

From: Rigley, Thomas R (DEC)
Sent: Mon, 3 Jul 2023 13:28:51 +0000
To: Vincent A. Scovazzo; Keith.heasley@mail.wvu.edu
Subject: FW: Cargill Cayuga Salt Mine -Mining Permit Modification Application Submission
Attachments: StorageModification_06.30.2023.pdf

Good morning Vince and Keith,

Hope the summer is treating y'all well. Just wanted to forward along this modification application.

If you recall Vince, Cargill had proposed back in the winter to move the storage of water inflow into the mine to Level 6 in the S3 main since Level 4 was at or nearing its capacity. You had reviewed the modelling conducted by Cargill and basically determined that with additional monitoring this proposed action would not have an impact on the global stability of the mine.

After internal discussions, the department decided to treat this proposed action as a major modification and not as a notification. As such, they had to submit an official modification and once the department completes the review of the application it will go out for a 30 day public comment period. DEC would like you'll to review the application and any other data that you need that may have been considered proprietary and not submitted with the application. If there is additional data needed, please let me know and I will reach out to Cargill.

Thanks and please call me if you have any questions –
Tom

Tom Rigley, PG (NC)

Mined Land Reclamation Specialist 2, Division of Mineral Resources – Region 7

New York State Department of Environmental Conservation

5786 Widewaters Parkway, Syracuse, NY 13214-1867

P: (315) 426-7412 | F: (315) 426-7489 | | Thomas.Rigley@dec.ny.gov

www.dec.ny.gov |  |  | 



have and not as

From: Philbin, Andrew <APhilbin@jmt.com>

Sent: Friday, June 30, 2023 5:22 PM

To: Balduzzi, Kevin M (DEC) <kevin.balduzzi@dec.ny.gov>; dec.sm.DEP.R7 <DEP.R7@dec.ny.gov>

Cc: Rigley, Thomas R (DEC) <thomas.rigley@dec.ny.gov>; Zoe_Scopa@cargill.com;

shawn_wilczynski@cargill.com; Naughton, Patricia S. <PNaughton@barclaydamon.com>;

KRoe@barclaydamon.com; Davidson, Ed <EDavidson@jmt.com>; LaFleur, Robert <rclafleur@jmt.com>

Subject: Cargill Cayuga Salt Mine -Mining Permit Modification Application Submission

You don't often get email from aphilbin@jmt.com. [Learn why this is important](#)

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Good Afternoon,

JMT of New York, Inc., on behalf of Cargill, Inc. is submitting the attached Mining Permit Modification Application for the Cayuga Salt Mine, located in the Town of Lansing, Tompkins County, New York.

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

Thank you very much,

Andrew Philbin

JMT of New York Inc.
An Employee-Owned Company

Andrew Philbin
Environmental Scientist
Special Projects

19 British American Blvd
Latham, NY 12110
P. 518-218-5926
aphilbin@jmt.com

This message is intended for the use of the individual or entity to which it is addressed and may contain information that is confidential, privileged and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient or the employee or agent of the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please contact the sender immediately and delete it from your system.

Thank You.



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





TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
2.0	MINE PLAN.....	1
2.1	SITE LOCATION AND HISTORY.....	1
2.2	ENVIRONMENTAL SETTING.....	1
2.2.1	Adjacent Land Use Features.....	1
2.2.2	Present Conditions of the Land	2
2.3	MINING METHOD	2
2.3.1	Description of Facility and Mining Method	2
2.3.2	Water Handling and Storage	2
2.4	ASSESSMENT AND MITIGATION OF POTENTIAL ENVIRONMENTAL IMPACTS	2
3.0	RECLAMATION PLAN.....	3

FIGURE

FIGURE 1	SITE LOCATION
FIGURE 2	WATER STORAGE AREA

PLATES

PLATE 1	SURFACE MINING PLAN MAP
PLATE 2	SUBSURFACE MINING PLAN MAP
PLATE 3	SURFACE RECLAMATION PLAN MAP

APPENDICES

APPENDIX A	MINED LAND RECLAMATION PERMIT APPLICATION AND ORGANIZATIONAL REPORT FORM
APPENDIX B	FULL ENVIRONMENTAL ASSESSMENT FORM
APPENDIX C	S3 MONITORING PLAN



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.

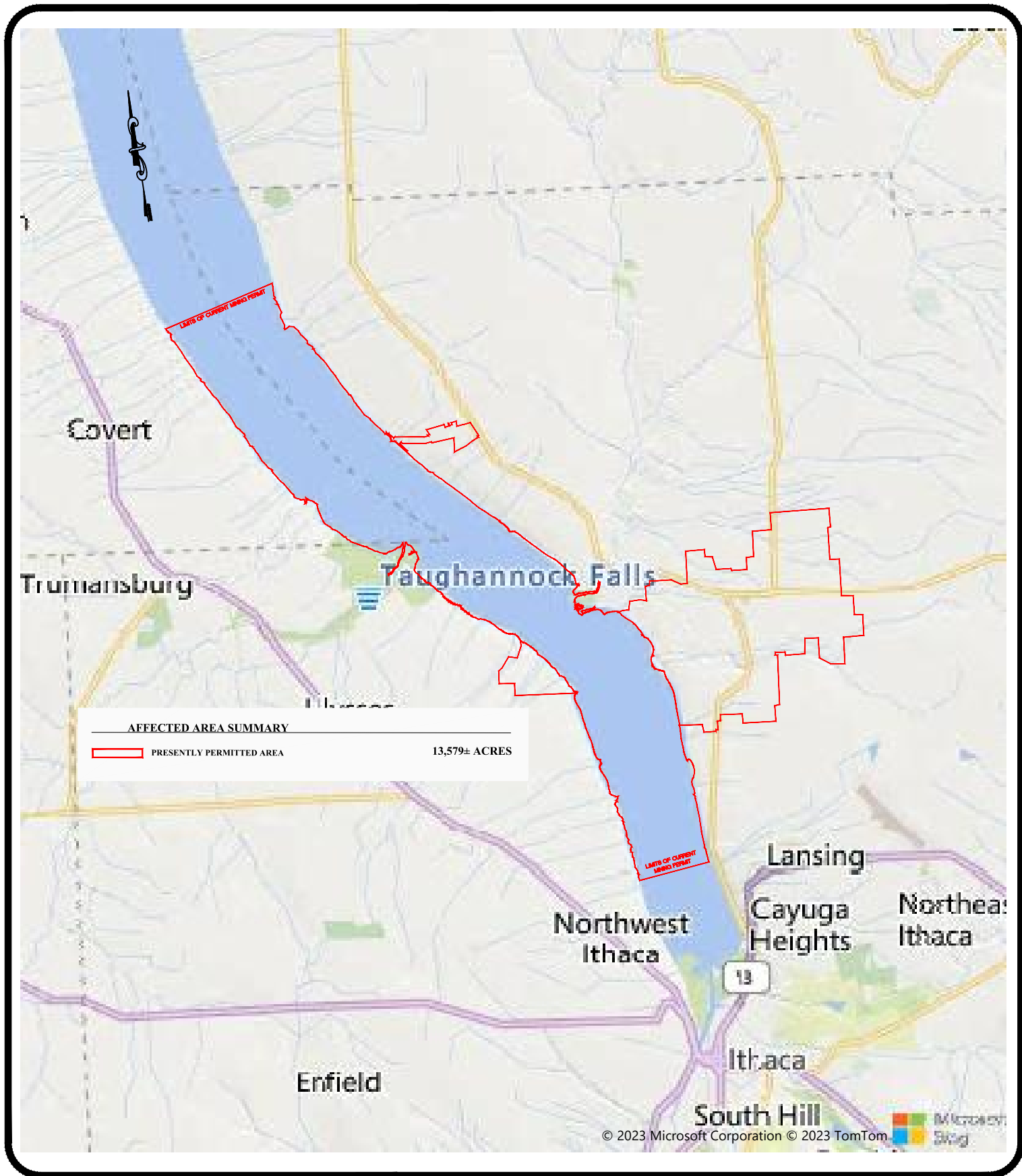
The proposed modification regarding underground water storage location is an update to (change in location of) a thoroughly studied and long-approved operational practice at the Cayuga Salt Mine. There are no potential surface impacts associated with the proposed change in water storage location.

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.



FIGURES

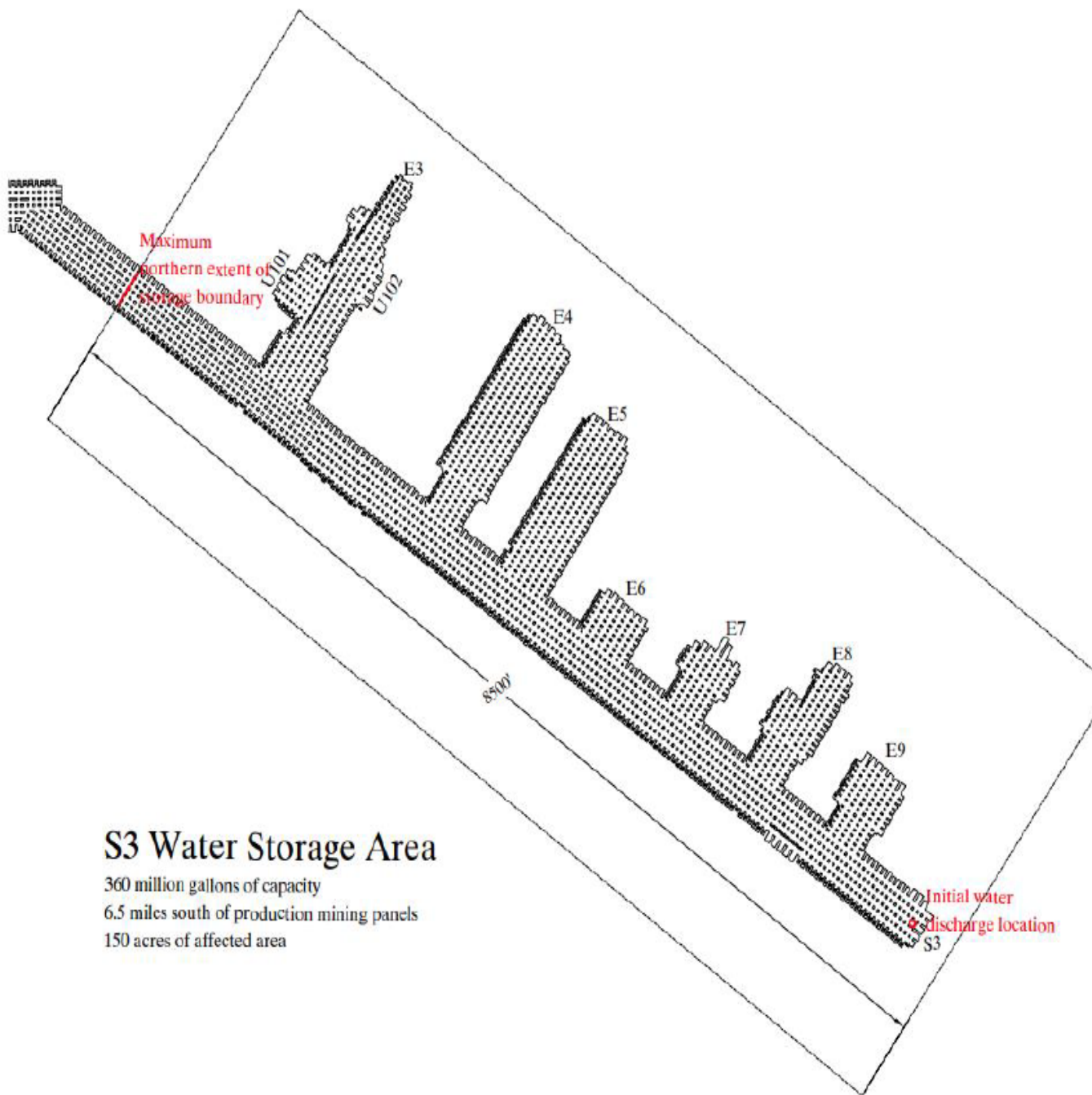


19 British American Blvd., Latham, New York 12110
P: (518) 782-0882 F: (518) 782-0973 www.jmt.com

SITE LOCATION MAP
CARGILL INC.
CAYUGA SALT MINE

TOWN OF LANSING

CAYUGA CO., NY



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



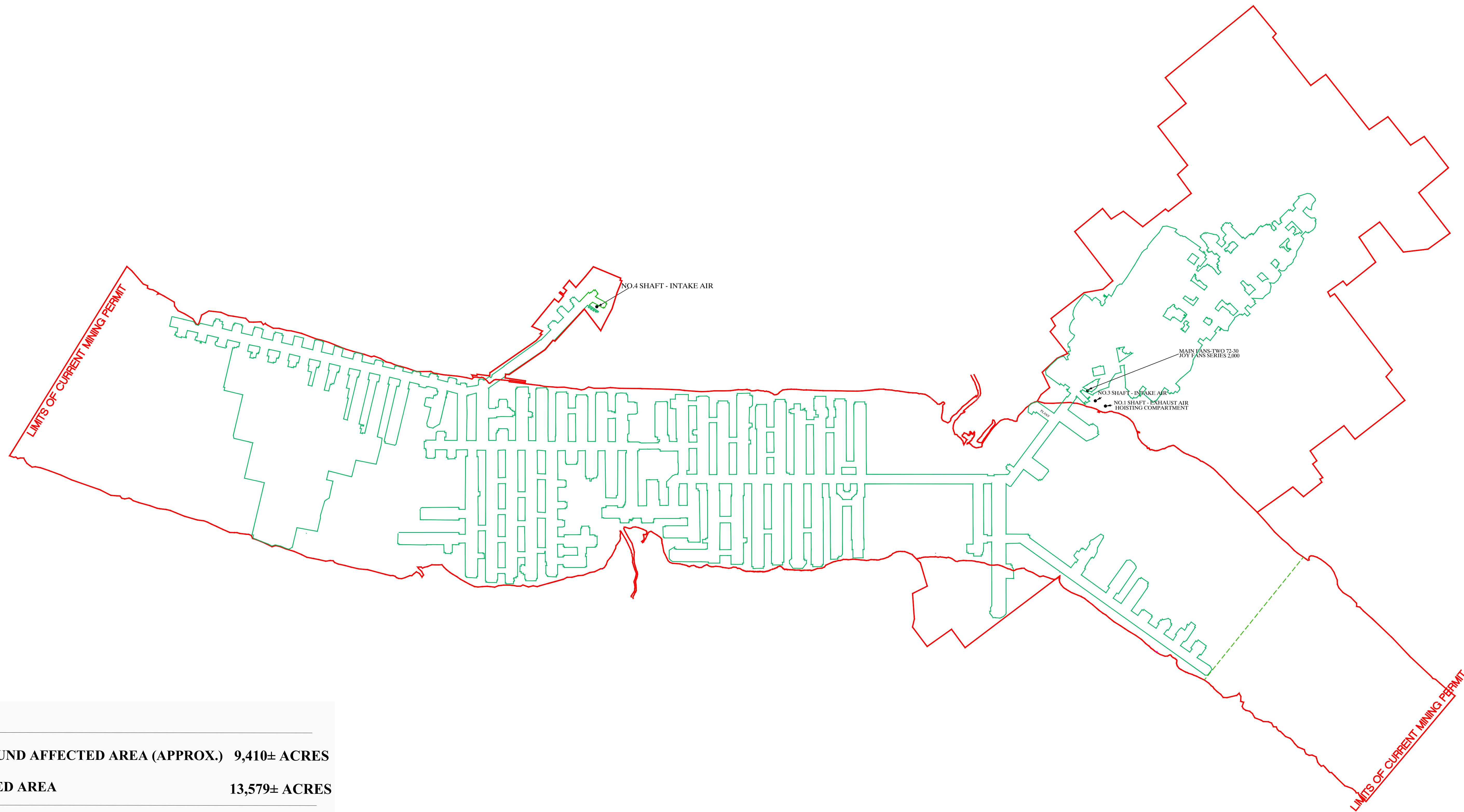
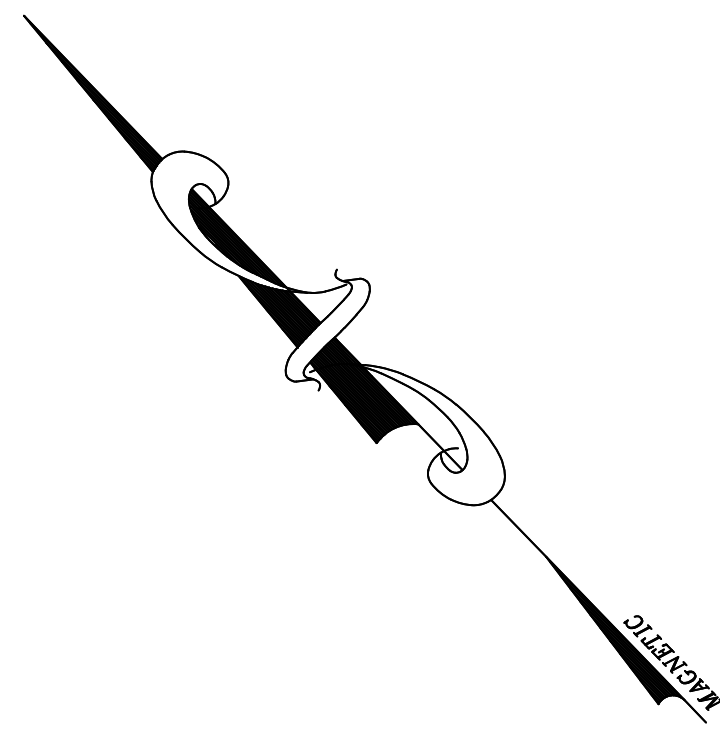
PLATES

[illegible]

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

PROPERTY LINE _____

[illegible]



AFFECTED AREA SUMMARY	
<div></div> CURRENT UNDERGROUND AFFECTED AREA (APPROX.)	9,410± ACRES
<div></div> PRESENTLY PERMITTED AREA	13,579± ACRES
TOTAL AFFECTED AREA	13,579± ACRES

NO.	DATE	RECORD OF WORK	DRN	OKD	APPR
1	4/28/14	LATERAL EXPANSION	EGD		
2	2/4/15	UPDATE AFFECTED AREA	EGD		
3	10/10/15	UPDATE AFFECTED AREA	DTS		
4	11/21/21	TITLE BLOCK UPDATE	ARP		
5	6/6/23	SUBSURFACE UPDATE	ARP		

PROJECT	
PROJ. MGR:	RCL
PROJ. NO.:	12159
PREPARED BY:	EGD
DRAFTED BY:	EGD
CHECKED BY:	
APPROVED BY:	
DATUM:	MSL
CONTOUR INTERVAL:	FEET
0 5001000 2000 4000	
1"=2000'	

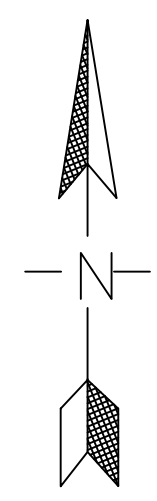
SUBSURFACE MINING PLAN MAP

CARGILL INC.
CAYUGA SALT MINE

TOWN OF LANSINGTOMPKINS CO., NY

19 British American Blvd Latham, New York 12110
P: (518) 782-0802 F: (518) 782-0873 www.jmt.com

DATE: 01/28/14 | SCALE: 1"=2000' | DWG. NO. 121590050 | PLATE 2 OF 3



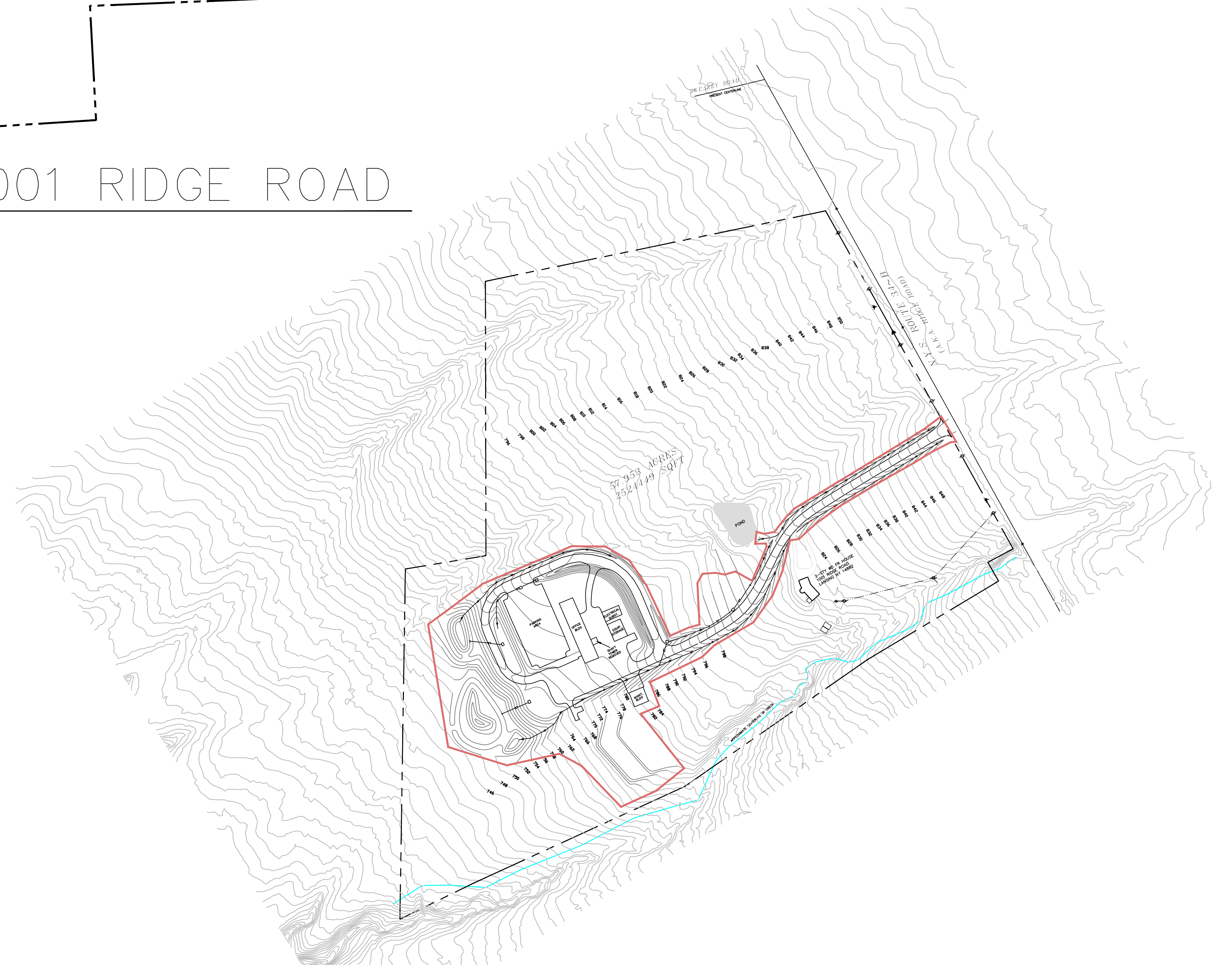
PORTLAND POINT ROAD



LEGEND

PROPERTY LINE
AREA OF DISTURBANCE

1001 RIDGE ROAD



NOTE: PROPERTY LINE AND PHYSICAL FEATURES SHOWN FOR 1001 RIDGE ROAD ARE TAKEN FROM A MAP ENTITLED "LANDS OF SANDRA STRUSKI (HOWELL)" 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.

NO.	DATE	RECORD OF WORK	DRN	OKD	APPR
1	10/13/15	ADD 1001 RIDGE ROAD FACILITY	DTS		
2	1/21/16	UPDATE AREA OF DISTURBANCE	DTS		
3	11/21/21	TITLE BLOCK UPDATE	ARP		

PROJECT
PROJ. MGR: ROL
PROJ. NO.: 20-01312N-002
PREPARED BY: PAW
DRAFTED BY: PAW
CHECKED BY:
APPROVED BY:
DATUM: MSL
CONTOUR INTERVAL = 5 FT. FEET
0 50 100 200 400
1"=200'

SURFACE RECLAMATION PLAN MAP

CARGILL INC.
CAYUGA SALT MINE

TOWN OF LANSINGTOMPKINS CO., NY


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

DATE: 12/18/00SCALE: 1"=200'DWG. NO. 121590060PLATE 3 OF 3



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				<table border="1"> <thead> <tr> <th></th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td>a. Will the total acreage affected by mining for the entire mining site be equal to or greater than 5 acres?</td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>b. Will the vertical depth from the top of the mine face to the floor exceed 20 feet?</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>c. Will there be on-site processing of mining products (eg. crushing, screening, washing) that requires an air permit?</td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>d. Will mining occur within 100 feet of a surface water body (eg. stream, lake) or wetland area?</td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>e. Will any consolidated materials be mined (eg. limestone, trap rock, sandstone)?</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>f. Will mining occur within 500 feet of any dwelling?</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>g. Will mining ever occur below the water table?</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table>			Yes	No	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"/>	<input type="checkbox"/>	b. Will the vertical depth from the top of the mine face to the floor exceed 20 feet?	<input type="checkbox"/>	<input type="checkbox"/>	c. Will there be on-site processing of mining products (eg. crushing, screening, washing) that requires an air permit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	d. Will mining occur within 100 feet of a surface water body (eg. stream, lake) or wetland area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	e. Will any consolidated materials be mined (eg. limestone, trap rock, sandstone)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	f. Will mining occur within 500 feet of any dwelling?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	g. Will mining ever occur below the water table?	<input type="checkbox"/>	<input type="checkbox"/>
	Yes	No																											
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"/>	<input type="checkbox"/>																											
b. Will the vertical depth from the top of the mine face to the floor exceed 20 feet?	<input type="checkbox"/>	<input type="checkbox"/>																											
c. Will there be on-site processing of mining products (eg. crushing, screening, washing) that requires an air permit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>																											
d. Will mining occur within 100 feet of a surface water body (eg. stream, lake) or wetland area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>																											
e. Will any consolidated materials be mined (eg. limestone, trap rock, sandstone)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>																											
f. Will mining occur within 500 feet of any dwelling?	<input type="checkbox"/>	<input checked="" type="checkbox"/>																											
g. Will mining ever occur below the water table?	<input type="checkbox"/>	<input type="checkbox"/>																											
3. TELEPHONE NUMBER (607) 533-4221				N/A																									
4. PERMANENT ADDRESS: NUMBER & STREET NAME 191 Portland Point Road, Post Office Box B																													
CITY Lansing	STATE NY	ZIP CODE 14882																											
5. CONTACT PERSON Zoe Scopa		6. a. TELEPHONE NUMBER (607) 533-3758																											
6. b. EMAIL ADDRESS zoe_scopa@cargill.com																													
8. TAXPAYER ID (If other than individual, provide Federal Taxpayer ID Number) 14-0177680				9. APPLICATION TYPE <input type="checkbox"/> New <input type="checkbox"/> Renewal <input checked="" type="checkbox"/> Modification <input type="checkbox"/> Transfer																									
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		11. NAME OF MINERAL/MATERIAL TO BE MINED Rock Salt																									
12. LOCAL ORDINANCES a. Is mining prohibited at this location? <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																									
13. a. ARE ANY OTHER STATE MINING PERMITS CURRENTLY HELD BY THE APPLICANT? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				13. b. If YES, give Mine File Number(s)																									
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)																													
15. ACREAGE SUMMARY (To be filled in by applicant)				FOR OFFICIAL DEC USE ONLY																									
a. Total acreage controlled by owner at this location				13,625.8 acres																									
b. Total acreage permitted by DEC prior to this application				13,579.0 acres																									
c. Total acreage affected since April 1, 1975				9,410.0 acres																									
d. Total acreage approved by DEC as reclaimed since April 1, 1975				0.0 acres																									
e. Current affected acreage (c minus d)				9,410.0 acres																									
f. Acreage included in this application, but not previously approved				0.0 acres																									
g. New acreage to be affected during the coming permit term				0.0 acres																									
h. Number of acres to be reclaimed during coming permit term				0.0 acres																									
16. NAME OF MINING OPERATION Cayuga Mine																													
17. MINE LOCATION		18. MAP LOCATION																											
Road Portland Point Road		a. Quadrangle Name Ludlowville																											
Nearest Road Intersection State Route 34B		b. <input type="checkbox"/> 15 minute <input checked="" type="checkbox"/> 7 1/2 minute																											
Town Lansing		FOR OFFICIAL DEC USE ONLY																											
County Tompkins		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) <i>Shawn Wilczynski</i>		DATE 6/30/23		SIGNATURE(S) OF MINERAL OWNER(S) <i>Shawn Wilczynski</i>																									
				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 <i>Shawn Wilczynski</i>					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>																			
<p>3. TYPE OF ACTIVITY (Check those that apply)</p> <table border="0"><tr><td><input type="checkbox"/> PRODUCTION—Oil, Gas, Injection or Geothermal Well(s)</td><td><input type="checkbox"/> SOLUTION MINING—Own/Operate Facility</td></tr><tr><td><input type="checkbox"/> STORAGE—Underground Gas or LPG Facility</td><td><input type="checkbox"/> BRINE DISPOSAL—Own/Operate Facility</td></tr><tr><td><input type="checkbox"/> PURCHASING—Of Oil or Gas from Others</td><td><input type="checkbox"/> STRATIGRAPHIC—Own Well or Hole</td></tr><tr><td><input type="checkbox"/> TRANSPORTATION—By Truck or Pipeline for Others</td><td><input type="checkbox"/> SURFACE MINING—Own/Operate Facility</td></tr><tr><td><input type="checkbox"/> PLUGGING—Plug and Abandon Wells for Others</td><td><input checked="" type="checkbox"/> UNDERGROUND MINING—Own/Operate Facility</td></tr><tr><td><input type="checkbox"/> DRILLING—Drill Wells for Others</td><td></td></tr></table>				<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							
<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																				
<p>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>																					
<p>TYPE OR PRINT NAME OF AUTHORIZED PERSON</p> <p>Zoe Scopa</p>		<p>SWORN TO AND SUBSCRIBED</p> <p>BEFORE ME, THIS <u>15th</u></p> <p>DAY OF <u>June</u> 20 <u>23</u></p> <p>NOTARY PUBLIC <u>Jessica L. Hall</u></p>																			
<p>SIGNATURE </p>		<p>JESSICA L. HALL Notary Public, State of New York No. 01HA6401119 Qualified in Tompkins County Commission Expires Dec. 2, 2023</p>																			
<p>DATE <u>6/15/2023</u></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



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):	
<hr/> <hr/> <hr/>	
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):	
<hr/> <hr/> <hr/>	

* 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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes,	
i. Purpose of the impoundment: _____ ii. If a water impoundment, the principal source of the water: <input type="checkbox"/> Ground water <input type="checkbox"/> Surface water streams <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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? <input type="checkbox"/> Yes <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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? _____ • Will a line extension within an existing district be necessary to serve the project? _____ <p>If Yes:</p> <ul style="list-style-type: none"> • Describe extensions or capacity expansions proposed to serve this project: _____ _____ _____ 	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No	
<p>iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? _____</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? _____ 	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<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>vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____ _____ _____</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? _____</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>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> <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 checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <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? _____</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? _____</p> <p>If Yes, identify:</p> <p>i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles) _____</p> <p>ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers) _____</p> <p>iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation) _____</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<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? _____</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) _____</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) 		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No

<p>h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Estimate methane generation in tons/year (metric): _____</p> <p>ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____</p>			
<p>i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): _____</p>			
<p>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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p>i. When is the peak traffic expected (Check all that apply): <input type="checkbox"/> Morning <input type="checkbox"/> Evening <input type="checkbox"/> Weekend <input type="checkbox"/> Randomly between hours of _____ to _____.</p> <p>ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____</p> <p>iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____</p> <p>iv. Does the proposed action include any shared use parking? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe: _____</p> <p>vi. Are public/private transportation service(s) or facilities available within 1/2 mile of the proposed site? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>vii. Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>			
<p>k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Estimate annual electricity demand during operation of the proposed action: _____</p> <p>ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other): _____</p> <p>iii. Will the proposed action require a new, or an upgrade, to an existing substation? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>			
<p>l. Hours of operation. Answer all items which apply.</p> <table style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>i. During Construction:</p> <ul style="list-style-type: none"> • Monday - Friday: _____ • Saturday: _____ • Sunday: _____ • Holidays: _____ </td> <td style="width: 50%; vertical-align: top;"> <p>ii. During Operations:</p> <ul style="list-style-type: none"> • Monday - Friday: _____ 24 hrs • Saturday: _____ Varies* • Sunday: _____ Varies* • Holidays: _____ Varies* </td> </tr> </table>		<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*
<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>_____</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>_____</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>	
<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? <i>i. If Yes: explain:</i> _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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? If Yes, <i>i. Identify Facilities:</i> _____ _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
e. Does the project site contain an existing dam? If Yes: <i>i. Dimensions of the dam and impoundment:</i> <ul style="list-style-type: none"> • Dam height: _____ feet • Dam length: _____ feet • Surface area: _____ acres • Volume impounded: _____ gallons OR acre-feet <i>ii. Dam's existing hazard classification:</i> _____ <i>iii. Provide date and summarize results of last inspection:</i> _____ _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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? If Yes: <i>i. Has the facility been formally closed?</i> _____ • If yes, cite sources/documentation: _____ <i>ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:</i> _____ _____ <i>iii. Describe any development constraints due to the prior solid waste activities:</i> _____ _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
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? If Yes: <i>i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:</i> _____ _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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? If Yes: <i>i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply:</i> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div> <input type="checkbox"/> Yes – Spills Incidents database <input type="checkbox"/> Yes – Environmental Site Remediation database <input type="checkbox"/> Neither database </div> <div> Provide DEC ID number(s): _____ Provide DEC ID number(s): _____ </div> </div> <i>ii. If site has been subject of RCRA corrective activities, describe control measures:</i> _____ _____ <i>iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database?</i> _____ If yes, provide DEC ID number(s): _____ <i>iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):</i> _____ _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No

v. Is the project site subject to an institutional control limiting property uses? <input type="checkbox"/> Yes <input type="checkbox"/> No <ul style="list-style-type: none"> 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? <input type="checkbox"/> Yes <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, what proportion of the site is comprised of bedrock outcroppings? _____ %										
c. Predominant soil type(s) present on project site: * <table style="width: 100%; border: none;"> <tr> <td style="width: 60%;">NA</td> <td style="width: 20%; text-align: right;">_____ %</td> <td style="width: 20%;"></td> </tr> <tr> <td>_____</td> <td style="text-align: right;">_____ %</td> <td></td> </tr> <tr> <td>_____</td> <td style="text-align: right;">_____ %</td> <td></td> </tr> </table>		NA	_____ %		_____	_____ %		_____	_____ %	
NA	_____ %									
_____	_____ %									
_____	_____ %									
d. What is the average depth to the water table on the project site? Average: _____ feet										
e. Drainage status of project site soils: <input type="checkbox"/> Well Drained: _____ NA % of site * <input type="checkbox"/> Moderately Well Drained: _____ NA % of site <input type="checkbox"/> Poorly Drained: _____ NA % of site										
f. Approximate proportion of proposed action site with slopes: <input type="checkbox"/> 0-10%: _____ NA % of site * <input type="checkbox"/> 10-15%: _____ NA % of site <input type="checkbox"/> 15% or greater: _____ NA % of site										
g. Are there any unique geologic features on the project site? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, describe: _____ _____										
h. Surface water features. <ul style="list-style-type: none"> i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ii. Do any wetlands or other waterbodies adjoin the project site? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes to either <i>i</i> or <i>ii</i> , continue. If No, skip to E.2.i. <ul style="list-style-type: none"> iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No iv. For each identified regulated wetland and waterbody on the project site, provide the following information: <ul style="list-style-type: none"> Streams: Name _____ Classification _____ Lakes or Ponds: Name <u>Cayuga Lake</u> 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? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, name of impaired water body/bodies and basis for listing as impaired: _____ _____										
i. Is the project site in a designated Floodway? ** <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No										
j. Is the project site in the 100-year Floodplain? ** <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No										
k. Is the project site in the 500-year Floodplain? ** <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No										
l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes: <ul style="list-style-type: none"> 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.

<p>m. Identify the predominant wildlife species that occupy or use the project site: *</p> <p>NA _____</p> <p>_____</p> <p>_____</p>	
<p>n. Does the project site contain a designated significant natural community? * <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Describe the habitat/community (composition, function, and basis for designation): _____</p> <p style="margin-left: 20px;">ii. Source(s) of description or evaluation: _____</p> <p style="margin-left: 20px;">iii. Extent of community/habitat:</p> <ul style="list-style-type: none"> • Currently: _____ acres • Following completion of project as proposed: _____ acres • Gain or loss (indicate + or -): _____ acres 	
<p>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 *</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Species and listing (endangered or threatened): _____</p> <p>_____</p> <p>_____</p>	
<p>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 *</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Species and listing: _____</p> <p>_____</p> <p>_____</p>	
<p>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 *</p> <p>If yes, give a brief description of how the proposed action may affect that use: _____</p> <p>_____</p> <p>_____</p>	
<p>E.3. Designated Public Resources On or Near Project Site</p>	
<p>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</p> <p>If Yes, provide county plus district name/number: _____</p>	
<p>b. Are agricultural lands consisting of highly productive soils present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p style="margin-left: 20px;">i. If Yes: acreage(s) on project site: _____</p> <p style="margin-left: 20px;">ii. Source(s) of soil rating(s): _____</p>	
<p>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 *</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Nature of the natural landmark: <input type="checkbox"/> Biological Community <input type="checkbox"/> Geological Feature</p> <p style="margin-left: 20px;">ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____</p> <p>_____</p> <p>_____</p>	
<p>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 *</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. CEA name: _____</p> <p style="margin-left: 20px;">ii. Basis for designation: _____</p> <p style="margin-left: 20px;">iii. Designating agency and date: _____</p>	

* 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No *
If Yes:	
i. Nature of historic/archaeological resource: <input type="checkbox"/> Archaeological Site <input type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No *
g. Have additional archaeological or historic site(s) or resources been identified on the project site?	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	
<input type="checkbox"/> Yes <input type="checkbox"/> No	

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

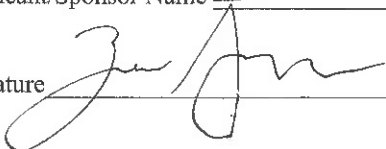
F. Additional Information

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 <u>Zoe Scopa</u>	Date <u>6/15/23</u>
Signature 	Title <u>Senior Mine Engineer</u>

PRINT FORM



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.

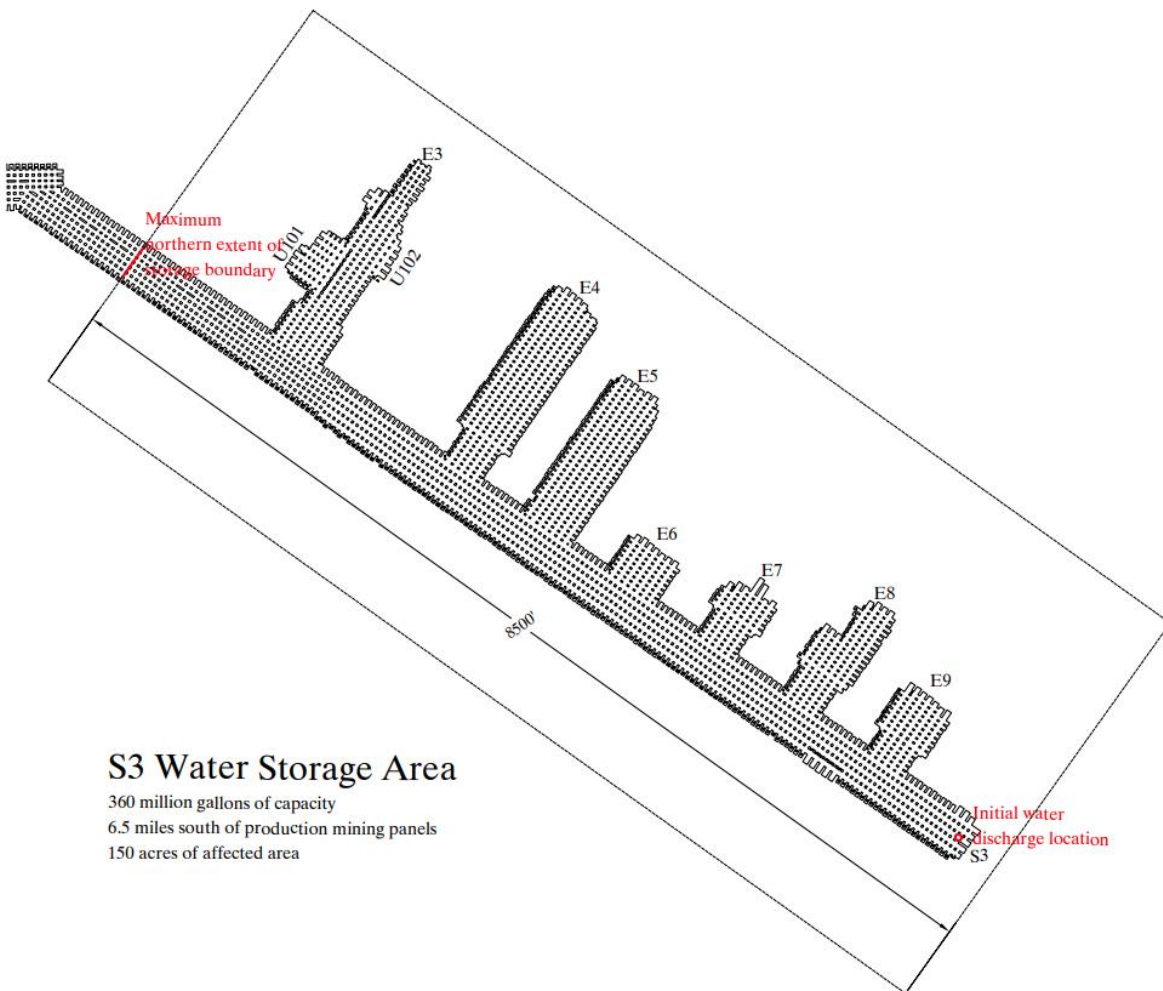


Figure 1

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.

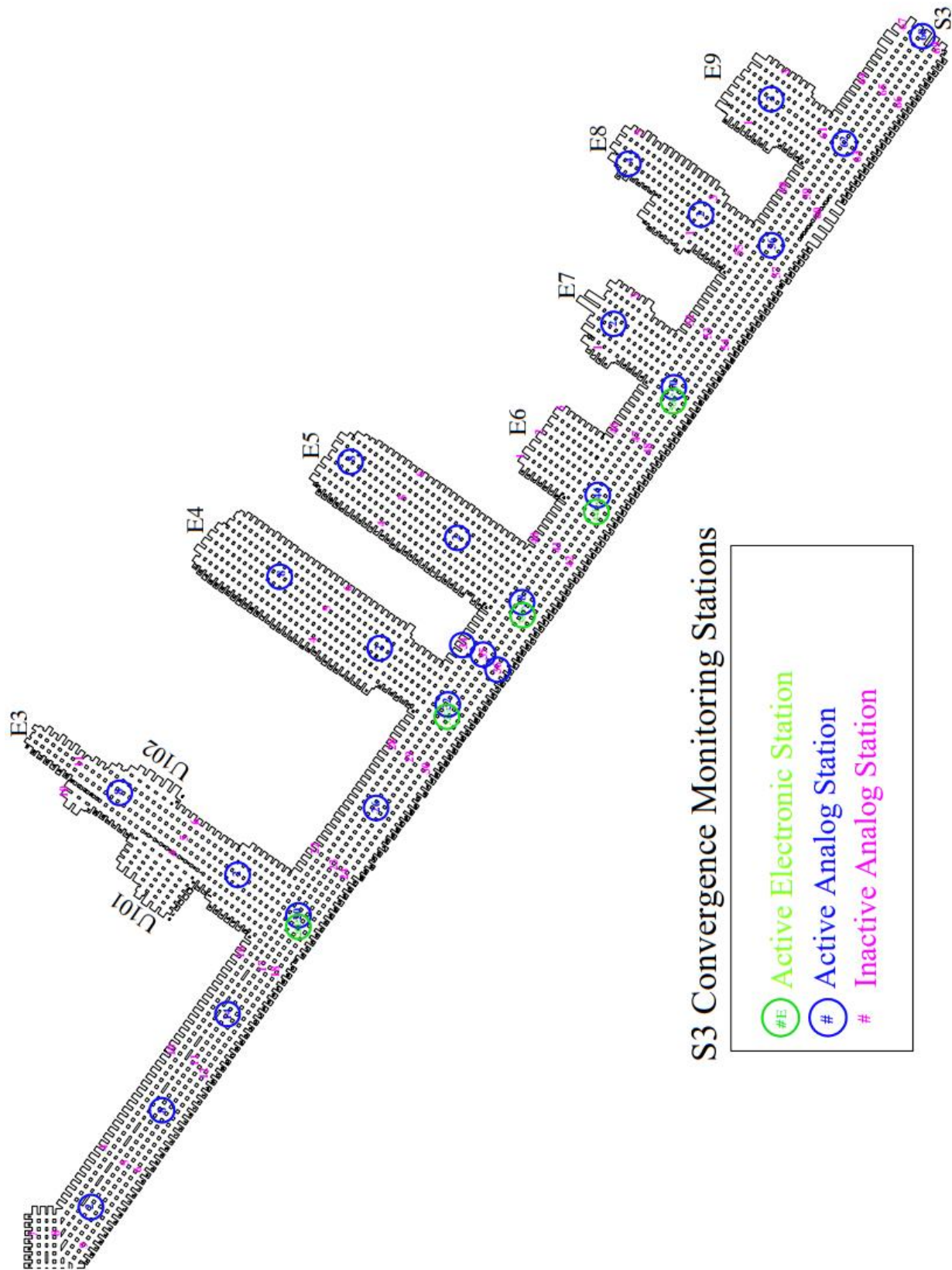


Figure 2