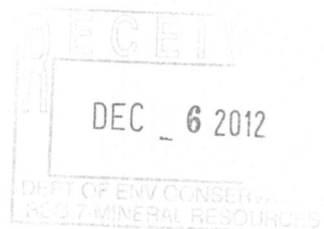




November 30, 2012

Cargill Deicing Technology
Cayuga Mine
P.O. Box B
191 Portland Point Road
Lansing, NY 14882

Mr. Matthew Podniesinski
Chief, Resource Development Section
Bureau of Resource Management & Development
Division of Mineral Resources
New York State Department of Environmental Conservation
625 Broadway, Third Floor
Albany, New York 12233-6500



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

Dear Mr. Podniesinski:

Enclosed is an annual report required in accordance with the Special Conditions section (item numbers 13.a through 13.g) of DEC permit number 0-9999-00075/00001. This report will address each reporting requirement separately (13a.1, 13.a.2, 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 this report is in the mail to Lucas Mahoney, the Region 7 Mined Land Reclamation Specialist.

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

With Best Regards,

Russell Givens
Mine Manager – Cargill Deicing Technology

Cargill Deicing Technology
191 Portland Point Road
Lansing, New York 14882

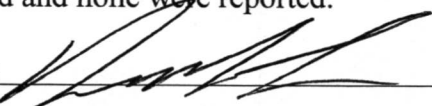
Mail Address:
PO Box B
Lansing, New York 14882

Tel (607) 533-4221
Fax (607) 533-4501

Reporting, Monitoring, and Notifications

13.a.1 - Cargill Cayuga Mine Manager Certification:

I, Russell S. Givens, Mine Manager – Cargill Deicing Technology, certify that all mining activities, to the best of my knowledge, conducted during the reporting period from January 1, 2012 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: 

Date: 12-3-2012

13.a.2 - 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

As was discussed during the July 2012 meeting with the DEC, mining has been temporarily suspended in the southern workings pending evaluation of atypical microseismic noises heard there during July of 2011. Mining will resume there when Cargill has deemed it prudent to do so.

13.a.3 - 3 Year Mining Plan

A map is attached depicting the current and proposed mining for the next three years.

The Cayuga Mine is currently operating in the northern region of the mine. Active mining is located in panels U-62 to the west, U-63 to the east and NW-3 to the north. As can be seen on the map, mining is proposed to continue east from U-63 under the land, pending acquisition of mineral rights there. No mining will be done where Cargill does not own the mineral rights.

13.a.4 - 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 shifted 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, specific convergence stations are monitored quarterly. Currently, there are over 300 convergence stations being monitored. Once the data from the convergence stations has been collected it is evaluated both internally and externally for trends to ensure that each panel and the mine are behaving properly.

Roof sag, measured with extensometers, is also monitored as conditions warrant. This data is reviewed internally and externally as well.

Evaluations of weekly and quarterly convergence data indicate that no unusual trends have been identified and the mine is behaving as expected, with the exception of the U-40B and U12 areas. Since

backfill placement in the U40B area has been completed the convergence rates have slowed and are trending back toward historical rates. The U-12 panel also shows higher than normal closure near the breakthrough with SW-2 and near the U-12A sub-panel. These areas are being monitored more frequently as we try to understand why the rates are increased. Both of these areas in U-12 were backfilled during the 1990's.

13.a.5 - Summary of Subsidence Monitoring:

Surface subsidence measurements continue to be performed in accordance with the Mined Land Use Plan. A survey of the west shore of Cayuga lake was performed this year and the data is being evaluated now. Plans are being made to conduct subsidence surveys of the east shore line in the 2013 calendar year. Past measurements indicate that the mine is behaving as expected with no anomalous subsidence zones.

13.a.6 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) – 16 gallons per minute
- Ventilation Shaft (#2 shaft) – 4 gallons per minute
- ED Plant Concentrate discharge – 7 gallons per minute

- Total Water Inflow = 27 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 at the far east end of 4-level as well as to various areas of the active mine for dust control. Recent volume calculations indicated that at our current rate of storage (about 13,000,000 gallons per year) we have approximately 13 years of disposal life remaining on 4-level.

Action plans are in place to continue to reduce the inflow into the mine over the next year. A system for collecting the #1 shaft water inflow and for pumping it to surface for processing has been installed but is not yet operational awaiting installation of the piping in the #1 shaft. Once the piping installation is completed, the system is expected to reduce inflow by an additional 6 gpm (~3,000,000 gpm).

13.a.7 - Summary of SPDES Monitoring Data:

The following is a summary of the past year's outfall results (December 2011 – October 2012) and waste water treatment plant results (December 2011 – October 2012). There were no exceedances of the SPDES limits to report during the time of this report. If an exceedance occurs it is reported to the DEC in two ways. Once an exceedance 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. Several years ago, outfalls 004 and 005 were physically routed into outfall 003 so there is no longer any data from them. The data is included here as an attached spreadsheet.

13.b - Notification of Non-routine Mining Incidents:

There were no incidents meeting the guidelines for notification as identified in section 13.a.2.

13.c. - MSHA Correspondence Involving Non-routine Mining Incidents:

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

13.d. - Changes in Mining Method:

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

13.e. - Surface Subsidence:

Surface subsidence surveys continue to be done in accordance with the Mined Land Use Plan. See section 13.a.5 of this report.

13.f. - In-situ Rock Mechanics Measurements:

See section 13.a.4 of this report.

13.g. - Written Citizen Complaints:

No written complaints from citizens were received since the last report (December 2011).

Water Volume Calculation
Ultimate Pond Potential Volume
1-Jan-13

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	128,409	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
Water added during 2007 (measured)						13,507,200
Water added during 2008 (measured)						10,886,400
Water added during 2009 (estimated)						10,401,624
Water added during 2010 (estimated)						8,894,769
Water added during 2011 (estimated)						10,669,680
Water added during 2012 (flow meter)						11,861,287
Mar 2010 Adjustment (Final fill -1520 elevation to -1540 elevation)						55,753,706
Volume remaining						165,380,811
Remaining Pond Life @ 11861287 gal/yr.						13.9

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. Water added values are estimates from the mine pumping system.

2012 DEC Report Outfall Results (Dec 2011 through Oct 2012)

Red = exceedance

CYANIDE

Permit Limit Month/Year	OUTFALLS								
	001 1.1	002 0.1	003 0.1	004 0.1	005 0.1	006 0.1	007 0.1	008 0.1	012 0.1
December 2011	0.09	<.01	<.01	Combined	Combined	<.01	<.01	Eliminated	<.01
January 2012	0.23	<.01	<.01	with #003	with #003	<.01	<.01		<.01
February	<.01	<.01	<.01			<.01	<.01		<.01
March	<.01	<.01	<.01			<.01	<.01		<.01
April	0.14	<.01	<.01			<.01	<.01		<.01
May	0.057	<.01	<.01			NF	<.01		<.01
June	0.2	<.01	<.01			<.01	<.01		<.01
July	0.017	<.01	<.01			<.01	<.01		<.01
August	0.15	<.01	<.01			NF	NF		NF
September	0.35	0.011	0.1			<.01	<.01		<.01
October	0.23	<.01	<.01			0.021	<.01		0.013
						0.01	<.01		0.01

CHLORIDE

Permit Limit Month/Year	OUTFALLS								
	001 40,000 mg/l	002 10,000 mg/l	003 10,000 mg/l	004	005	006 5,000 mg/l	007 5,000 mg/l	008	012 5,000 mg/l
December 2011	15,000	1,200	690	Combined	Combined	1,200	250	Eliminated	800
January 2012	16,000	880	760	with #003	with #003	2,000	320		1,400
February	6,800	710	1,800			1,600	990		2,200
March	3,600	1,600	2,100			960	450		190
April	9,800	970	940			NF	280		1,100
May	8,700	850	730			4,502	230		840
June	8,200	220	530			1,600	310		2,400
July	7,000	420	1,100			NF	NF		NF
August	17,000	9,600	640			1,000	850		2,700
September	35,000	5,000	740			2,200	760		1,900
October	26,000	2,600	720			4,000	920		3,450

TDS

Permit Limit Month/Year	OUTFALLS								
	001 80,000 mg/l	002 40,000 mg/l	003 40,000 mg/l	004	005	006 10,000 mg/l	007 10,000 mg/l	008	012 10,000 mg/l
December 2011	20,000	2,400	2,100	Combined	Combined	2,000	770	Eliminated	1,500
January 2012	26,000	2,200	2,100	with #003	with #003	3,600	960		2,600
February	11,000	1,300	3,300			2,900	1,700		3,600
March	6,500	2,800	5,200			1,800	880		560
April	16,000	2,100	2,600			NF	990		2,300
May	14,000	2,100	2,100			1,962	880		2,000
June	15,000	660	1,900			3,100	1,200		5,100
July	11,000	930	3,100			NF	NF		NF
August	25,000	14,000	1,900			2,000	2,000		4,600
September	49,000	8,300	2,000			3,700	1,600		3,100
October	40,000	4,200	2,000			6,400	1,900		5,700

ZINC	OUTFALL
	001
Permit Limit	20 mg/l
Month/Year	
December 2011	0.62
January 2012	0.2
February	0.068
March	0.51
April	0.19
May	0.02
June	0.25
July	4.1
August	6.8
September	2.8
October	14

NON CONTACT COOLING WATER

Outfall #014

Permit Limit	Min/Max	Min/75 Max	500 Max Gpm.
	Intake Water	Effluent Water	Flow Rate
	Temp. deg. F.	Temp. deg. F.	Effluent Gross
Month/Year	Maximum 5 degree Increase intake to Effluent		
December 2011	52/52	61.3/61.3	375
January 2012	52.1/52.1	62.4/62.4	350
February	54.5/54.5	64.7/64.7	350
March	58/58	63/63	100
April	56.1/56.1	59.3/59.3	100
May	NF	NF	NF
June	NF	NF	NF
July	NF	NF	NF
August	74.2/74.2	74.3/74.3	355
September	70.1/70.1	71.9/71.9	343
October	61.1/61.1	61.8/61.8	320

WASTE WATER TREATMENT PLANT

Outfall #009

Item	Flow Rate	BOD		pH		Total Suspended Solids		Settleable Solids	Total Residual Chlorine	Fecal Coliform # per 100 ml	
		Avg	Max	Min	Max	Avg	Max			Avg	Max
		30 Day	7 Day			30 Day	7 Day	Daily max	Max Daily Avg	30 Day	7 Day
Permit Limit	Report	30	45	6	9	30	45	3.0 ml/l	1.0 mg/l	Report	Report
Month/Year											
December 2011	748	14	14	6.3	7.6	20	20	<0.1	1	2	2
January 2012	815	4	4	6.5	7.1	6	6	<0.1	1	2	2
February	736	8	8	6	6.7	4	4	<0.1	0.5	42	42
March	628	2	2	6.8	7.2	11	11	<0.1	0.5	1	1
April	495	13	13	6.5	7.8	16	16	<0.1	0.9	1	1
May	765	14	14	6.8	7.6	8	8	<0.1	0.9	1	1
June	981	12	12	6.6	6.9	18	18	<0.1	1	1	1
July	794	11	11	6.7	7.6	4	4	<0.1	0.9	1	1
August	929	13	13	6.5	7.2	9	9	<0.1	0.7	14	14
September	773	11	11	6.5	7.1	4	4	<0.1	0.9	14	14
October	1190	8	8	6.6	6.9	7	7	<0.1	0.9	12	12