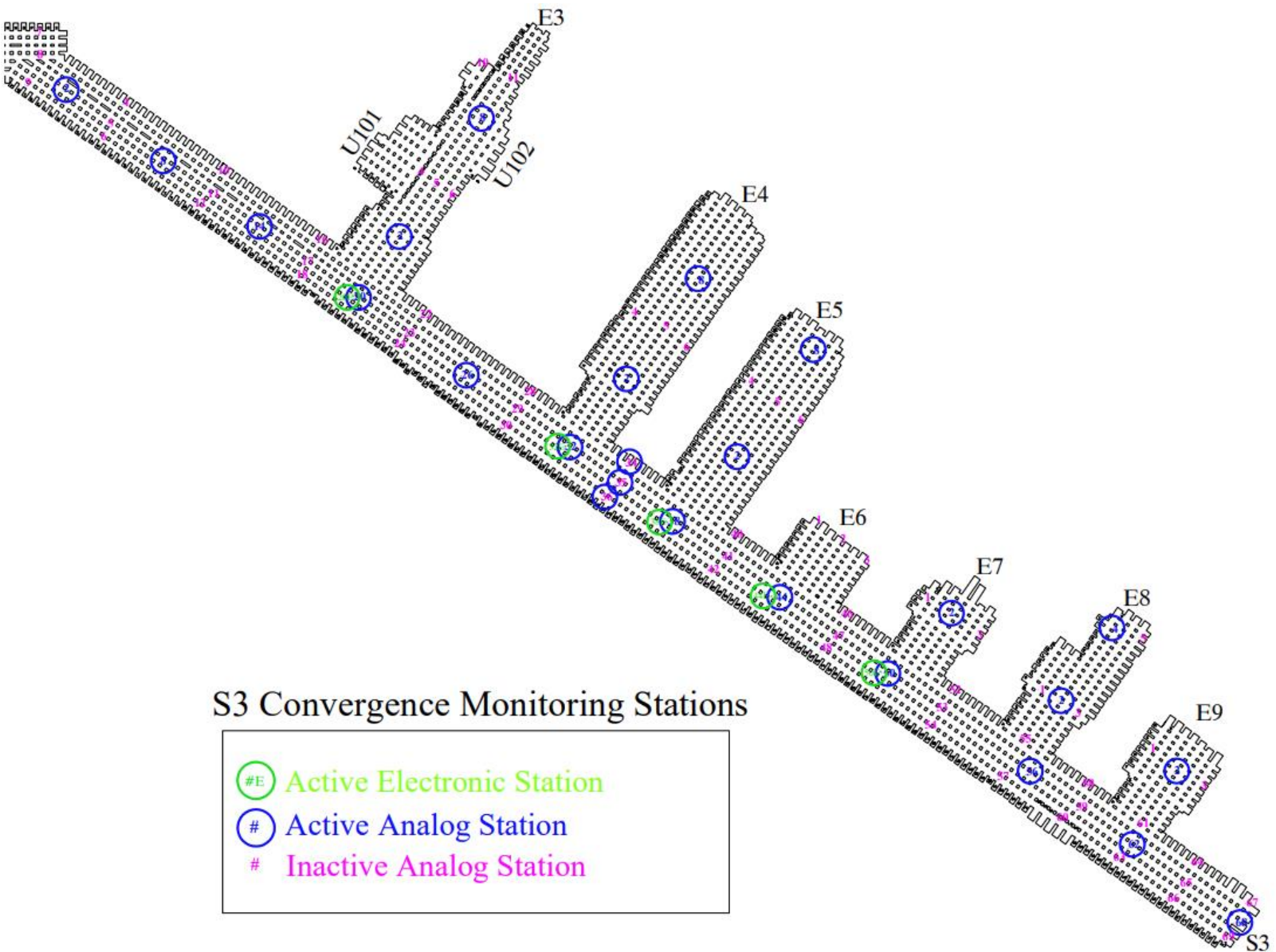


Figure 2