

Michigan Department of Environmental Quality- Water Bureau
WASTEWATER DISCHARGE PERMIT APPLICATION
 SECTION I - General Information

Section I shall be completed by all permit applicants. See Page iii for instructions on completing Section I, Pages 1 and 2. To submit additional information, see Page ii, Item 3.

<p style="text-align: center;">Water Bureau Use Only</p> <p>Receipt Number: _____</p> <p>Permit ID #: _____</p>	<p style="text-align: center;">Cashier Use Only: 37000-40535-9412-481000-00</p>
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PLEASE TYPE OR PRINT

1	NPDES PERMIT NUMBER MI0003158		
2. APPLICANT	Applicant Name St Barbara Cement <hr/> Address 3933 Dearborn Street <hr/> Address 2 or P.O. Box <hr/> City Detroit <hr/> State MI <hr/> ZIP Code 48209 <hr/> Telephone (with area code) 313-842-4600 <hr/> FAX (with area code) 313-849-4512		
3. FACILITY	Facility Name 1 St Marys Cement Inc. (U.S.) <hr/> Facility Name 2 <hr/> Facility Name 3 <hr/> Street Address (do not use a P.O. Box Number) 16000 Bells Bay Road <hr/> City Charlevoix <hr/> State MI <hr/> ZIP Code 49720 <hr/> Telephone (with area code) 231-547-9971 <hr/> FAX (with area code) 231-547-6202		
4. CONTACTS	<input type="checkbox"/> Application Contact <input checked="" type="checkbox"/> Facility Contact <input type="checkbox"/> Discharge Monitoring Reports <input type="checkbox"/> Storm Water Billing <input type="checkbox"/> Biosolids Billing <input type="checkbox"/> NPDES Annual Billing	First Name Dirk <hr/> Title Operations Manager <hr/> Address 1 16000 Bells Bay Road <hr/> City Charlevoix <hr/> State MI <hr/> ZIP Code 49720 <hr/> Telephone (with area code) 231-547-9971 <hr/> FAX (with area code) 231-547-6202 <hr/> e-mail address daco@vcsmc.com	Last Name Cox <hr/> Business St Marys Cement Inc. (U.S.) <hr/> Address 2 <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
4. CONTACTS	<input checked="" type="checkbox"/> Application Contact <input type="checkbox"/> Facility Contact <input checked="" type="checkbox"/> Discharge Monitoring Reports <input checked="" type="checkbox"/> Storm Water Billing <input type="checkbox"/> Biosolids Billing <input checked="" type="checkbox"/> NPDES Annual Billing	First Name Cortney <hr/> Title Environmental Manager <hr/> Address 1 16000 Bells Bay Road <hr/> City Charlevoix <hr/> State MI <hr/> ZIP Code 49720 <hr/> Telephone (with area code) 231-237-1342 <hr/> FAX (with area code) 231-547-6202 <hr/> e-mail address ckschmidt@vcsmc.com	Last Name Schmidt <hr/> Business St Marys Cement Inc. (U.S.) <hr/> Address 2 <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
4. CONTACTS	<input type="checkbox"/> Application Contact <input type="checkbox"/> Facility Contact <input type="checkbox"/> Discharge Monitoring Reports <input type="checkbox"/> Storm Water Billing <input type="checkbox"/> Biosolids Billing <input type="checkbox"/> NPDES Annual Billing	First Name <hr/> Title <hr/> Address 1 <hr/> City <hr/> State <hr/> ZIP Code <hr/> Telephone (with area code) <hr/> FAX (with area code) <hr/> e-mail address 	Last Name <hr/> Business <hr/> Address 2 <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

Michigan Department of Environmental Quality- Water Bureau
WASTEWATER DISCHARGE PERMIT APPLICATION
SECTION I - General Information

PLEASE TYPE OR PRINT

FACILITY NAME St Marys Cement Inc. (U.S.)	NPDES PERMIT NUMBER MI0003158
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5. PERMIT ACTION REQUESTED (Check one box only) - Instructions for this item are on Page iii.

NEW USE A proposed discharge OR an existing discharge that is currently unpermitted.

REISSUANCE of current permit.

MODIFICATION of current permit. Attach a description of the proposed modification.

Note: Applications for **New Use** discharges and applications for either **Reissuance** or **Modification** that include an increased loading of pollutants to the receiving water are required to submit a Rule 98 Demonstration with the Application. See Item 6.

6. RULE 98 - ANTIDegradation REQUIREMENTS - Instructions for this item are on Page iii.

In accordance with Rule 323.1098 of the Michigan Water Quality Standards, the applicant is required to submit an Antidegradation Demonstration for any new or increased loading of pollutants to the surface waters of the state. An Antidegradation Demonstration must contain the information specified in Rule 1098, Antidegradation section of the Appendix. For assistance completing this item, contact the Permits Section.

Will this discharge be an increased loading of pollutants to the surface waters of the state?

Yes. Submit an Antidegradation Demonstration.

No. Continue with Item 7.

7. ADDITIONAL FACILITY LOCATION INFORMATION - Instructions for this item are on Page iii.

A. Is the treatment facility within municipal boundaries? Yes No

B. County Charlevoix				Township Charlevoix	
C. Town 4N	Range 8W	Section 28,29	1/4	1/4, 1/4	Private (French) Land Claim
D. Latitude 45 18 53				Longitude 85 17 53	

8. CERTIFIED OPERATOR Does the facility have a DEQ certified operator? Yes No Instructions for this item are on Page iii.

First Name Cortney		Last Name Schmidt			
Certification Number		Certification Classification(s) A-1b, h, i; B-3b, A-2d			
Address 1 16000 Bells Bay Road			Address 2		
City Charlevoix			State MI	Zip Code 49720	
Telephone Number 231-237-1342		Fax Number 231-547-6202		e-mail address ckschmidt@vcsmc.com	

9. OTHER ENVIRONMENTAL PERMITS

Provide the information requested below for any other federal, state, or local environmental permits in effect or applied for at the time of submittal of this Application form; including, but not limited to, permits issued under any of the following programs: Air Pollution Control, Hazardous Waste Management, Wetlands Protection, Soil Erosion and Sedimentation Control, and other NPDES permits. To submit additional information, see Page ii, Item 3.

Issuing Agency	Permit or COC Number	Permit Type
USEPA	MID065846032	CESQWG
Michigan Department of Environmental Quality	700-77H	Air
Michigan Department of Environmental Quality	9091	Type III Landfill

Michigan Department of Environmental Quality- Water Bureau
WASTEWATER DISCHARGE PERMIT APPLICATION
 SECTION I - General Information

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FACILITY NAME St Marys Cement Inc. (U.S.)	NPDES PERMIT NUMBER MI0003158
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15 CERTIFICATION

Rule 323.2114(1-4), promulgated under the Michigan Act, requires that this Application be signed as follows:

- A. For an organization, company, corporation, or authority, by a principal executive officer.
- B. For a partnership, by a general partner.
- C. For a sole proprietor, by the proprietor.
- D. For a municipal, state, or other public facility, by a principal executive officer or ranking elected official (such as the mayor, village president, city or village manager, or clerk).

Note: If the signatory is not listed above, but is authorized to sign the Application, please provide documentation of that authorization.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for having knowledge of violations."

Print Name:	Dirk Cox	Title:	Operations Manager
Representing:	St Marys Cement Inc. (U.S.)		
Signature:		Date:	FEB 08 2007

This completes Section I. Publicly-Owned Treatment Works discharging sanitary and industrial wastewater to the surface waters, and privately-owned treatment works discharging sanitary wastewater to the surface waters should complete Section II. Privately-owned treatment works include, but are not limited to, Mobile Home Parks, Campgrounds, Condominiums, Hotels and Motels, Nursing Homes, etc. All other applicants should complete Section III. If assistance is needed completing this Application, contact the Permits Section.

Permit Application Submittal Checklist

Please confirm the following before submitting the application form:

- 1. Section I has been completed, including all diagrams, maps, and the treatment process narrative.
- 2. The Application has been signed as required above in Section I.15. (A.-D.) or a copy of the letter authorizing the signatory to sign the letter has been included.
- 3. Section II or Section III has been completed, including any additional information or submissions.
- 4. A check or Money Order for the appropriate application fee has made out to the "State of Michigan and has been included with the application submittal.

Michigan Department of Environmental Quality- Water Bureau
WASTEWATER DISCHARGE PERMIT APPLICATION
 SECTION III - Industrial and Commercial Wastewater

B. Outfall Information

Complete a separate Section III.B. - Outfall Information (Pages 25-31) - for each outfall at the facility. Make copies of this blank section of the Application as necessary for additional outfalls.

PLEASE TYPE OR PRINT

FACILITY NAME St Marys Cement Inc. (U.S.)	NPDES PERMIT NUMBER MI0003158	OUTFALL NUMBER 003
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1. OUTFALL INFORMATION - Instructions for this item are on Page 23.

A.	Watershed Boardman - Charlevoix	HUC Code 04060105				
B.	Receiving Water Lake Michigan					
C.	County Charlevoix	Township Charlevoix				
D.	Town 34N	Range 8W	Section 28	¼ NW	¼, ¼ SE	Private (French) Land Claim
E.	Latitude 45 18 53			Longitude 85 17 53		

F. Type of Wastewater Discharged (check all that apply to this outfall):

- Contact Cooling Groundwater Cleanup Hydrostatic Pressure Test Noncontact Cooling Water
 Process Wastewater Sanitary Wastewater Storm Water - not regulated Storm Water - regulated
 Storm water subject to effluent guidelines (indicate under which category): _____

Other – specify (see "Table 8 - Other Common Types of Wastewater" - in the Appendix) Quarry dewatering; CKD pile seepage; CKD Landfill Leachate

G. What is the Maximum Design Flow Rate for this outfall: 45 MGD

H. What is the Maximum Authorized Discharge Flow for this outfall for the next five years?
 Seasonal Dischargers _____ MGY (Continue with Item I)
 Continuous Dischargers 45 MGD (Continue with Item J)

I. Seasonal Discharge:

List the discharge periods (by month) and the volume discharged in the space provided below.

From	Through	Discharge Volume	Annual Total

J. Continuous Discharge:

How often is there a discharge from this outfall (on the average)? 24 Hours/Day 365 Days/Year

Batch dischargers are required to provide the following additional information:

Is there effluent flow equalization? Yes No

Batch Peak Flow Rate: _____ Number of batches discharged per day: _____

	Minimum	Average	Maximum
Batch Volume (gallons)			
Batch Duration (minutes)			

Michigan Department of Environmental Quality- Water Bureau
WASTEWATER DISCHARGE PERMIT APPLICATION
 SECTION III - Industrial and Commercial Wastewater

B. Outfall Information

PLEASE TYPE OR PRINT

FACILITY NAME St Marys Cement Inc. (U.S.)	NPDES PERMIT NUMBER MI0003158	OUTFALL NUMBER 003
<p>2. PROCESS STREAMS CONTRIBUTING TO OUTFALL DISCHARGE</p> <p>Federal Regulations require that different industries report different information depending on the type facility. The information below is used to determine the applicable federal regulations for this facility. An abbreviated list is in the Summary of Information to be reported by Industry Type section of the Appendix. Applicants are required to provide the name and the SIC or the NAICS code of each process at the facility. Facilities with production-based limits must report an estimated annual production rate for the next five years or the life of the permit. If the wastestream is not regulated under federal categorical standards, the applicant is required to report all pollutants which have the reasonable potential to be present in the discharge. To submit additional information, see Page ii, Item 3.</p>		
<p>PROCESS INFORMATION</p> <p>A. Name of the process contributing to the discharge: <u>Quarry Dewatering from Limestone and Other Mining Operations</u></p> <p>B. SIC or NAICS code: <u>1422</u></p> <p>C. Describe the process and provide measures of production: Quarry dewatering; treated in settling ponds prior to discharge.</p>		
<p>PROCESS INFORMATION</p> <p>A. Name of the process contributing to the discharge: <u>Stormwater</u></p> <p>B. SIC or NAICS code: <u>3241</u></p> <p>C. Describe the process and provide measures of production: Precipitation</p>		
<p>PROCESS INFORMATION</p> <p>A. Name of the process contributing to the discharge: <u>CKD Pile Seepage and CKD Landfill Leachate</u></p> <p>B. SIC or NAICS code: <u>NA</u></p> <p>C. Describe the process and provide measures of production: Leachate/seepage from former cement kiln dust Piles (closed in accordance with PA 451, Part 201) and CKD Landfill (Type III - Low Hazard Industrial Waste constructed in accordance with PA 451 Part 115 and PA 451 Part 201).</p>		
<p>PROCESS INFORMATION</p> <p>A. Name of the process contributing to the discharge: _____</p> <p>B. SIC or NAICS code: _____</p> <p>C. Describe the process and provide measures of production:</p>		
<p>PROCESS INFORMATION</p> <p>A. Name of the process contributing to the discharge: _____</p> <p>B. SIC or NAICS code: _____</p> <p>C. Describe the process and provide measures of production:</p>		

SECTION I, Part 10
ATTACHMENT
WASTEWATER DISCHARGE PERMIT APPLICATION
ST MARYS CEMENT INC. (U.S.)
CHARLEVOIX, MICHIGAN

Narrative of Manufacturing Process

The St Marys Cement Inc. facility in Charlevoix, Michigan manufactures the following products:

- Portland cement (primary product)
- Masonry cement

The materials used in the process are limestone, shale, bottom ash, fly ash, bauxite, sand, iron ore, and gypsum. The limestone and shale are mined from an onsite quarry. All other materials are shipped to into the plant by truck or barge. The kiln is fueled by coal, petroleum coke, and No. 2 fuel oil.

The materials from the quarry are fed into an underground primary crusher. This reduces the limestone and shale to a maximum size of 6 inches. The rock then goes through the secondary crusher, which reduces the size to 4 inches or smaller. The materials are then routed to separate storage piles and then to silos. Other materials are moved by mobile equipment into separate storage piles and then to silos. The materials are then fed into a Roller Mill, which grinds the material to a talcum powder consistency. This "kiln feed" is collected in a large control device (currently an electrostatic precipitator; scheduled to be replaced by a bag-house in 2005) and then conveyed to a blending silo and storage tanks.

The kiln feed is lifted by a bucked elevator to the Preheater. The Preheater is a four-stage cyclone unit which ultimately heats the kiln feed to a temperature of over 1600° F and is then fed into an inclined rotary kiln. Inside the kiln the material and the air/heat travel concurrently. As the material moves through the kiln at temperatures approaching 2600° F, certain elements are driven off in the form of gases. The remaining elements unite to form a new substance with new physical and chemical characteristics. The new substance, called clinker, is formed in pieces about the size of large marbles.

Clinker is discharged from the kiln and cooled. The clinker is then ground with gypsum in rotating ball mills. The finished cement is then stored until transported offsite by ship, barge, or truck.

The St Marys Cement Inc. Charlevoix facility produces approximately 1.5 Million tons of clinker annually, which equates to approximately 1.6 Million tons of Portland and masonry cement.

Water is used in both the quarry and manufacturing process. For the manufacturing process, a Lake Michigan intake provides water for non-contact cooling and contact cooling purposes. The non-contact cooling water is used by compressors, heat exchangers and cement coolers. Under certain conditions the cement cooler water may be considered contact due to high fugitive dust conditions inside the Finish Mill Building, this is the only *contact* cooling water at the facility. On the application form for Outfall 001 St Marys Cement Inc. has noted this exception.

Lake Michigan intake water is also used for process gas cooling is not discharged, as it is evaporated in the process and does not condense. Approximately one-third of the intake water is lost to evaporation in the gas conditioning process.

A brief narrative of each outfall follows:

Outfall 001

This outfall has two sources: 1) Lake Michigan intake which is used for non-contact and contact cooling; and 2) stormwater. Additionally, the intake/discharge water in this process loop is treated with Ondeo-Nalco chemicals 7408 and 7345 (already approved by MDEQ-WQD) for Zebra Mussel control.

The cement coolers in this process loop operate intermittently, depending on cement temperature, ambient temperature, and quality metrics. When the cement coolers are not operating, the water is bypassed around the coolers and discharged directly. There is no change in Outfall 001 flow rates due to operation of the cement coolers. Under previously issued NPDES permits, the MDEQ has separated out this contribution from the cement coolers as Outfall 001B. The *net* total suspended solids (TSS) from this contribution are calculated by subtracting the TSS from the Lake Michigan intake from the TSS of the cement cooler discharge. A mass (pounds/day) is calculated and historically this net limit has been established at 66 pounds per day TSS.

St Marys Cement Inc. recommends that Outfall 001B be integrated into Outfall 001 and that the TSS limits apply only when the cement coolers are operating.

Stormwater contributions to this outfall are limited to the east side of the manufacturing facility, much of which is paved. Best stormwater management practices are employed.

Outfall 002

There are five contributions to this outfall: 1) non-contact water from cement manufacturing process; 2) stormwater; 3) treated groundwater from fuel oil spill remediation system (Outfall 002B); treated water from quarry dewatering activities; and 5) cement kiln dust (CKD) pile seepage and landfill leachate (part of quarry contribution). Additionally, the intake/discharge water in this process loop is treated with Ondeo-Nalco chemicals 7408 and 7345 (already approved by MDEQ-WQD) for Zebra Mussel control.

The non-contact cooling water is Lake Michigan intake used to provide cooling for equipment in the manufacturing process including sealed bearings, heat exchangers, and compressors.

Stormwater contributions are from the northwest side of the manufacturing facility, much of which is unpaved. This stormwater is diverted to a ditch to filter out suspended solids prior to discharge.

Outfall 002B is an intermittent discharge of treated groundwater from a fuel oil remediation system. The system uses sulfuric acid to adjust pH prior to be treated by a dual stage granular activated carbon system. The contribution from the remedial system is most often used for gas conditioning (evaporated) in the process and is only discharged via Outfall 002B when the kiln is not in operation.

The quarry water is generated during dewatering operations and storm events. This water is treated in a series of settling ponds prior to discharge. Only a small portion (approximately 10%) of the quarry water discharge is routed to Outfall 002 through what is known as the Landscape Pond.

The seepage from the historic CKD piles (closed in accordance with Part 201) is an integral part of the quarry water; however, it has been listed as a separate contribution in the permit. New to this application is the inclusion of the CKD Landfill leachate. St Marys Cement Inc. received a temporary approval from the MDEQ-WQD District Office in 2003 for this contribution. St Marys Cement Inc. proposes to make this a permanent addition, as the CKD Landfill leachate is the same source and quality as the historic CKD piles, and was also constructed to comply with Part 201 (and Part 115) standards.

Outfall 003

There are three contributions to this outfall: 1) stormwater; 2) treated water from quarry dewatering activities; and 3) cement kiln dust (CKD) pile seepage and landfill leachate (part of quarry contribution). Please refer to Outfall 002 for descriptions.

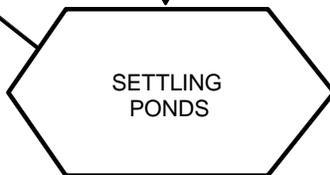
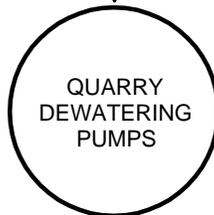
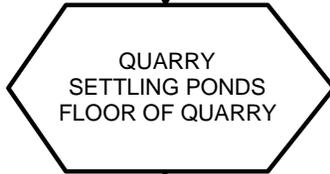
Outfall 004

Stormwater and groundwater generated in the raw material and coal storage yard is discharged via Outfall 004. Additionally, there is believed to be a small amount of settling pond seepage is contributed to this same outfall, however, the analytical data from Outfalls 002 and 003, the main receivers of the pond discharge, does not correlate with the data from Outfall 004.

Outfall 005

Outfall 005 is used when and if it is necessary to dewater the shale quarry located on what is known as St Marys Cement Inc.'s Sweet Property. There has been no discharge from this quarry for over 8 years, so no recent analytical data is available. However, St Marys Cement Inc. reserves the right to use this outfall in the future. Prior to any discharge activities, St Marys Cement Inc. will notify the MDEQ-WQD.

Flow diagrams and maps of the water intakes and discharges are included in this application.



OUTFALL 002
(3.0 MGD MAX)

2.0 MGD

CRUSHER SUMP
ESTIMATED 0.1 MGD

TO LAKE MICHIGAN
OUTFALL 003
(45 MGD MAX.)

WATER CIRCUIT FOR OUTFALL 003

St. Marys Cement, Inc. (U.S.)

P:\2004475.05\CADD-Data\NPDES APPLICATION MAPS\dwg\6110.dwg Tab: Layout1 Scale: 1"=40' Saved on: 08/17/07, 1:57pm Plotted by: jrlumley 08/17/07, 2:09pm

Location:

PART OF SECTION 28,
T 34 N, R 8 W,
CHARLEVOIX COUNTY,
MICHIGAN

Sheet

Job No.: 2004475.05
Date: 03/05/2004
Scale: NOT TO
Drawn: from RMT
Chk'd.: JVS
Rev.: 08/17/2007



Gosling Czubak
engineering sciences, inc.
1280 Business Park Drive
Traverse City, MI 49686-8607
231-946-9191 800-968-1062
Fax: 231-941-4603

- *Engineers*
- *Surveyors*
- *Planners*
- *Environmental Services*

P:\2004475.05\CADD-Data\NPDES APPLICATION MAPS\dwg\6109.dwg Tab: Layout1 Scale: 1"=500' Saved on: 01/24/07, 4:14pm Plotted by: jrlumley 08/17/07, 2:09pm

OUTFALLS CONTRIBUTIONS:

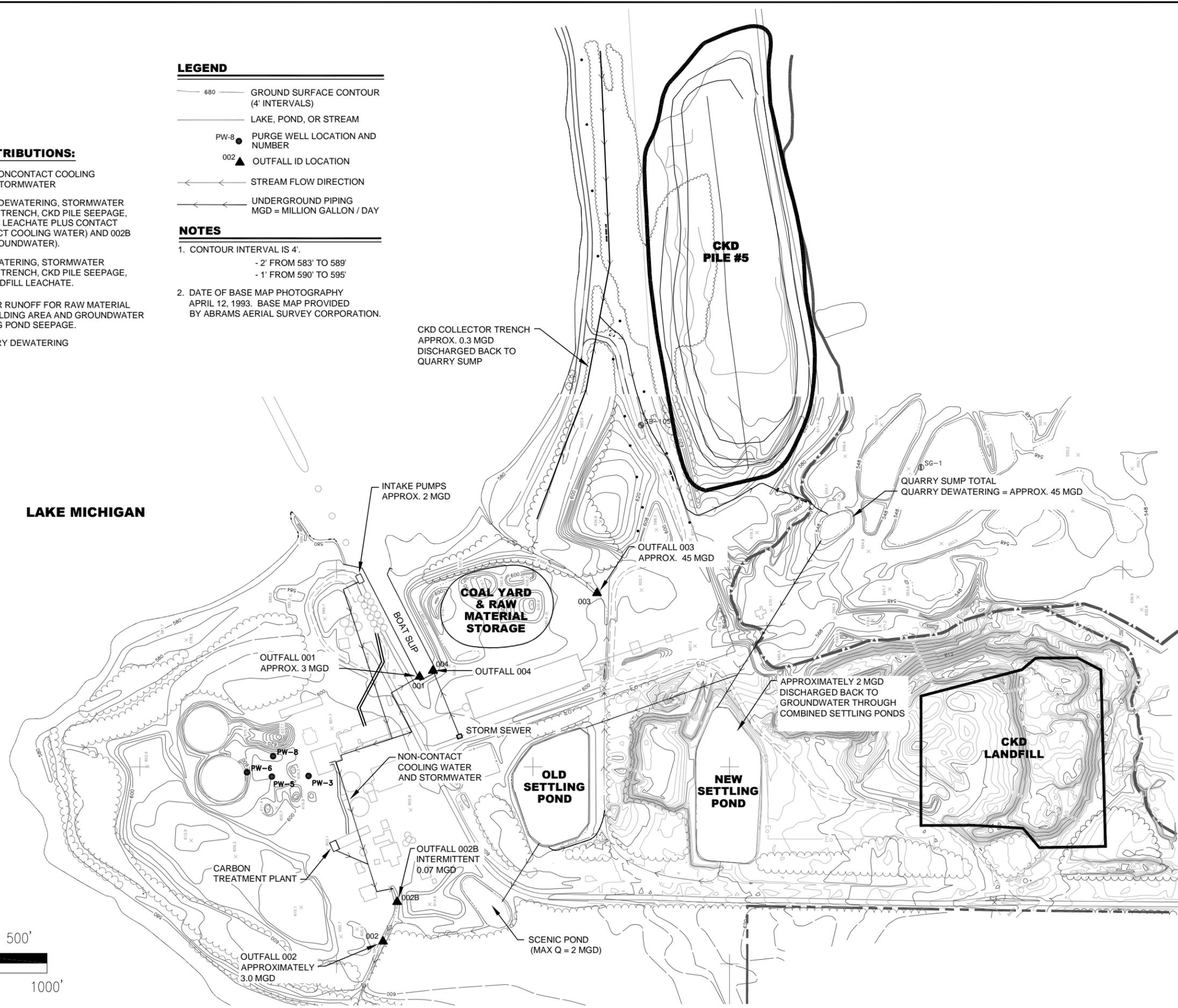
- OUTFALL 001: CONTACT & NONCONTACT COOLING WATER AND STORMWATER
- OUTFALL 002: 002 (QUARRY DEWATERING, STORMWATER RUNOFF, CKD TRENCH, CKD PILE SEEPAGE, CKD LANDFILL LEACHATE PLUS CONTACT & NONCONTACT COOLING WATER) AND 002B (TREATED GROUNDWATER).
- OUTFALL 003: QUARRY DEWATERING, STORMWATER RUNOFF, CKD TRENCH, CKD PILE SEEPAGE, AND CKD LANDFILL LEACHATE.
- OUTFALL 004: STORMWATER RUNOFF FOR RAW MATERIAL STORAGE BUILDING AREA AND GROUNDWATER AND SETTLING POND SEEPAGE.
- OUTFALL 005: SHALE QUARRY DEWATERING

LEGEND

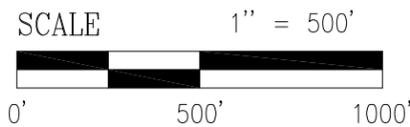
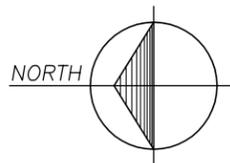
- 680 ——— GROUND SURFACE CONTOUR (4' INTERVALS)
- LAKE, POND, OR STREAM
- PW-8 ● PURGE WELL LOCATION AND NUMBER
- 002 ▲ OUTFALL ID LOCATION
- ←←← STREAM FLOW DIRECTION
- ←←← UNDERGROUND PIPING MGD = MILLION GALLON / DAY

NOTES

1. CONTOUR INTERVAL IS 4'.
 - 2' FROM 583' TO 589'
 - 1' FROM 590' TO 595'
2. DATE OF BASE MAP PHOTOGRAPHY APRIL 12, 1993. BASE MAP PROVIDED BY ABRAMS AERIAL SURVEY CORPORATION.



LAKE MICHIGAN



Gosling Czubak
 engineering sciences, inc.
 1280 Business Park Drive
 Traverse City, MI 49686-8607
 231-946-9191 800-968-1062
 Fax: 231-941-4603

• Engineers
 • Surveyors
 • Planners
 • Environmental Services

Job No.: 2004475.05
 Date: 03/08/2004
 Scale: 1" = 500'
 Drawn: from RMT
 Chk'd: JVS
 Rev.: 08/17/2007

**OUTFALL FLOW DIAGRAM
 LOCATION MAP
 St. Marys Cement, Inc. (U.S.)**

Location: PART OF SECTION 28,
 T 34 N, R 8 W,
 CHARLEVOIX COUNTY,
 MICHIGAN

Sheet 1 of 1

ANALYTICAL RESULTS FROM MARCH 2004 TO THE PRESENT
OUTFALL 003
ST MARYS CEMENT INC. (U.S.), CHAREVOIX, MI
NPDES PERMIT MI0003158

SAMPLE DATE	PARAMETER NAME	DELIMITER	RESULT	UNITS
3/3/2004	ANTIMONY (TOTAL)	<	2	UG/L
4/7/2004	ANTIMONY (TOTAL)	<	2	UG/L
5/3/2004	ANTIMONY (TOTAL)	<	2	UG/L
6/9/2004	ANTIMONY (TOTAL)	<	2	UG/L
7/6/2004	ANTIMONY (TOTAL)	<	2	UG/L
8/4/2004	ANTIMONY (TOTAL)	<	2	UG/L
9/8/2004	ANTIMONY (TOTAL)	<	2	UG/L
10/7/2004	ANTIMONY (TOTAL)	<	2	UG/L
11/1/2004	ANTIMONY (TOTAL)	<	2	UG/L
12/7/2004	ANTIMONY (TOTAL)	<	2	UG/L
1/5/2005	ANTIMONY (TOTAL)		2.2	UG/L
2/1/2005	ANTIMONY (TOTAL)	<	2	UG/L
3/10/2005	ANTIMONY (TOTAL)	<	2	UG/L
4/4/2005	ANTIMONY (TOTAL)	<	2	UG/L
5/11/2005	ANTIMONY (TOTAL)	<	2	UG/L
6/7/2005	ANTIMONY (TOTAL)		2.1	UG/L
7/6/2005	ANTIMONY (TOTAL)	<	2	UG/L
8/2/2005	ANTIMONY (TOTAL)	<	2	UG/L
9/8/2005	ANTIMONY (TOTAL)	<	2	UG/L
10/5/2005	ANTIMONY (TOTAL)	<	2	UG/L
3/3/2004	ARSENIC (TOTAL)	<	1	UG/L
4/7/2004	ARSENIC (TOTAL)	<	1	UG/L
5/3/2004	ARSENIC (TOTAL)	<	1	UG/L
6/9/2004	ARSENIC (TOTAL)	<	1	UG/L
7/6/2004	ARSENIC (TOTAL)	<	1	UG/L
8/4/2004	ARSENIC (TOTAL)	<	1	UG/L
9/8/2004	ARSENIC (TOTAL)	<	1	UG/L
10/7/2004	ARSENIC (TOTAL)	<	1	UG/L
11/1/2004	ARSENIC (TOTAL)	<	1	UG/L
12/7/2004	ARSENIC (TOTAL)	<	1	UG/L
1/5/2005	ARSENIC (TOTAL)	<	1	UG/L
2/1/2005	ARSENIC (TOTAL)	<	1	UG/L
3/10/2005	ARSENIC (TOTAL)	<	1	UG/L
4/4/2005	ARSENIC (TOTAL)	<	1	UG/L
5/11/2005	ARSENIC (TOTAL)	<	1	UG/L
6/7/2005	ARSENIC (TOTAL)	<	1	UG/L
7/6/2005	ARSENIC (TOTAL)	<	1	UG/L
8/2/2005	ARSENIC (TOTAL)	<	1	UG/L
9/8/2005	ARSENIC (TOTAL)	<	1	UG/L
10/5/2005	ARSENIC (TOTAL)	<	1	UG/L
8/5/2004	BERYLLIUM (TOTAL)	<	0.01	MG/L
8/9/2004	BERYLLIUM (TOTAL)	<	0.01	MG/L
9/8/2004	BERYLLIUM (TOTAL)	<	0.01	MG/L

ANALYTICAL RESULTS FROM MARCH 2004 TO THE PRESENT
OUTFALL 003
ST MARYS CEMENT INC. (U.S.), CHAREVOIX, MI
NPDES PERMIT MI0003158

SAMPLE DATE	PARAMETER NAME	DELIMITER	RESULT	UNITS
9/13/2004	BERYLLIUM (TOTAL)	<	0.01	MG/L
10/7/2004	BERYLLIUM (TOTAL)	<	0.01	MG/L
10/11/2004	BERYLLIUM (TOTAL)	<	0.01	MG/L
11/1/2004	BERYLLIUM (TOTAL)	<	0.01	MG/L
11/10/2004	BERYLLIUM (TOTAL)	<	0.01	MG/L
12/8/2004	BERYLLIUM (TOTAL)	<	0.01	MG/L
12/12/2004	BERYLLIUM (TOTAL)	<	0.01	MG/L
1/4/2005	BERYLLIUM (TOTAL)	<	0.01	MG/L
1/12/2005	BERYLLIUM (TOTAL)	<	0.01	MG/L
2/1/2005	BERYLLIUM (TOTAL)	<	0.01	MG/L
2/16/2005	BERYLLIUM (TOTAL)	<	0.01	MG/L
3/2/2005	BERYLLIUM (TOTAL)	<	0.01	MG/L
3/10/2005	BERYLLIUM (TOTAL)	<	0.01	MG/L
4/4/2005	BERYLLIUM (TOTAL)	<	0.01	MG/L
4/11/2005	BERYLLIUM (TOTAL)	<	0.01	MG/L
5/4/2005	BERYLLIUM (TOTAL)	<	0.01	MG/L
5/11/2005	BERYLLIUM (TOTAL)	<	0.01	MG/L
8/5/2004	CHLORIDE		18	MG/L
8/9/2004	CHLORIDE		20	MG/L
9/8/2004	CHLORIDE		23	MG/L
9/13/2004	CHLORIDE		20	MG/L
10/7/2004	CHLORIDE		20	MG/L
10/11/2004	CHLORIDE		21	MG/L
11/1/2004	CHLORIDE		20	MG/L
11/10/2004	CHLORIDE		19	MG/L
12/8/2004	CHLORIDE		21	MG/L
12/12/2004	CHLORIDE		20	MG/L
1/4/2005	CHLORIDE		19	MG/L
1/12/2005	CHLORIDE		19	MG/L
2/1/2005	CHLORIDE		18	MG/L
2/16/2005	CHLORIDE		18	MG/L
3/2/2005	CHLORIDE		18	MG/L
3/10/2005	CHLORIDE		19	MG/L
4/4/2005	CHLORIDE		19	MG/L
4/11/2005	CHLORIDE		19	MG/L
5/4/2005	CHLORIDE		18	MG/L
5/11/2005	CHLORIDE		19	MG/L
3/3/2004	COPPER (TOTAL)	<	1	UG/L
4/7/2004	COPPER (TOTAL)	<	1	UG/L
5/3/2004	COPPER (TOTAL)	<	1	UG/L
6/9/2004	COPPER (TOTAL)	<	1	UG/L
7/6/2004	COPPER (TOTAL)	<	1	UG/L
8/4/2004	COPPER (TOTAL)	<	1	UG/L

**ANALYTICAL RESULTS FROM MARCH 2004 TO THE PRESENT
OUTFALL 003
ST MARYS CEMENT INC. (U.S.), CHAREVOIX, MI
NPDES PERMIT MI0003158**

SAMPLE DATE	PARAMETER NAME	DELIMITER	RESULT	UNITS
9/8/2004	COPPER (TOTAL)		4.2	UG/L
10/7/2004	COPPER (TOTAL)		2.6	UG/L
11/1/2004	COPPER (TOTAL)	<	1	UG/L
12/7/2004	COPPER (TOTAL)	<	1	UG/L
1/5/2005	COPPER (TOTAL)	<	1	UG/L
2/1/2005	COPPER (TOTAL)	<	1	UG/L
3/10/2005	COPPER (TOTAL)	<	1	UG/L
4/4/2005	COPPER (TOTAL)	<	1	UG/L
5/11/2005	COPPER (TOTAL)	<	1	UG/L
6/7/2005	COPPER (TOTAL)	<	1	UG/L
7/6/2005	COPPER (TOTAL)	<	1	UG/L
8/2/2005	COPPER (TOTAL)	<	1	UG/L
9/8/2005	COPPER (TOTAL)	<	1	UG/L
10/5/2005	COPPER (TOTAL)	<	1	UG/L
8/9/2005	HARDNESS, (EDTA) AS CaCO3		700	MG/L
8/5/2004	LITHIUM (TOTAL)		0.045	MG/L
8/9/2004	LITHIUM (TOTAL)		0.043	MG/L
9/8/2004	LITHIUM (TOTAL)		0.04	MG/L
9/13/2004	LITHIUM (TOTAL)		0.043	MG/L
10/7/2004	LITHIUM (TOTAL)		0.039	MG/L
10/11/2004	LITHIUM (TOTAL)		0.041	MG/L
11/1/2004	LITHIUM (TOTAL)		0.049	MG/L
11/10/2004	LITHIUM (TOTAL)		0.043	MG/L
12/8/2004	LITHIUM (TOTAL)		0.042	MG/L
12/12/2004	LITHIUM (TOTAL)		0.044	MG/L
1/4/2005	LITHIUM (TOTAL)		0.048	MG/L
1/12/2005	LITHIUM (TOTAL)		0.042	MG/L
2/1/2005	LITHIUM (TOTAL)		0.042	MG/L
2/16/2005	LITHIUM (TOTAL)		0.044	MG/L
3/2/2005	LITHIUM (TOTAL)		0.044	MG/L
3/10/2005	LITHIUM (TOTAL)		0.042	MG/L
4/4/2005	LITHIUM (TOTAL)		0.046	MG/L
4/11/2005	LITHIUM (TOTAL)		0.04	MG/L
5/4/2005	LITHIUM (TOTAL)		0.046	MG/L
5/11/2005	LITHIUM (TOTAL)		0.041	MG/L
3/3/2004	MANGANESE (TOTAL)		58	UG/L
4/7/2004	MANGANESE (TOTAL)		58	UG/L
5/3/2004	MANGANESE (TOTAL)		49	UG/L
6/9/2004	MANGANESE (TOTAL)		49	UG/L
7/6/2004	MANGANESE (TOTAL)		43	UG/L
8/4/2004	MANGANESE (TOTAL)		43	UG/L
9/8/2004	MANGANESE (TOTAL)		41	UG/L
10/7/2004	MANGANESE (TOTAL)		43	UG/L

**ANALYTICAL RESULTS FROM MARCH 2004 TO THE PRESENT
OUTFALL 003
ST MARYS CEMENT INC. (U.S.), CHAREVOIX, MI
NPDES PERMIT MI0003158**

SAMPLE DATE	PARAMETER NAME	DELIMITER	RESULT	UNITS
11/1/2004	MANGANESE (TOTAL)		55	UG/L
12/7/2004	MANGANESE (TOTAL)		74	UG/L
1/5/2005	MANGANESE (TOTAL)		74	UG/L
2/1/2005	MANGANESE (TOTAL)		77	UG/L
3/10/2005	MANGANESE (TOTAL)		79	UG/L
4/4/2005	MANGANESE (TOTAL)		67	UG/L
5/11/2005	MANGANESE (TOTAL)		78	UG/L
6/7/2005	MANGANESE (TOTAL)		68	UG/L
7/6/2005	MANGANESE (TOTAL)		47	UG/L
8/2/2005	MANGANESE (TOTAL)		40	UG/L
9/8/2005	MANGANESE (TOTAL)		48	UG/L
10/5/2005	MANGANESE (TOTAL)		62	UG/L
3/3/2004	MERCURY (TOTAL)		0.613	NG/L
4/7/2004	MERCURY (TOTAL)		0.332	NG/L
5/10/2004	MERCURY (TOTAL)		0.468	NG/L
6/9/2004	MERCURY (TOTAL)		0.373	NG/L
7/12/2004	MERCURY (TOTAL)		0.296	NG/L
8/5/2004	MERCURY (TOTAL)		0.273	NG/L
9/9/2004	MERCURY (TOTAL)		0.565	NG/L
10/7/2004	MERCURY (TOTAL)		0.1	NG/L
11/3/2004	MERCURY (TOTAL)		0.326	NG/L
12/15/2004	MERCURY (TOTAL)		0.356	NG/L
1/5/2005	MERCURY (TOTAL)		0.227	NG/L
2/2/2005	MERCURY (TOTAL)		0.168	NG/L
3/10/2005	MERCURY (TOTAL)		0.159	NG/L
4/11/2005	MERCURY (TOTAL)		0.24	NG/L
5/11/2005	MERCURY (TOTAL)		0.117	NG/L
6/7/2005	MERCURY (TOTAL)		0.1	NG/L
7/6/2005	MERCURY (TOTAL)		0.17	NG/L
8/2/2005	MERCURY (TOTAL)		0.38	NG/L
9/8/2005	MERCURY (TOTAL)		0.1	NG/L
10/5/2005	MERCURY (TOTAL)		0.35	NG/L
12/15/2005	MERCURY (TOTAL)		0.18	NG/L
1/10/2006	MERCURY (TOTAL)		0.1	NG/L
4/11/2006	MERCURY (TOTAL)		0.74	NG/L
7/11/2006	MERCURY (TOTAL)		0.44	NG/L
10/9/2006	MERCURY (TOTAL)		0.28	NG/L
3/3/2004	NICKEL (TOTAL)	<	25	UG/L
4/7/2004	NICKEL (TOTAL)	<	25	UG/L
5/3/2004	NICKEL (TOTAL)	<	25	UG/L
6/9/2004	NICKEL (TOTAL)	<	25	UG/L
7/6/2004	NICKEL (TOTAL)	<	25	UG/L
8/4/2004	NICKEL (TOTAL)	<	25	UG/L

**ANALYTICAL RESULTS FROM MARCH 2004 TO THE PRESENT
OUTFALL 003
ST MARYS CEMENT INC. (U.S.), CHAREVOIX, MI
NPDES PERMIT MI0003158**

SAMPLE DATE	PARAMETER NAME	DELIMITER	RESULT	UNITS
9/8/2004	NICKEL (TOTAL)	<	25	UG/L
10/7/2004	NICKEL (TOTAL)	<	25	UG/L
11/1/2004	NICKEL (TOTAL)	<	25	UG/L
12/7/2004	NICKEL (TOTAL)	<	25	UG/L
1/5/2005	NICKEL (TOTAL)	<	25	UG/L
2/1/2005	NICKEL (TOTAL)	<	25	UG/L
3/10/2005	NICKEL (TOTAL)	<	25	UG/L
4/4/2005	NICKEL (TOTAL)	<	25	UG/L
5/11/2005	NICKEL (TOTAL)	<	25	UG/L
6/7/2005	NICKEL (TOTAL)	<	25	UG/L
7/6/2005	NICKEL (TOTAL)	<	25	UG/L
8/2/2005	NICKEL (TOTAL)	<	25	UG/L
9/8/2005	NICKEL (TOTAL)	<	25	UG/L
10/5/2005	NICKEL (TOTAL)	<	25	UG/L
3/3/2004	POTASSIUM (TOTAL)		20	MG/L
4/7/2004	POTASSIUM (TOTAL)		24	MG/L
5/3/2004	POTASSIUM (TOTAL)		21	MG/L
6/9/2004	POTASSIUM (TOTAL)		26	MG/L
7/6/2004	POTASSIUM (TOTAL)		22	MG/L
8/4/2004	POTASSIUM (TOTAL)		20	MG/L
9/8/2004	POTASSIUM (TOTAL)		23	MG/L
10/7/2004	POTASSIUM (TOTAL)		19	MG/L
11/1/2004	POTASSIUM (TOTAL)		19	MG/L
12/7/2004	POTASSIUM (TOTAL)		19	MG/L
1/5/2005	POTASSIUM (TOTAL)		18	MG/L
2/1/2005	POTASSIUM (TOTAL)		17	MG/L
3/10/2005	POTASSIUM (TOTAL)		17	MG/L
4/4/2005	POTASSIUM (TOTAL)		19	MG/L
5/11/2005	POTASSIUM (TOTAL)		18	MG/L
6/7/2005	POTASSIUM (TOTAL)		21	MG/L
7/6/2005	POTASSIUM (TOTAL)		17	MG/L
8/2/2005	POTASSIUM (TOTAL)		19	MG/L
9/8/2005	POTASSIUM (TOTAL)		16	MG/L
10/5/2005	POTASSIUM (TOTAL)		16	MG/L
11/2/2005	POTASSIUM (TOTAL)		15	MG/L
12/5/2005	POTASSIUM (TOTAL)		14	MG/L
1/10/2006	POTASSIUM (TOTAL)		17	MG/L
2/1/2006	POTASSIUM (TOTAL)		16	MG/L
3/6/2006	POTASSIUM (TOTAL)		16	MG/L
4/5/2006	POTASSIUM (TOTAL)		17	MG/L
5/8/2006	POTASSIUM (TOTAL)		25	MG/L
6/5/2006	POTASSIUM (TOTAL)		22	MG/L
7/11/2006	POTASSIUM (TOTAL)		19	MG/L

**ANALYTICAL RESULTS FROM MARCH 2004 TO THE PRESENT
 OUTFALL 003
 ST MARYS CEMENT INC. (U.S.), CHAREVOIX, MI
 NPDES PERMIT MI0003158**

SAMPLE DATE	PARAMETER NAME	DELIMITER	RESULT	UNITS
8/2/2006	POTASSIUM (TOTAL)		22	MG/L
9/5/2006	POTASSIUM (TOTAL)		17	MG/L
10/9/2006	POTASSIUM (TOTAL)		20	MG/L
11/1/2006	POTASSIUM (TOTAL)		21	MG/L
12/5/2006	POTASSIUM (TOTAL)		18	MG/L
3/3/2004	SELENIUM (TOTAL)	<	2	UG/L
4/7/2004	SELENIUM (TOTAL)	<	2	UG/L
5/3/2004	SELENIUM (TOTAL)	<	2	UG/L
6/9/2004	SELENIUM (TOTAL)	<	2	UG/L
7/6/2004	SELENIUM (TOTAL)	<	2	UG/L
8/4/2004	SELENIUM (TOTAL)	<	2	UG/L
9/8/2004	SELENIUM (TOTAL)	<	2	UG/L
10/7/2004	SELENIUM (TOTAL)	<	2	UG/L
11/1/2004	SELENIUM (TOTAL)	<	2	UG/L
12/7/2004	SELENIUM (TOTAL)	<	2	UG/L
1/5/2005	SELENIUM (TOTAL)	<	2	UG/L
2/1/2005	SELENIUM (TOTAL)	<	2	UG/L
3/10/2005	SELENIUM (TOTAL)	<	2	UG/L
4/4/2005	SELENIUM (TOTAL)	<	2	UG/L
5/11/2005	SELENIUM (TOTAL)	<	2	UG/L
6/7/2005	SELENIUM (TOTAL)	<	2	UG/L
7/6/2005	SELENIUM (TOTAL)	<	2	UG/L
8/2/2005	SELENIUM (TOTAL)	<	2	UG/L
9/8/2005	SELENIUM (TOTAL)	<	2	UG/L
10/5/2005	SELENIUM (TOTAL)	<	2	UG/L
3/3/2004	SILVER (TOTAL)	<	0.2	UG/L
4/7/2004	SILVER (TOTAL)	<	0.2	UG/L
5/3/2004	SILVER (TOTAL)	<	0.2	UG/L
6/9/2004	SILVER (TOTAL)	<	0.2	UG/L
7/6/2004	SILVER (TOTAL)	<	0.2	UG/L
8/4/2004	SILVER (TOTAL)	<	0.2	UG/L
9/8/2004	SILVER (TOTAL)	<	0.2	UG/L
10/7/2004	SILVER (TOTAL)	<	0.2	UG/L
11/1/2004	SILVER (TOTAL)	<	0.2	UG/L
12/7/2004	SILVER (TOTAL)	<	0.2	UG/L
1/5/2005	SILVER (TOTAL)	<	0.2	UG/L
2/1/2005	SILVER (TOTAL)	<	0.2	UG/L
3/10/2005	SILVER (TOTAL)	<	0.2	UG/L
4/4/2005	SILVER (TOTAL)	<	0.2	UG/L
5/11/2005	SILVER (TOTAL)	<	0.2	UG/L
6/7/2005	SILVER (TOTAL)	<	0.2	UG/L
7/6/2005	SILVER (TOTAL)	<	0.2	UG/L
8/2/2005	SILVER (TOTAL)	<	0.2	UG/L

ANALYTICAL RESULTS FROM MARCH 2004 TO THE PRESENT
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SAMPLE DATE	PARAMETER NAME	DELIMITER	RESULT	UNITS
9/8/2005	SILVER (TOTAL)	<	0.2	UG/L
10/5/2005	SILVER (TOTAL)	<	0.2	UG/L
8/5/2004	STRONTIUM (TOTAL)		2.45	MG/L
8/9/2004	STRONTIUM (TOTAL)		2.49	MG/L
9/8/2004	STRONTIUM (TOTAL)		2.43	MG/L
9/13/2004	STRONTIUM (TOTAL)		2.9	MG/L
10/7/2004	STRONTIUM (TOTAL)		2.46	MG/L
10/11/2004	STRONTIUM (TOTAL)		2.42	MG/L
11/1/2004	STRONTIUM (TOTAL)		2.41	MG/L
11/10/2004	STRONTIUM (TOTAL)		2.33	MG/L
12/8/2004	STRONTIUM (TOTAL)		2.74	MG/L
12/12/2004	STRONTIUM (TOTAL)		2.88	MG/L
1/4/2005	STRONTIUM (TOTAL)		2.47	MG/L
1/12/2005	STRONTIUM (TOTAL)		2.78	MG/L
2/1/2005	STRONTIUM (TOTAL)		2.39	MG/L
2/16/2005	STRONTIUM (TOTAL)		2.522	MG/L
3/2/2005	STRONTIUM (TOTAL)		2.5	MG/L
3/10/2005	STRONTIUM (TOTAL)		2.43	MG/L
4/4/2005	STRONTIUM (TOTAL)		2.45	MG/L
4/11/2005	STRONTIUM (TOTAL)		2.64	MG/L
5/4/2005	STRONTIUM (TOTAL)		2.53	MG/L
5/11/2005	STRONTIUM (TOTAL)		2.49	MG/L
8/5/2004	SULFATE		481	MG/L
8/9/2004	SULFATE		479	MG/L
9/8/2004	SULFATE		494	MG/L
9/13/2004	SULFATE		509	MG/L
10/7/2004	SULFATE		468	MG/L
10/11/2004	SULFATE		491	MG/L
11/1/2004	SULFATE		505	MG/L
11/10/2004	SULFATE		473	MG/L
12/8/2004	SULFATE		483	MG/L
12/12/2004	SULFATE		525	MG/L
1/4/2005	SULFATE		500	MG/L
1/12/2005	SULFATE		522	MG/L
2/1/2005	SULFATE		464	MG/L
2/16/2005	SULFATE		514	MG/L
3/2/2005	SULFATE		482	MG/L
3/10/2005	SULFATE		518	MG/L
4/4/2005	SULFATE		453	MG/L
4/11/2005	SULFATE		490	MG/L
5/4/2005	SULFATE		531	MG/L
5/11/2005	SULFATE		459	MG/L
11/2/2005	SULFATE		490	MG/L

**ANALYTICAL RESULTS FROM MARCH 2004 TO THE PRESENT
OUTFALL 003
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SAMPLE DATE	PARAMETER NAME	DELIMITER	RESULT	UNITS
12/5/2005	SULFATE		490	MG/L
1/10/2006	SULFATE		510	MG/L
2/1/2006	SULFATE		500	MG/L
3/6/2006	SULFATE		520	MG/L
4/5/2006	SULFATE		500	MG/L
5/8/2006	SULFATE		500	MG/L
6/5/2006	SULFATE		510	MG/L
7/11/2006	SULFATE		500	MG/L
8/2/2006	SULFATE		480	MG/L
9/5/2006	SULFATE		530	MG/L
10/9/2006	SULFATE		500	MG/L
11/1/2006	SULFATE		520	MG/L
12/5/2006	SULFATE		500	MG/L
8/5/2004	SULFIDE	<	0.05	MG/L
8/9/2004	SULFIDE	<	0.05	MG/L
9/8/2004	SULFIDE	<	0.05	MG/L
9/13/2004	SULFIDE	<	0.05	MG/L
10/7/2004	SULFIDE	<	0.05	MG/L
10/11/2004	SULFIDE	<	0.05	MG/L
11/1/2004	SULFIDE	<	0.05	MG/L
11/10/2004	SULFIDE	<	0.05	MG/L
12/8/2004	SULFIDE	<	0.05	MG/L
12/12/2004	SULFIDE	<	0.05	MG/L
1/4/2005	SULFIDE	<	0.05	MG/L
1/12/2005	SULFIDE	<	0.05	MG/L
2/1/2005	SULFIDE	<	0.05	MG/L
2/16/2005	SULFIDE	<	0.05	MG/L
3/2/2005	SULFIDE	<	0.05	MG/L
3/10/2005	SULFIDE	<	0.05	MG/L
4/4/2005	SULFIDE	<	0.05	MG/L
4/11/2005	SULFIDE	<	0.05	MG/L
5/4/2005	SULFIDE	<	0.05	MG/L
5/11/2005	SULFIDE	<	0.05	MG/L
3/3/2004	THALLIUM (TOTAL)	<	2	UG/L
4/7/2004	THALLIUM (TOTAL)	<	2	UG/L
5/3/2004	THALLIUM (TOTAL)	<	2	UG/L
6/9/2004	THALLIUM (TOTAL)	<	2	UG/L
7/6/2004	THALLIUM (TOTAL)	<	2	UG/L
8/4/2004	THALLIUM (TOTAL)	<	2	UG/L
9/8/2004	THALLIUM (TOTAL)	<	2	UG/L
10/7/2004	THALLIUM (TOTAL)	<	2	UG/L
11/1/2004	THALLIUM (TOTAL)	<	2	UG/L
12/7/2004	THALLIUM (TOTAL)	<	2	UG/L

**ANALYTICAL RESULTS FROM MARCH 2004 TO THE PRESENT
OUTFALL 003
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SAMPLE DATE	PARAMETER NAME	DELIMITER	RESULT	UNITS
1/5/2005	THALLIUM (TOTAL)	<	2	UG/L
2/1/2005	THALLIUM (TOTAL)	<	2	UG/L
3/10/2005	THALLIUM (TOTAL)	<	2	UG/L
4/4/2005	THALLIUM (TOTAL)	<	2	UG/L
5/11/2005	THALLIUM (TOTAL)	<	2	UG/L
6/7/2005	THALLIUM (TOTAL)	<	2	UG/L
7/6/2005	THALLIUM (TOTAL)	<	2	UG/L
8/2/2005	THALLIUM (TOTAL)	<	2	UG/L
9/8/2005	THALLIUM (TOTAL)	<	2	UG/L
10/5/2005	THALLIUM (TOTAL)	<	2	UG/L
3/3/2004	TOTAL DISSOLVED SOLIDS		1020	MG/L
4/7/2004	TOTAL DISSOLVED SOLIDS		992	MG/L
5/3/2004	TOTAL DISSOLVED SOLIDS		970	MG/L
6/9/2004	TOTAL DISSOLVED SOLIDS		1040	MG/L
7/6/2004	TOTAL DISSOLVED SOLIDS		1040	MG/L
8/4/2004	TOTAL DISSOLVED SOLIDS		1100	MG/L
9/8/2004	TOTAL DISSOLVED SOLIDS		998	MG/L
10/7/2004	TOTAL DISSOLVED SOLIDS		1020	MG/L
11/1/2004	TOTAL DISSOLVED SOLIDS		1030	MG/L
12/7/2004	TOTAL DISSOLVED SOLIDS		1240	MG/L
1/5/2005	TOTAL DISSOLVED SOLIDS		1040	MG/L
2/1/2005	TOTAL DISSOLVED SOLIDS		928	MG/L
3/10/2005	TOTAL DISSOLVED SOLIDS		928	MG/L
4/4/2005	TOTAL DISSOLVED SOLIDS		956	MG/L
5/11/2005	TOTAL DISSOLVED SOLIDS		998	MG/L
6/7/2005	TOTAL DISSOLVED SOLIDS		966	MG/L
7/6/2005	TOTAL DISSOLVED SOLIDS		1050	MG/L
8/2/2005	TOTAL DISSOLVED SOLIDS		1050	MG/L
8/9/2005	TOTAL DISSOLVED SOLIDS		992	MG/L
9/8/2005	TOTAL DISSOLVED SOLIDS		962	MG/L
10/5/2005	TOTAL DISSOLVED SOLIDS		938	MG/L
11/2/2005	TOTAL DISSOLVED SOLIDS		958	MG/L
12/5/2005	TOTAL DISSOLVED SOLIDS		924	MG/L
1/10/2006	TOTAL DISSOLVED SOLIDS		1000	MG/L
2/1/2006	TOTAL DISSOLVED SOLIDS		972	MG/L
3/6/2006	TOTAL DISSOLVED SOLIDS		976	MG/L
4/5/2006	TOTAL DISSOLVED SOLIDS		984	MG/L
5/8/2006	TOTAL DISSOLVED SOLIDS		1010	MG/L
6/5/2006	TOTAL DISSOLVED SOLIDS		988	MG/L
7/11/2006	TOTAL DISSOLVED SOLIDS		972	MG/L
8/2/2006	TOTAL DISSOLVED SOLIDS		998	MG/L
9/5/2006	TOTAL DISSOLVED SOLIDS		1070	MG/L
10/9/2006	TOTAL DISSOLVED SOLIDS		1000	MG/L

**ANALYTICAL RESULTS FROM MARCH 2004 TO THE PRESENT
OUTFALL 003
ST MARYS CEMENT INC. (U.S.), CHAREVOIX, MI
NPDES PERMIT MI0003158**

SAMPLE DATE	PARAMETER NAME	DELIMITER	RESULT	UNITS
11/1/2006	TOTAL DISSOLVED SOLIDS		1000	MG/L
12/5/2006	TOTAL DISSOLVED SOLIDS		958	MG/L
3/3/2004	VANADIUM (TOTAL)	<	4	UG/L
4/7/2004	VANADIUM (TOTAL)	<	4	UG/L
5/3/2004	VANADIUM (TOTAL)	<	4	UG/L
6/9/2004	VANADIUM (TOTAL)	<	4	UG/L
7/6/2004	VANADIUM (TOTAL)	<	4	UG/L
8/4/2004	VANADIUM (TOTAL)	<	4	UG/L
9/8/2004	VANADIUM (TOTAL)	<	4	UG/L
10/7/2004	VANADIUM (TOTAL)	<	4	UG/L
11/1/2004	VANADIUM (TOTAL)	<	4	UG/L
12/7/2004	VANADIUM (TOTAL)	<	4	UG/L
1/5/2005	VANADIUM (TOTAL)	<	4	UG/L
2/1/2005	VANADIUM (TOTAL)	<	4	UG/L
3/10/2005	VANADIUM (TOTAL)	<	4	UG/L
4/4/2005	VANADIUM (TOTAL)	<	4	UG/L
5/11/2005	VANADIUM (TOTAL)	<	4	UG/L
6/7/2005	VANADIUM (TOTAL)	<	4	UG/L
7/6/2005	VANADIUM (TOTAL)	<	4	UG/L
8/2/2005	VANADIUM (TOTAL)	<	4	UG/L
9/8/2005	VANADIUM (TOTAL)	<	4	UG/L
10/5/2005	VANADIUM (TOTAL)	<	4	UG/L
3/3/2004	ZINC (TOTAL)	<	20	UG/L
4/7/2004	ZINC (TOTAL)	<	20	UG/L
5/3/2004	ZINC (TOTAL)	<	20	UG/L
6/9/2004	ZINC (TOTAL)	<	20	UG/L
7/6/2004	ZINC (TOTAL)	<	20	UG/L
8/4/2004	ZINC (TOTAL)	<	20	UG/L
9/8/2004	ZINC (TOTAL)	<	20	UG/L
10/7/2004	ZINC (TOTAL)	<	20	UG/L
11/1/2004	ZINC (TOTAL)	<	20	UG/L
12/7/2004	ZINC (TOTAL)	<	20	UG/L
1/5/2005	ZINC (TOTAL)	<	20	UG/L
2/1/2005	ZINC (TOTAL)	<	20	UG/L
3/10/2005	ZINC (TOTAL)	<	20	UG/L
4/4/2005	ZINC (TOTAL)	<	20	UG/L
5/11/2005	ZINC (TOTAL)	<	20	UG/L
6/7/2005	ZINC (TOTAL)	<	20	UG/L
7/6/2005	ZINC (TOTAL)	<	20	UG/L
8/2/2005	ZINC (TOTAL)	<	20	UG/L
9/8/2005	ZINC (TOTAL)	<	20	UG/L
10/5/2005	ZINC (TOTAL)	<	20	UG/L