

January 5, 2007

Cayuga Mine
191 Portland Point Road
Lansing, NY 14882
Phone: (607) 533-4221
Fax: (607) 533-4501

Ac Controlled 13,157
Ac Lot Mine 13,417
Ac Affected 9,260

Mr. Joseph S. Moskiewicz, Jr.
Chief, Resource Development Section
New York State Department of Environmental Conservation
Bureau of Resource Management & Development
Division of Mineral Resources
625 Broadway Third Floor
Albany, NY 12233-6500
Phone 518-402-8072, Fax 518-402-8060

RE: Annual Report for Mine File #709-3-29-0052; Cayuga Salt Mine
Application ID#0-9999-00075-00001
Towns of Lansing and Ulysses, County of Tompkins
Town of Covert, County of Seneca

Dear Mr. Moskiewicz:

Enclosed is an annual report required in accordance with the Special Conditions section (item numbers 7-13) of DEC permit number 0-9999-00075/00001. This report will address each reporting requirement separately (7a, 7b, etc.) and drawings are attached as required. As requested, all technical data associated with monitoring of mine stability will be sent to J.T. Boyd and Associates with attention to Dr. Vincent Scovazzo.

A second copy of the report is included here for you to distribute to the Region 7 office, or as you see fit.

If any questions arise please bring them to my attention at your earliest convenience.

Regards,



Steve Horne
Mine Manager - Cargill Polding Technology

Reporting, Monitoring, and Notifications

7a. Cargill Cayuga Mine Manager Certification:

I, Steven J. Horne, Mine Manager – Cargill Deicing Technology, certify that all mining activities, to the best of my knowledge, conducted during the reporting period from January 6, 2006 to present were in conformance with the DEC Permit # 0-9999-00075/00001 and the approved plans. No variances occurred and none were reported.

Signed: Steven J. Horne Date: 1/5/07

7b. Summary of all non-routine mining incidents:

The Cayuga Mine is not aware of any non-routine incidents associated with the mining, processing, or other mine related activities that would have adversely affected any of the following;

- Mine stability
- Ground and surface water
- Natural resources
- Health, safety, welfare or property of the general public

On occasion, the underground production crews encounter rock structures that delay or hinder our mining plan. A small floor rock roll was encountered in the U-57 panel and the E-3 panel continues to encounter a rock roll as mining progresses to the east. Both of these have been or are being mined through as those panels advance.

7c. 3 Year Mining Plan

Attached are maps depicting the current and proposed mining for the next three years.

- Attachment 1A – 3 Year Mine Plan for the Northern Region
- Attachment 1B – 3 Year Mine Plan for the Southern Region
- Attachment 1C – Large Mine map showing current extent of mining and three year mining plan

The Cayuga Mine is currently operating in two different sections of the mine. There is one development crew that is mining east (E-3) from the west shoreline of Cayuga Lake. The rest of the mining is located in the northern region of the mine where development crews will continue to mine north (NW-2) and production crews will mine panels (U-54, U-59, U-56) to the east and west.

7d. Summary of In-situ Measurements of Rock Mechanics:

The Cayuga Mine continues to collect mine convergence data in accordance with the guidelines previously established in the Mined Land Use Plan. Convergence stations are typically installed

at the "face" of active tunnels in mining panels with a profile of three stations located in the center and edges of the panel. The convergence stations are usually read daily during the first week and then dropped to a weekly schedule until the next profile is installed. The initial profile will then be monitored on a monthly or quarterly schedule for the duration of mining of the panel. After abandonment of the panel, the convergence stations are monitored quarterly and annually. Currently, there are approximately 135 quarterly and 385 annual convergence stations being monitored. Once all of the data from the annual convergence stations have been collected it is evaluated both internally and externally for trends to ensure that the each panel and the mine is behaving properly.

Evaluation of weekly, quarterly, and annual convergence data indicate that no unusual trends have been identified and the mine is behaving as expected, with the exception of the U-40B area. It has been noted that this area is squeezing faster than other areas of the mine of similar layout and age. The closure data indicates that the area is stable, in that the closure rates continue to decrease, however those rates are higher than desired. Monitoring of this area has increased in frequency to twice per month. Additionally, an electronic monitoring system has been installed to allow measuring movement on a daily basis. This system has had some technical problems but should be up and operating by January 30. Plans are in place to begin backfilling the area with waste salt and rock within the coming 6 months. The purpose of the backfill is to limit the total amount of closure that is possible, thus reducing the total possible surface subsidence.

The most recent contour maps of total closure and closure rate are attached for your information. All applicable electronic data and maps will be forwarded to J.T. Boyd for review by January 31st, 2007.

7e. Summary of Subsidence Monitoring:

Surface subsidence measurements continue to be performed in accordance with the Mined Land Use Plan. No subsidence surveys were run during 2006. Surveys are planned for the winter of 2007, and the eastern area survey benchmarks (near the South Lansing town site) are being reworked to improve their reliability and position to enhance the quality of the future surveys.

7f. Source and Volume of Water Inflow Into the Mine and Disposition of Such Water:

The following is a list of sources and associated flow rates of water into the Cayuga Mine:

- Production Shaft (#1 shaft) – 13 gallons per minute
- Ventilation Shaft (#2 shaft) – 4 gallons per minute
- ED Plant Concentrate discharge – 7 gallons per minute
- Storm Water Run-off – 0 gallons per minute (3 ED stacks now operational)
- Total Water Inflow = 24 gallons per minute

All of the water is directed to a settling pond located on the 4-level of the mine. The water is then pumped from the settling pond to abandoned areas on 4-level. Recent volume calculations indicated that at our current rate we have approximately 17 years of disposal life remaining on 4-level. See the attached water inflow table and the pond map. Action plans are in place to continue reduce the inflow into the mine over the next 3 years. The second expansion of the storm water ED treatment plant has been commissioned and is operational. This has reduced the storm water run-off that is entering the mine from about 18 gpm to 0 gpm. A system for

collecting the #1 shaft water inflow and pumping it to surface for processing through the LL¹ plant has been designed and funds have been allocated. Construction will be complete by October of 2007, resulting in a reduction of an additional 8 gpm. The underground storage pond levels were checked in November to verify the predictions of remaining storage life.

7g. Summary of SPDES Monitoring Data:

The following is a summary of the past year's outfall results (November 2004-2005) and waste water treatment plant results (November 2004-2005). All outfall exceedances are reported to the DEC in two ways. Once an exceedance event has been identified the DEC is informed via telephone of the occurrence. Each event is also captured in the monthly Report of Non-Compliance, which also lists corrective action taken.

Outfall Results for Nov. 2005 - Nov. 2006

Note: All Permit Exceedances are Highlighted in Red

CHLORIDES

OUTFALLS

	#001	#002	#003	#004	#005	#006	#007	#008	#012
Permit Limit	40,000 mg/l	10,000 mg/l	10,000 mg/l	5,000 mg/l	5,000 mg/l	5,000 mg/l	5,000 mg/l	5,000 mg/l	5,000 mg/l
Month/Year									
Nov 2005	5,600	2,800	1,100			1,700	500	NF	800
Dec	7,000	1,500	970	4,600	NF	1,800	300	NF	620
Jan 2006	7,200	2,800	1,300			2,700	530	NF	1,400
Feb	24,000	1,700	1,400			2,300	540	NF	1,000
March	17,000	2,900	1,300	NF	NF	NF	NF	NF	NF
April	12,000	2,500	1,700			2,300	670	NF	1,400
May	22,000	1,500	1,100			NF	410	NF	2,500
June	19,000	6,100	2,900	12,000	NF	3,000	510	NF	4,150
July	23,000	1,400	940			770	410	NF	2,200
August	19,000	1,400	1,200			980	450	NF	2,400
Sept	13,000	1,500	1,100	NF	NF	1,000	380	NF	1,500
Oct	18,000	2,100	1,100			1,300	510	NF	3,200
Nov	21,000	3,600	880			980	380	NF	2,100

NF = NO FLOW

Outfall Results Continued:

WAD CYANIDE

OUTFALLS

	#001	#002	#003	#004	#005	#006	#007	#008	#012
Permit Limit	1.1 mg/l	0.1 mg/l	0.1 mg/l	0.1 mg/l	0.1 mg/l	0.1 mg/l	0.1 mg/l	0.1 mg/l	0.1 mg/l
Month/Year									
Nov 2005	0.022	<.01	<.01			0.01	<.01	NF	<.01
Dec	0.028	<.01	<.01	<.01	NF	<.01	<.01	NF	<.01
Jan 2006	0.014	<.01	<.01			<.01	<.01	NF	<.01
Feb	0.34	0.01	<.01			<.01	<.01	NF	<.01
March	0.065	<.01	<.01	NF	NF	NF	NF	NF	NF
April	0.29	0.011	<.01			<.01	<.01	NF	<.01
May	0.18	<.01	<.01			NF	<.01	NF	<.01
June	0.18	0.031	0.057	0.02	NF	<.01	<.01	NF	<.01
July	1.5	<.01	0.017			0.011	<.01	NF	<.01
August	0.17	<.01	<.01			<.01	<.01	NF	<.01
Sept	0.81	<.01	<.01	NF	NF	<.01	<.01	NF	<.01
Oct	0.46	<.01	<.01			<.01	<.01	NF	<.01
Nov	0.12	<.01	<.01			<.01	<.01	NF	<.01

NF = NO FLOW

ZINC

#001

Permit Limit 20mg/l

Month/Year

Nov 2005	<.01
Dec	<.01
Jan 2006	<.01
Feb.	0.13
March	0.027
April	<.01
May	0.6
June	0.02
July	<0.1
August	0.051
Sept	0.019
Oct	0.034
Nov	0.17

Outfall Results Continued:

Total Dissolved

Solids

OUTFALLS

	#001	#002	#003	#004	#005	#006	#007	#008	#012
Permit Limit	80,000 mg/l	40,000 mg/l	40,000 mg/l	10,000 mg/l	10,000 mg/l	10,000 mg/l	10,000 mg/l	10,000 mg/l	10,000 mg/l
Month/Year									
Nov 2005	9,800	5,300	2,700			3,700	1,000	NF	1,900
Dec	12,000	3,200	2,700	8,100	NF	3,800	800	NF	1,500
Jan 2006	12,000	5,400	1,300			2,700	1,200	NF	2,500
Feb	39,000	3,900	3,600			4,900	1,200	NF	2,300
March	29,000	5,000	3,200	NF	NF	NF	NF	NF	NF
April	19,000	5,500	3,800			4,400	1,700	NF	3,000
May	37,000	3,300	2,800			NF	1,300	NF	4,900
June	31,000	6,000	3,600	9,500	NF	3,100	1,500	NF	4,800
July	43,000	3,200	2,800			2,000	1,200	NF	4,800
August	29,000	3,100	3,200			2,000	1,200	NF	4,400
Sept	20,000	3,200	3,000	NF	NF	2,300	1,000	NF	3,300
Oct	28,000	4,300	2,700			2,500	1,400	NF	5,700
Nov	34,000	7,000	2,500			2,000	1,000	NF	4,400

NF = NO FLOW

Waste Water Treatment Plant. #009

Dec. '05 - Nov. '06

	Flow Rate Ave.	BOD		PH.		Tot. Susp. Solids		Settleable Solids Daily Max.	Total Resid.	Fecal Coliform	
		Ave.	Max.	Min.	Max.	Ave.	Max.		Chlorine	# Per 100 ml	
		30 Day	7 Day Ave			30 Day	7 Day Ave		Max. Daily Ave.	30 Day	7 Day Ave
Permit Limit		30	45	6.0	9.0	30	45	0.3 mg/l	1.0 mg/l	Report	Report
Dec	1389	4.2	4.2	6.7	7.4	9.0	9.0	<0.1	0.8	158.0	158.0
Jan.'06	1329	2.7	2.7	6.8	7.1	3.0	3.0	<0.1	1.5	12.0	12.0
Feb.	1117	8.7	8.7	6.7	7.1	15.0	15.0	<0.1	0.8	3.0	3.0
March	1201	2.7	2.7	6.8	7.1	4.0	4.0	<0.1	1.0	112.0	112.0
April	1114	18.0	18.0	6.6	7.0	17.5	17.5	<0.1	0.8	96.0	96.0
May	2030	4.2	4.2	6.8	7.2	4.0	4.0	<0.1	0.8	53.0	53.0
June	1458	4.2	4.2	6.5	7.3	4.0	4.0	<0.1	0.8	53.0	53.0
July	901	8.4	8.4	6.5	6.8	8.0	8.0	<0.1	0.6	178.0	178.0
August	888	16.2	16.2	6.4	6.8	5.0	5.0	<0.1	0.6	0.0	0.0
Sept	1023	1.8	1.8	6.9	7.6	12.0	12.0	<0.1	1.0	13.0	13.0
Oct	1344	2.4	2.4	6.9	7.3	27.5	27.5	<0.1	0.8	1.0	1.0
Nov	806	1	1	6.9	7.6	28.5	28.5	<0.1	1.0	1.0	1.0

8. Notification of Non-routine Mining Incidents:

See section 7b.

9. MRHA Correspondence Involving Non-routine Mining Incidents:

The Cayuga Mine has not received any citations from MSHA regarding non-routine mining incidents.

10. Changes in Mining Method:

There have been no changes to the Cayuga Mine layout in the past year.

11. Surface Subsidence:

Surface subsidence surveys continue to be done in accordance with the Mined Land Use Plan. See section 7e of this report.

12. In-situ Rock Mechanics Measurements:

See section 7d of this report.

13. Written Citizen Complaints:

There have been no written citizen complaints received by Cargill concerning the Cayuga Mine.

Water Volume Calculation Ultimate Pond Potential Volume 6-Dec-06						
Area	Total Area	Pillar Area	Fillable Area Ft2	Roof Height	Volume	Gallons
Far East Pond	6,598,278	2,831,750	3,766,528	12	45,198,336	338,083,553
Overflow Basin	832,750	64,788	767,962	10	7,679,620	57,443,558
Small Pond #2	128409	0	128,409	7	898,863	6,723,495
Bowl Edge Pond	Not planned					
Small Pond #1	Not planned					
Southern Pond	Not planned					
Total Gallons						402,250,606
Incoming gallons per year @ 40gpm						21,021,000
Ultimate Pond Life (yrs) as of 6 Feb2001						19
Water added = (46 months/12 mo.) X 21,024,000 = (6 Feb 2001 - 1 Jan 2005)						80,592,000
Water added during 2005 (measured)						16,030,800
Water added during 2006 (measured)						18,272,329
Volume remaining						287,355,477
Remaining Pond Life @ (16,030,000 + 18,272,329)/2 gal/yr.						17

Pond volumes are calculated by using the "area" function of Auto Cad. A polygon is drawn around the perimeter of the entire pond and Auto Cad is used to calculate the area of the polygon (in square feet). A polygon is drawn around each individual pillar within the pond limits and an area is calculated using Auto Cad. The pillar area's are subtracted from the total area to give the total pond area. Roof heights are determined by visual inspection, historical information where available, and the use of raw estimates.