

STATE OF MISSOURI  
DEPARTMENT OF NATURAL RESOURCES  
MISSOURI CLEAN WATER COMMISSION



**MISSOURI STATE OPERATING PERMIT**

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92<sup>nd</sup> Congress) as amended,

Permit No. MO-0127132

Owner: The S-S-S Lumber Company, Inc.  
Address: P.O. Box 474, Louisiana, MO 63353

Continuing Authority: The S-S-S Lumber Company, Inc.  
Address: P.O. Box 474, Louisiana, MO 63353

Facility Name: The S-S-S Lumber Company, Inc.  
Facility Address: 10415 Highway 79 South, Louisiana, MO 63353

Legal Description: See page 2  
UTM Coordinates: See page 2

Receiving Stream: See page 2  
First Classified Stream and ID: See page 2  
USGS Basin & Sub-watershed No.: See page 2

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

**FACILITY DESCRIPTION**

Industrial - SIC #1422, 1442, 4491

Industrial stormwater runoff from mining, crushing and shipping of limestone rock / dredging of river sand and gravel / storing and shipping of limestone, sand and gravel, rock, fertilizer, bauxite, coal, grain, clay and salt. Industrial process wastewater from quarry pit dewatering and truck washing without added detergents, acids, caustics, solvents, or other additives.


Total design flow from all outfalls is greater than 1 MGD.

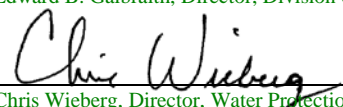
See page 2

This permit authorizes only wastewater and stormwater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Sections 640.013, 621.250, and 644.051.6 of the Law.

September 1, 2019      November 1, 2019  
Effective Date      Modification Date

September 30, 2023  
Expiration Date

  
Edward B. Galbraith, Director, Division of Environmental Quality

  
Chris Wieberg, Director, Water Protection Program

## **FACILITY DESCRIPTION (CONTINUED)**

### OUTFALL #001 – SIC #1442

Industrial stormwater runoff from sand and gravel loading and unloading areas and storage piles covering 3.56 acres.

Legal Description: NW ¼, SE ¼, Sec. 20, T54N, R1W, Pike County  
UTM Coordinates: X=669509, Y=4367044  
Receiving Stream: Mississippi River (P)  
First Classified Stream and ID: Mississippi River (P) (3699)  
USGS Basin & Sub-watershed No.: (07110004 – 0702)  
Design flow: 0.44 mgd  
Actual flow: Dependent upon precipitation.

### OUTFALL #002

Eliminated prior to June 6, 2008

### OUTFALL #003 – SIC #1442

Industrial stormwater runoff from materials (listed on page 1) loading and unloading area, sand and gravel storage piles, and limestone storage piles covering 1.62 acres.

Legal Description: SW ¼, NE ¼, Sec. 20, T54N, R1W, Pike County  
UTM Coordinates: X=669442, Y=4367268  
Receiving Stream: Mississippi River (P)  
First Classified Stream and ID: Mississippi River (P) (3699)  
USGS Basin & Sub-watershed No.: (07110004 – 0702)  
Design flow: 0.20 mgd  
Actual flow: Dependent upon precipitation.

### OUTFALL #004

Eliminated prior to June 6, 2008

### OUTFALL #005

Eliminated prior to June 6, 2008

### OUTFALL #006 – SIC #1442

Industrial stormwater runoff from gravel crushing areas, sand and gravel storage piles, and materials (listed on page 1) storage areas covering 3.31 acres.

Legal Description: SW ¼, NE ¼, Sec. 20, T54N, R1W, Pike County  
UTM Coordinates: X=669341, Y=4367401  
Receiving Stream: Mississippi River (P)  
First Classified Stream and ID: Mississippi River (P) (3699)  
USGS Basin & Sub-watershed No.: (07110004 – 0702)  
Design flow: 0.41 mgd  
Actual flow: Dependent upon precipitation.

### OUTFALL #007 – SIC #1422, #1442, #4491

Industrial stormwater runoff from materials (listed on page 1) loading and unloading areas for barges covering 0.51 acres.

Legal Description: SW ¼, NE ¼, Sec. 20, T54N, R1W, Pike County  
UTM Coordinates: X=669316, Y=4367434  
Receiving Stream: Mississippi River (P)  
First Classified Stream and ID: Mississippi River (P) (3699)  
USGS Basin & Sub-watershed No.: (07110004 – 0702)  
Design flow: 0.064 mgd  
Actual flow: Dependent upon precipitation.

### OUTFALL #008 – SIC #1422, #1442

Industrial stormwater runoff from a steel storage yard, plant shop, and warehouse areas covering 9.12 acres.

Legal Description: NW ¼, SE ¼, Sec. 20, T54N, R1W, Pike County  
UTM Coordinates: X=669437, Y=4367147  
Receiving Stream: Mississippi River (P)  
First Classified Stream and ID: Mississippi River (P) (3699)  
USGS Basin & Sub-watershed No.: (07110004 – 0702)  
Design flow: 1.14 mgd  
Actual flow: Dependent upon precipitation.

## **FACILITY DESCRIPTION (CONTINUED)**

### OUTFALL #009 – SIC #1442

Industrial stormwater runoff from a material storage area (typically raw bauxite) covering 1.55 acres.

Legal Description:	SW ¼, NE ¼, Sec. 20, T54N, R1W, Pike County
UTM Coordinates:	X=669174, Y=4367382
Receiving Stream:	Mississippi River (P)
First Classified Stream and ID:	Mississippi River (P) (3699)
USGS Basin & Sub-watershed No.:	(07110004 – 0702)
Design flow:	0.19 mgd
Actual flow:	Dependent upon precipitation.

### OUTFALL #010 – SIC #1422

Industrial stormwater runoff from quarry operations, crushed limestone stockpiles and stored materials (listed on page 1 above) covering 44.8 acres.

Legal Description:	SW ¼, NW ¼, Sec. 20, T54N, R1W, Pike County
UTM Coordinates:	X=668417, Y=4367190
Receiving Stream:	Tributary to Mississippi River
First Classified Stream and ID:	Mississippi River (P) (3699)
USGS Basin & Sub-watershed No.:	(07110004 – 0701)
Design flow:	5.6 mgd
Actual flow:	Dependent upon precipitation.

### OUTFALL #011 – SIC #1422

Industrial stormwater runoff from quarry operations, crushing operations and materials (listed on page 1) storage areas covering 19.42 acres.

Legal Description:	NE ¼, SW ¼, Sec. 20, T54N, R1W, Pike County
UTM Coordinates:	X=668883, Y=4366891
Receiving Stream:	Tributary to Mississippi River
First Classified Stream and ID:	Mississippi River (P) (3699)
USGS Basin & Sub-watershed No.:	(07110004 – 0702)
Design flow:	2.43 mgd
Actual flow:	Dependent upon precipitation.

### OUTFALL #012 – SIC #1422

Industrial stormwater runoff from quarry operations and limestone storage piles covering 294.6 acres.

Legal Description:	Land Grant 2768, Pike County
UTM Coordinates:	X=667730, Y=4367446
Receiving Stream:	Noix Creek (P)
First Classified Stream and ID:	Noix Creek (P) (011)
USGS Basin & Sub-watershed No.:	(07110004 – 0701)
Design flow:	3.68 mgd
Actual flow:	Dependent upon precipitation.

### OUTFALL #013 – SIC #1422

Industrial stormwater runoff from quarry operations, limestone storage piles and a scrap material and steel storage yard covering 8.4 acres.

Legal Description:	SE ¼, NW ¼, Sec. 20, T54N, R1W, Pike County
UTM Coordinates:	X=668819, Y=4367208
Receiving Stream:	Tributary to Mississippi River
First Classified Stream and ID:	Mississippi River (P) (3699)
USGS Basin & Sub-watershed No.:	(07110004 – 0702)
Design flow:	1.05 mgd
Actual flow:	Dependent upon precipitation.

## **FACILITY DESCRIPTION (CONTINUED)**

### OUTFALL #014 – SIC #1422

Industrial stormwater runoff from quarry operations and limestone storage piles covering 237.5 acres.

Legal Description:	SW ¼, SW ¼, Sec. 19, T54N, R1W, Pike County
UTM Coordinates:	X=667166, Y=4366481
Receiving Stream:	Tributary to Noix Creek (C)
First Classified Stream and ID:	8-20-13 MUDD V 1.0 (C) (3960)
USGS Basin & Sub-watershed No.:	(07110004 – 0701)
Design flow:	29.66 mgd
Actual flow:	Dependent upon precipitation.

### OUTFALL #015 – SIC #1422

Industrial stormwater runoff from a quarry operations, crushing operations and materials (listed above) storage areas covering 36.3 acres.

Legal Description:	NE ¼, SW ¼, Sec. 20, T54N, R1W, Pike County
UTM Coordinates:	X=668925, Y=4367043
Receiving Stream:	Tributary to Mississippi River
First Classified Stream and ID:	Mississippi River (P) (3699)
USGS Basin & Sub-watershed No.:	(07110004 – 0702)
Design flow:	2.11 mgd
Actual flow:	Dependent upon precipitation.

### OUTFALL #016 – SIC #1422

Industrial stormwater runoff from a quarry operations and limestone storage piles covering 30.9 acres.

Legal Description:	NE ¼, SW ¼, Sec. 30, T54N, R1W, Pike County
UTM Coordinates:	X=667464, Y=4365137
Receiving Stream:	Tributary to Buffalo Creek (C)
First Classified Stream and ID:	8-20-13 MUDD V 1.0 (C) (3960)
USGS Basin & Sub-watershed No.:	(07110004 – 0702)
Design flow:	3.86 mgd
Actual flow:	Dependent upon precipitation.



<b>OUTFALL #001</b> <i>Industrial Stormwater</i>	<b>TABLE A-1</b> <b>FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</b>					
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on <b>September 1, 2019</b> and remain in effect until expiration of the permit. Such discharges shall be controlled, limited, and monitored by the permittee as specified below:						
EFFLUENT PARAMETERS	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	MONTHLY AVERAGE	BENCH- MARKS	MEASUREMENT FREQUENCY	SAMPLE TYPE
<b>LIMIT SET: PW</b>						
<u>PROCESS WASTEWATER</u> (NOTE 2)						
PHYSICAL						
Flow	MGD	*	*	-	once/week	grab
CONVENTIONAL						
Oil & Grease	mg/L	15	10	-	once/week	grab
pH – Units†	SU	6.5 to 9.0	-	-	once/week	grab
Settleable Solids	mL/L/hr	1.5	1.0	-	once/week	grab
Total Suspended Solids	mg/L	110	70	-	once/week	grab
NUTRIENTS						
Ammonia as N	mg/L	*	-	-	once/week	grab
Nitrate as N	mg/L	*	-	-	once/week	grab
Nitrate plus Nitrite as N	mg/L	**	-	0.68	once/week	grab
Nitrogen, Kjeldahl, total as N	mg/L	*	-	-	once/week	grab
Phosphorus, Total	mg/L	*	-	-	once/week	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>MONTHLY</u> ; THE FIRST REPORT IS DUE <u>OCTOBER 28, 2019</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
<b>LIMIT SET: Q</b>						
<u>INDUSTRIAL STORMWATER</u> (NOTE 1)						
PHYSICAL						
Flow	MGD	*	-	-	once/quarter◇	24 hr. estimate
Precipitation	inches	*	-	-	once/quarter◇	measured
CONVENTIONAL						
Oil & Grease	mg/L	**	-	10	once/quarter◇	grab
pH †	SU	6.5 to 9.0	-	-	once/quarter◇	grab
Settleable Solids	mL/L/hr	**	-	2.0	once/quarter◇	grab
Total Suspended Solids	mg/L	**	-	100	once/quarter◇	grab
NUTRIENTS						
Ammonia as N	mg/L	*	-	-	once/quarter◇	grab
Nitrate as N	mg/L	*	-	-	once/quarter◇	grab
Nitrate plus Nitrite as N	mg/L	*	-	0.68	once/quarter◇	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>JANUARY 28, 2020</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

<b>OUTFALL</b> <b>#003, #006, #008, #009</b> <i>Industrial Stormwater</i>	<b>TABLE A-2</b> <b>FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</b>					
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on <b>September 1, 2019</b> and remain in effect until expiration of the permit. Such discharges shall be controlled, limited, and monitored by the permittee as specified below:						
EFFLUENT PARAMETERS	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	MONTHLY AVERAGE	BENCH- MARKS	MEASUREMENT FREQUENCY	SAMPLE TYPE
<b>LIMIT SET: PW</b>						
<b>PROCESS WASTEWATER</b> (NOTE 2)						
PHYSICAL						
Flow	MGD	*	*	-	once/week	grab
CONVENTIONAL						
Oil & Grease	mg/L	15	10	-	once/week	grab
pH – Units†	SU	6.5 to 9.0	-	-	once/week	grab
Settleable Solids	mL/L/hr	1.5	1.0	-	once/week	grab
Total Suspended Solids	mg/L	70	70	-	once/week	grab
NUTRIENTS						
Ammonia as N	mg/L	*	-	-	once/week	grab
Nitrate as N	mg/L	*	-	-	once/week	grab
Nitrate plus Nitrite as N	mg/L	**	-	0.68	once/week	grab
Nitrogen, Kjeldahl, total as N	mg/L	*	-	-	once/week	grab
Phosphorus, Total	mg/L	*	-	-	once/week	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>MONTHLY</u> ; THE FIRST REPORT IS DUE <u>OCTOBER 28, 2019</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
<b>LIMIT SET: Q</b>						
<b>INDUSTRIAL STORMWATER</b> (NOTE 1)						
PHYSICAL						
Flow	MGD	*	-	-	once/quarter◇	24 hr. estimate
Precipitation	inches	*	-	-	once/quarter◇	measured
CONVENTIONAL						
Chloride	mg/L	*	-	-	once/quarter◇	grab
Oil & Grease	mg/L	**	-	10	once/quarter◇	grab
pH †	SU	6.5 to 9.0	-	-	once/quarter◇	grab
Settleable Solids	mL/L/hr	**	-	1.0	once/quarter◇	grab
Total Suspended Solids	mg/L	**	-	100	once/quarter◇	grab
METALS						
Aluminum, Dissolved	µg/L	**	-	750	once/quarter◇	grab
NUTRIENTS						
Ammonia as N	mg/L	*	-	-	once/quarter◇	grab
Nitrate as N	mg/L	*	-	-	once/quarter◇	grab
Nitrate plus Nitrite as N	mg/L	*	-	0.68	once/quarter◇	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>JANUARY 28, 2020</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

<b>OUTFALL</b> <b>#007</b> <i>Industrial Stormwater</i>	<b>TABLE A-3</b> <b>FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</b>					
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on <b>September 1, 2019</b> and remain in effect until expiration of the permit. Such discharges shall be controlled, limited, and monitored by the permittee as specified below:						
EFFLUENT PARAMETERS	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	MONTHLY AVERAGE	BENCH- MARKS	MEASUREMENT FREQUENCY	SAMPLE TYPE
<b>LIMIT SET: PW</b>						
<b>PROCESS WASTEWATER</b> (NOTE 2)						
PHYSICAL						
Flow	MGD	*	*	-	once/week	grab
CONVENTIONAL						
Oil & Grease	mg/L	15	10	-	once/week	grab
pH – Units†	SU	6.5 to 9.0	-	-	once/week	grab
Settleable Solids	mL/L/hr	1.5	1.0	-	once/week	grab
Total Suspended Solids	mg/L	70	70	-	once/week	grab
NUTRIENTS						
Ammonia as N	mg/L	*	-	-	once/week	grab
Nitrate as N	mg/L	*	-	-	once/week	grab
Nitrate plus Nitrite as N	mg/L	**	-	0.68	once/week	grab
Nitrogen, Kjeldahl, total as N	mg/L	*	-	-	once/week	grab
Phosphorus, Total	mg/L	*	-	-	once/week	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>MONTHLY</u> ; THE FIRST REPORT IS DUE <u>OCTOBER 28, 2019</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
<b>LIMIT SET: Q</b>						
<b>INDUSTRIAL STORMWATER</b> (NOTE 1)						
PHYSICAL						
Flow	MGD	*	-	-	once/quarter◇	24 hr. estimate
Precipitation	inches	*	-	-	once/quarter◇	measured
CONVENTIONAL						
Chloride	mg/L	*	-	-	once/quarter◇	grab
Oil & Grease	mg/L	**	-	10	once/quarter◇	grab
pH †	SU	6.5 to 9.0	-	-	once/quarter◇	grab
Settleable Solids	mL/L/hr	**	-	1.0	once/quarter◇	grab grab
Total Suspended Solids	mg/L	**	-	100	once/quarter◇	grab
METALS						
Aluminum, Total Recoverable	µg/L	*	-	-	once/quarter◇	grab
Iron, Total Recoverable	µg/L	*	-	-	once/quarter◇	grab
Lead, Total Recoverable	µg/L	*	-	-	once/quarter◇	grab
Zinc, Total Recoverable	µg/L	*	-	-	once/quarter◇	grab
NUTRIENTS						
Ammonia as N	mg/L	*	-	-	once/quarter◇	grab
Nitrate as N	mg/L	*	-	-	once/quarter◇	grab
Nitrate plus Nitrite as N	mg/L	*	-	0.68	once/quarter◇	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>JANUARY 28, 2020</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

<b>OUTFALL</b> <b>#010, #011,</b> <b>#013, #015</b> <i>Industrial Stormwater</i>	<b>TABLE A-4</b> <b>FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</b>					
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on <b>September 1, 2019</b> and remain in effect until expiration of the permit. Such discharges shall be controlled, limited, and monitored by the permittee as specified below:						
EFFLUENT PARAMETERS	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	MONTHLY AVERAGE	BENCH- MARKS	MEASUREMENT FREQUENCY	SAMPLE TYPE
<b>LIMIT SET: PW</b>						
<b><u>PROCESS WASTEWATER</u></b> (NOTE 2)						
PHYSICAL						
Flow	MGD	*	*	-	once/week	grab
CONVENTIONAL						
Oil & Grease	mg/L	15	10	-	once/week	grab
pH – Units†	SU	6.5 to 9.0	-	-	once/week	grab
Settleable Solids	mL/L/hr	1.5	1.0	-	once/week	grab
Total Suspended Solids	mg/L	70	70	-	once/week	grab
NUTRIENTS						
Ammonia as N	mg/L	*	-	-	once/week	grab
Nitrate as N	mg/L	*	-	-	once/week	grab
Nitrate plus Nitrite as N	mg/L	*	-	0.68	once/week	grab
Nitrogen, Kjeldahl, total as N	mg/L	*	-	-	once/week	grab
Phosphorus, Total	mg/L	*	-	-	once/week	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>MONTHLY</u> ; THE FIRST REPORT IS DUE <u>OCTOBER 28, 2019</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
<b>LIMIT SET: Q</b>						
<b><u>INDUSTRIAL STORMWATER</u></b> (NOTE 1)						
PHYSICAL						
Flow	MGD	*	-	-	once/quarter◇	24 hr. estimate
Precipitation	inches	*	-	-	once/quarter◇	measured
CONVENTIONAL						
Oil & Grease	mg/L	**	-	10	once/quarter◇	grab
pH †	SU	6.5 to 9.0	-	-	once/quarter◇	grab
Settleable Solids	mL/L/hr	**	-	1.0	once/quarter◇	grab
Total Suspended Solids	mg/L	**	-	100	once/quarter◇	grab
NUTRIENTS						
Ammonia as N	mg/L	*	-	-	once/quarter◇	grab
Nitrate as N	mg/L	*	-	-	once/quarter◇	grab
Nitrate plus Nitrite as N	mg/L	*	-	0.68	once/quarter◇	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>JANUARY 28, 2020</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

<b>OUTFALL</b> <b>#012, #014,</b> <b>#016</b> <i>Industrial Stormwater</i>	<b>TABLE A-5</b> <b>FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</b>					
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on <b>September 1, 2019</b> and remain in effect until expiration of the permit. Such discharges shall be controlled, limited, and monitored by the permittee as specified below:						
EFFLUENT PARAMETERS	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	MONTHLY AVERAGE	BENCH- MARKS	MEASUREMENT FREQUENCY	SAMPLE TYPE
<b>LIMIT SET: PW</b>						
<b><u>PROCESS WASTEWATER</u></b> (NOTE 2)						
PHYSICAL						
Flow	MGD	*	*	-	once/week	grab
CONVENTIONAL						
Oil & Grease	mg/L	15	10	-	once/week	grab
pH – Units †	SU	6.5 to 9.0	-	-	once/week	grab
Settleable Solids	mL/L/hr	1.5	1.0	-	once/week	grab
Total Suspended Solids	mg/L	70	70	-	once/week	grab
NUTRIENTS						
Ammonia as N	mg/L	*	-	-	once/week	grab
Nitrate as N	mg/L	*	-	-	once/week	grab
Nitrate plus Nitrite as N	mg/L	*	-	0.68	once/week	grab
Nitrogen, Kjeldahl, total as N	mg/L	*	-	-	once/week	grab
Phosphorus, Total	mg/L	*	-	-	once/week	grab
MONITORING REPORTS SHALL BE SUBMITTED <b>MONTHLY</b> ; THE FIRST REPORT IS DUE <b>OCTOBER 28, 2019</b> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
<b>LIMIT SET: Q</b>						
<b><u>INDUSTRIAL STORMWATER</u></b> (NOTE 1)						
PHYSICAL						
Flow	MGD	*	-	-	once/quarter◇	24 hr. estimate
Precipitation	inches	*	-	-	once/quarter◇	measured
CONVENTIONAL						
Oil & Grease	mg/L	**	-	10	once/quarter◇	grab
pH †	SU	6.5 to 9.0	-	-	once/quarter◇	grab
Settleable Solids	mL/L/hr	**	-	1.0	once/quarter◇	grab
Total Suspended Solids	mg/L	**	-	100	once/quarter◇	grab
NUTRIENTS						
Ammonia as N	mg/L	*	-	-	once/quarter◇	grab
Nitrate as N	mg/L	*	-	-	once/quarter◇	grab
Nitrate plus Nitrite as N	mg/L	*	-	0.68	once/quarter◇	grab
MONITORING REPORTS SHALL BE SUBMITTED <b>QUARTERLY</b> ; THE FIRST REPORT IS DUE <b>JANUARY 28, 2020</b> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

## A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (CONTINUED)

- \* Monitoring and reporting requirement only
- \*\* Monitoring requirement with a benchmark value. See special condition #10.
- † pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.5-9.0 pH units.
- ◇ See table below for quarterly sampling.

Minimum Sampling Requirements			
Quarter	Months	Effluent Parameters	Report is Due
First	January, February, March	Sample at least once during any month of the quarter	April 28 <sup>th</sup>
Second	April, May, June	Sample at least once during any month of the quarter	July 28 <sup>th</sup>
Third	July, August, September	Sample at least once during any month of the quarter	October 28 <sup>th</sup>
Fourth	October, November, December	Sample at least once during any month of the quarter	January 28 <sup>th</sup>

### Note 1 - Industrial Stormwater discharges.

- (a) Stormwater samples shall be collected within the first 60 minutes of storm events of 0.1 inches or greater, that result in a discharge. Storm events include rainfall as well as run-off from the melting of frozen precipitation. Samples shall be collected prior to or at the property boundary or before the discharge enters waters of the state on the property. The permittee may simply report **“no discharge”** if no discharge actually occurs during the reporting period or if the watershed upstream of an outfall has met the following conditions: (1) there are no exposed materials (disturbed, processed, or stored) within the watershed, (2) there have been no activities that have occurred within the watershed within the previous 12 months, and (3) there have been no exceedances of any effluent or benchmark limitations at that outfall within the previous 12 months. Reporting **“no discharge”** shall include a note on the discharge monitoring report and in the SWPPP documenting the above conditions. The total amount of precipitation should be noted from the event from which the samples were collected.
- (b) Precipitation is to be monitored daily. A single outfall may be designated as representative of the site. The record may be obtained from a nearby monitoring station.
- (c) These parameters each have a benchmark limit. See special condition #10.

### Note 2 - Non-Stormwater discharges.

- (a) Non-stormwater discharges shall include only wastewater generated from process-related activities such as truck washing (without added detergents, acids, caustics, solvents, or other additives) and all dry-weather discharges from processing plants and mine-pit dewatering. In addition, non-stormwater discharges may include return water from aggregate dredging operations on the Mississippi River.
- (b) Samples shall be collected at least once per month during periods of operation only. When the facility is not in operation or when there are no non-stormwater discharges, report as “no discharge” on the monthly report.

## B. STANDARD CONDITIONS

In addition to specified conditions stated herein, this permit is subject to the attached Part I standard conditions dated August 1, 2014, respectively, and hereby incorporated as though fully set forth herein.

## C. SPECIAL CONDITIONS

### 1. Electronic Discharge Monitoring Report (eDMR) Submission System

Per 40 CFR Part 127 National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule, reporting of effluent limits and monitoring shall be submitted by the permittee via an electronic system to ensure a timely, complete, accurate, and nationally-consistent set of data.

- (a) Discharge Monitoring Reporting Requirements. The permittee must electronically submit compliance monitoring data via the eDMR system. In regards to Standard Conditions Part I, Section B, #7, the eDMR system is currently the only Department approved reporting method for this permit.
- (b) Programmatic Reporting Requirements. The following reports (if required by this permit) must be electronically submitted as an attachment to the eDMR system until such a time when the current or a new system is available to allow direct input of the data:
  - (1) Any additional report required by the permit excluding bypass reporting.  
After such a system has been made available by the Department, required data shall be directly input into the system by the next report due date.

## C. SPECIAL CONDITIONS (CONTINUED)

- (c) Other actions. The following shall be submitted electronically after such a system has been made available by the Department:
    - (1) General Permit Applications/Notices of Intent to discharge (NOIs);
    - (2) Notices of Termination (NOTs);
    - (3) No Exposure Certifications (NOEs);
  - (d) Electronic Submission: access the eDMR system, via: <https://edmr.dnr.mo.gov/edmr/E2/Shared/Pages/Main/Login.aspx>.
  - (e) Waivers from Electronic Reporting. The permittee must electronically submit compliance monitoring data and reports unless a waiver is granted by the department in compliance with 40 CFR Part 127. The permittee may obtain an electronic reporting waiver by first submitting an eDMR Waiver Request Form: <http://dnr.mo.gov/forms/780-2692-f.pdf>. The Department will either approve or deny this electronic reporting waiver request within 120 calendar days. Only permittees with an approved waiver request may submit monitoring data and reports on paper to the Department for the period the approved electronic reporting waiver is effective.
2. The facility's SIC code(s) or description is found in 40 CFR 122.26(b)(14) and/or 10 CSR 20-6.200(2) hence shall implement a Stormwater Pollution Prevention Plan (SWPPP) which must be prepared and implemented upon permit effective date. The SWPPP must be kept on-site and should not be sent to the Department unless specifically requested. The SWPPP must be reviewed and updated every five years or as site conditions change. The permittee shall select, install, use, operate, and maintain the Best Management Practices prescribed in the SWPPP in accordance with the concepts and methods described in: *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (EPA 833-B-09-002) published by the EPA in 2015 [https://www.epa.gov/sites/production/files/2015-11/documents/swppp\\_guide\\_industrial\\_2015.pdf](https://www.epa.gov/sites/production/files/2015-11/documents/swppp_guide_industrial_2015.pdf) The purpose of the SWPPP and the Best Management Practices (BMPs) listed herein is the prevention of pollution of waters of the state. A deficiency of a BMP means it was not effective preventing pollution [10 CSR 20-2.010(56)] of waters of the state. Corrective action means the facility took steps to eliminate the deficiency.
- The SWPPP must include:
- (a) A listing of specific contaminants and their control measures (or BMPs) and a narrative explaining how BMPs are implemented to control and minimize the amount of contaminants potentially entering stormwater.
  - (b) A map with all outfalls and structural BMPs marked.
  - (c) A schedule for at least once per month site inspections and brief written reports. The inspection report must include precipitation information for the entire period since last inspection, as well as observations and evaluations of BMP effectiveness. Throughout coverage under this permit, the facility must perform ongoing SWPPP review and revision to incorporate any site condition changes.
    - i. Operational deficiencies must be corrected within seven (7) calendar days.
    - ii. Minor structural deficiencies must be corrected within fourteen (14) calendar days.
    - iii. Major structural deficiencies must be reported to the regional office within seven (7) days of discovery. The initial report shall consist of the deficiency noted, the proposed remedies, the interim or temporary remedies (including proposed timing of the placement of the interim measures), and an estimate of the timeframe needed to wholly complete the repairs or construction. The permittee will work with the regional office to determine the best course of action, including but not limited to temporary structures to control stormwater runoff. The facility shall correct the major structural deficiency as soon as reasonably achievable.
    - iv. All actions taken to correct the deficiencies shall be included with the written report, including photographs.
    - v. Inspection reports must be kept on site with the SWPPP and maintained for a period of five (5) years. These must be made available to Department and EPA personnel upon request. Electronic versions of the documents are acceptable.
  - (d) A provision for designating an individual to be responsible for environmental matters.
  - (e) A provision for providing training to all personnel involved in housekeeping, material handling (including but not limited to loading and unloading), storage, and staging of all operational, maintenance, storage, and cleaning areas. Proof of training shall be submitted upon request by the Department.
3. Permittee shall adhere to the following minimum Best Management Practices (BMPs):
- (a) Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, warehouse activities, and other areas and thereby prevent the contamination of stormwater from these substances.
  - (b) Provide collection facilities and arrange for proper disposal of waste products including but not limited to petroleum waste products, and solvents.
  - (c) Store all paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) so these materials are not exposed to stormwater or provide other prescribed BMPs such as plastic lids and/or portable spill pans to prevent the commingling of stormwater with container contents. Commingled water may not be discharged under this permit. Provide spill prevention control, and/or management sufficient to prevent any spills of these pollutants from entering waters of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater. Spill records should be retained on-site.

C. SPECIAL CONDITIONS (CONTINUED)

- (d) Provide good housekeeping practices on the site to keep trash from entry into waters of the state.
- (e) Provide sediment and erosion control sufficient to minimize sediment loss off of the property
- (f) Ensure adequate provisions are provided to prevent surface water intrusion into the storage basin, to divert stormwater runoff around the storage basin, and to protect embankments from erosion.

4. This permit stipulates pollutant benchmarks applicable to your discharge. The benchmarks do not constitute direct numeric effluent limitations; therefore, a benchmark exceedance alone is not a permit violation. Benchmark monitoring and visual inspections shall be used to determine the overall effectiveness of the SWPPP and to assist you in knowing when additional corrective action may be necessary to protect water quality. If a sample exceeds a benchmark concentration you must review your SWPPP and your BMPs to determine what improvements or additional controls are needed to reduce the pollutant in your stormwater discharge(s).

Any time a benchmark exceedance occurs, a Corrective Action Report (CAR) must be completed. A CAR is a document recording the efforts undertaken by the facility to improve BMPs to meet benchmarks in future samples. CARs must be retained with the SWPPP and be available to the Department upon request. If the efforts taken by the facility are not sufficient and subsequent exceedances of a benchmark occur, the facility must contact the Department if a benchmark value cannot be achieved. Failure to take corrective action to address a benchmark exceedance and failure to make measureable progress towards achieving the benchmarks is a permit violation.

5. To protect the general criteria found at 10 CSR 20-7.031(4), before releasing water accumulated in secondary containment areas, it must be examined for hydrocarbon odor and presence of sheen. If odor or sheen is indicated, the water shall be treated using an appropriate method or disposed of in accordance with legally approved methods, such as being sent to a wastewater treatment facility. Following treatment, the water shall be tested for oil and grease, benzene, toluene, ethylbenzene, and xylene using 40 CFR part 136 methods. All pollutant levels must be below the most protective, applicable standards for the receiving stream, found in 10 CSR 20-7.031 Tables A1-B3. Records of all testing and treatment of water accumulated in secondary containment shall be stored in the SWPPP to be available on demand to Department personnel.
6. The full implementation of this operating permit, which includes implementation of any applicable schedules of compliance, shall constitute compliance with all applicable federal and state statutes and regulations in accordance with §644.051.16, RSMo, and the CWA section 402(k); however, this permit may be reopened and modified, or alternatively revoked and reissued to comply with any applicable effluent standard or limitation issued or approved under Clean Water Act Sections 301(b)(2)(C) and (D), §304(b)(2), and §307(a) (2), if the effluent standard or limitation so issued or approved contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or controls any pollutant not limited in the permit. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, termination, notice of planned changes, or anticipated non-compliance does not stay any permit condition.
7. All outfalls must be clearly marked in the field and clearly identified on a map that is kept on file at the onsite facility office.
8. Changes in Discharges of Toxic Pollutant
- In addition to the reporting requirements under §122.41(1), all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:
- (a) That an activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
    - (1) One hundred micrograms per liter (100 µg/L);
    - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile;
    - (3) Five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol;
    - (4) One milligram per liter (1 mg/L) for antimony;
    - (5) Five (5) times the maximum concentration value reported for the pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
    - (6) The notification level established by the Department in accordance with 40 CFR 122.44(f).
  - (b) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
    - (1) Five hundred micrograms per liter (500 µg/l);
    - (2) One milligram per liter (1 mg/l) for antimony;
    - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with §122.21(g)(7).
    - (4) The level established by the Director in accordance with §122.44(f).



C. SPECIAL CONDITIONS (CONTINUED)

9. Report as no-discharge when a discharge does not occur during the report period. It is a violation of this permit to report no-discharge when a discharge has occurred.
10. Reporting of Non-Detects
  - (a) An analysis conducted by the permittee or their contracted laboratory shall be conducted in such a way the precision and accuracy of the analyzed result can be enumerated.
  - (b) The permittee shall not report a sample result as “non-detect” without also reporting the detection limit of the test or the reporting limit of the laboratory. Reporting as “non-detect” without also including the detection/reporting limit will be considered failure to report, which is a violation of this permit.
  - (c) The permittee shall report the non-detect result using the less than “<” symbol and the laboratory’s detection/reporting limit (e.g. <6).
  - (d) Where the permit contains a Minimum Level (ML) and the permittee is granted authority in the permit to report zero in lieu of the < ML for a specified parameter, then zero (0) is reported for the parameter.
  - (e) See Standard Conditions Part I, Section A, #4 regarding proper detection limits used for sample analysis.
  - (f) When calculating monthly averages, one-half of the minimum detection limit (MDL) should be used instead of a zero. Where all data are below the MDL, the “<MDL” shall be reported as indicated in item (C).
11. Failure to pay fees associated with this permit is a violation of the Missouri Clean Water Law (644.055 RSMo).
12. This permit does not cover land disturbance activities.
13. This permit does not authorize the placement of fill materials in flood plains, placement of solid materials into any waterway, the obstruction of stream flow, or changing the channel of a defined drainage course. The facility must contact the U.S. Army Corps of Engineers (Corps) to obtain a CWA §404 Department of Army permit. This permit does not authorize the discharge of wash water, stormwater and return water from aggregate dredging operations on the Missouri and Mississippi Rivers.

**MISSOURI DEPARTMENT OF NATURAL RESOURCES**  
**STATEMENT OF BASIS**  
**MO-0127132**  
**THE S-S-S LUMBER COMPANY, INC.**

This Statement of Basis (Statement) gives pertinent information regarding minor modification(s) to the above listed operating permit without the need for a public comment process. A Statement is not an enforceable part of a Missouri State Operating Permit.

**Part I – Facility Information**

Facility Type: Industrial  
Facility Description: This is a limestone quarry and crushing facility and an inland marine cargo handling facility.

**Part II – Modification Rationale**

This operating permit is hereby modified to reflect a change in nutrient monitoring for process waste water and industrial stormwater. Permittee will monitor for nutrients in industrial stormwater quarterly and for nutrients in process wastewater monthly. The permit writer made typos which did not reflect the correct sampling frequencies.

No other changes were made at this time.

**Part III – Administrative Requirements**

On the basis of preliminary staff review and the application of applicable standards and regulations, the Department, as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions contained herein and within the operating permit.

**DATE OF FACT SHEET:** 10/2/2019

**COMPLETED BY:**

**KYLE O'ROURKE, ENVIRONMENTAL SPECIALIST**  
**MISSOURI DEPARTMENT OF NATURAL RESOURCES**  
**WATER PROTECTION PROGRAM**  
**OPERATING PERMITS SECTION - DOMESTIC WASTEWATER UNIT**  
**(573) 526-1289**  
**Kyle.O'Rourke@dnr.mo.gov**

**MISSOURI DEPARTMENT OF NATURAL RESOURCES**  
**FACT SHEET**  
**FOR THE PURPOSE OF RENEWAL**  
**OF**  
**MO-0127132**  
**THE S-S-S LUMBER COMPANY, INC.**

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollutant Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States, and the release of stormwater from certain point sources. All such discharges are unlawful without a permit (Section 301 of the "Clean Water Act"). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Missouri State Operating Permits (MSOPs) are issued by the Director of the Missouri Department of Natural Resources (Department) under an approved program, operating in accordance with federal and state laws (Federal "Clean Water Act" and "Missouri Clean Water Law" Section 644 as amended). MSOPs are issued for a period of five (5) years unless otherwise specified for less.

As per [40 CFR Part 124.8(a)] and [10 CSR 20-6.020(1)(A)2.] a factsheet shall be prepared to give pertinent information regarding the applicable regulations, rationale for the development of effluent limitations and conditions, and the public participation process for the Missouri State Operating Permit (MSOP or operating permit) listed below. A factsheet is not an enforceable part of an operating permit.

**PART I. FACILITY INFORMATION**

Facility Type: Industrial  
SIC Code(s): 1422 – Crushed and Broken Limestone  
1442 – Construction Sand and Gravel  
4491 – Marine Cargo Handling  
Application Date: 03/19/2018  
Expiration Date: 09/30/2018  
Last Inspection: 01/29/2014 In Compliance

**FACILITY DESCRIPTION:**

This is a limestone quarry and crushing facility and an inland marine cargo handling facility.

According to the permittee's website, the following activities occur on site:

- Materials transferring: loading and unloading of bulk and palletized materials to and from river barges, rail cars, and trucks; using heavy equipment; loading and unloading bagged materials to and from rail cars and trucks.
- Materials packaging: palletizing, bagging, or transferring from bulk to bag or bag to bulk.
- Materials storage: indoor and outdoor storage for all materials.
- Materials scale for weighing and measuring.
- Sand and Gravel Dredging from Mississippi River.
- Crushing and drying of materials, including crushing of limestone from quarry operations.
- Boat Maintenance for tow boats.
- Limestone quarry operations.

According to the permittee's website and the previous permit findings, the following materials are handled on site:

- |                             |                                 |   |
|-----------------------------|---------------------------------|---|
| • Bauxite (aluminum oxides) | • Stone/rock                    | • DAP (Diammonium Phosphate – fertilizer) |
| • Clay                      | • Limestone and Lime            | • Potash (salts containing potassium)     |
| • Brick                     | • Coal                          | • DDG (distillers dried grain)            |
| • Sand                      | • Steel Slag                    | • Mulch                                   |
| • Gravel                    | • Ammonium Nitrate (fertilizer) | • Grain                                   |
| • Clinker (cement)          | • Urea (fertilizer)             |   |

The following are the currently active outfalls. The descriptions were gathered from the permit application and the previous permit.

Outfall #001 – Industrial stormwater runoff from sand and gravel loading and unloading areas and storage piles. Actual acres reported as 3.56. SIC #1442

Outfall #003 – Industrial stormwater runoff from materials (listed above) loading and unloading area, sand and gravel storage piles, and limestone storage piles. Actual acres reported as 1.62. SIC #1442

- Outfall #006 – Industrial stormwater runoff from gravel crushing areas, sand and gravel storage piles, and materials (listed above) storage areas. Actual acres reported as 3.31. SIC #1442
- Outfall #007 – Industrial stormwater runoff from materials (listed above) loading and unloading areas for barges. Actual acres reported as 0.51. SIC #1422, #1442, #4491
- Outfall #008 – Industrial stormwater runoff from a steel storage yard, plant shop and warehouse areas. Actual acres reported as 9.12. SIC #1422, #1442
- Outfall #009 – Industrial stormwater runoff from a material storage area (typically calcined bauxite). Actual acres reported as 1.55. SIC #1422, #1442
- Outfall #010 – Industrial stormwater runoff from quarry operations, crushed limestone stockpiles and stored materials (listed above). Actual acres reported as 44.8. SIC #1422
- Outfall #011 – Industrial stormwater runoff from quarry operations, crushing operations and materials (listed above) storage areas. The stormwater is rerouted to a settling pond at Outfall #015, therefore discharge from this outfall is expected only during extreme events. Actual acres reported as 19.42. SIC #1422
- Outfall #012 – Industrial stormwater runoff from quarry operations and limestone storage piles. Actual acres reported as 294.6. SIC #1422
- Outfall #013 – Industrial stormwater runoff from quarry operations, limestone storage piles and scrap materials and steel storage yard. Actual acres reported as 8.4. SIC #1422
- Outfall #014 – Industrial stormwater runoff from quarry operations and limestone storage piles. Actual acres reported as 237.5. SIC #1422
- Outfall #015 – Industrial stormwater runoff from a quarry operations, crushing operations and materials (listed above) storage areas. Actual acres reported as 36.3, including 19.42 acres that flow from outfall #11. SIC #1422
- Outfall #016 – Industrial stormwater runoff from a quarry operations and limestone storage piles. Actual acres reported as 30.9. SIC #1422

The charter number for the continuing authority for this facility is 00102732; this number was verified by the permit writer to be associated with the facility and precisely matches the continuing authority reported by the facility.

**PERMITTED FEATURES TABLE:**

OUTFALL	DESIGN FLOW (MGD/CFS)	TREATMENT LEVEL	EFFLUENT TYPE
001	0.44/0.681	BMPs	Industrial Stormwater / Washwater
002	Eliminated		
003	0.20/0.309	BMPs	Industrial Stormwater / Washwater
004	Eliminated		
005	Eliminated		
006	0.41/0.634	BMPs	Industrial Stormwater / Washwater
007	0.064/0.099	BMPs	Industrial Stormwater / Washwater
008	1.14/1.764	BMPs	Industrial Stormwater / Washwater
009	0.19/0.294	BMPs	Industrial Stormwater / Washwater
010	5.6/8.664	BMPs	Industrial Stormwater / Washwater
011	2.43/3.760	BMPs	Industrial Stormwater / Washwater
012	3.68/5.694	BMPs	Industrial Stormwater / Washwater
013	1.05/1.625	BMPs	Industrial Stormwater / Washwater
014	29.66/45.891	BMPs	Industrial Stormwater / Washwater
015	2.11/3.265	BMPs	Industrial Stormwater / Washwater
016	3.86/5.972	BMPs	Industrial Stormwater / Washwater

Total design flow from all outfalls is greater than 1 MGD.

**FACILITY PERFORMANCE HISTORY & COMMENTS:**

On January 21, 2016 and February 11, 2015, the Department issued letters of warnings for violations of effluent limitations. Both LOW's were administratively closed and no further action is required by the permittee. Regional office staff confirmed that the permittee provided adequate and timely responses to the concerns listed in the LOW's.

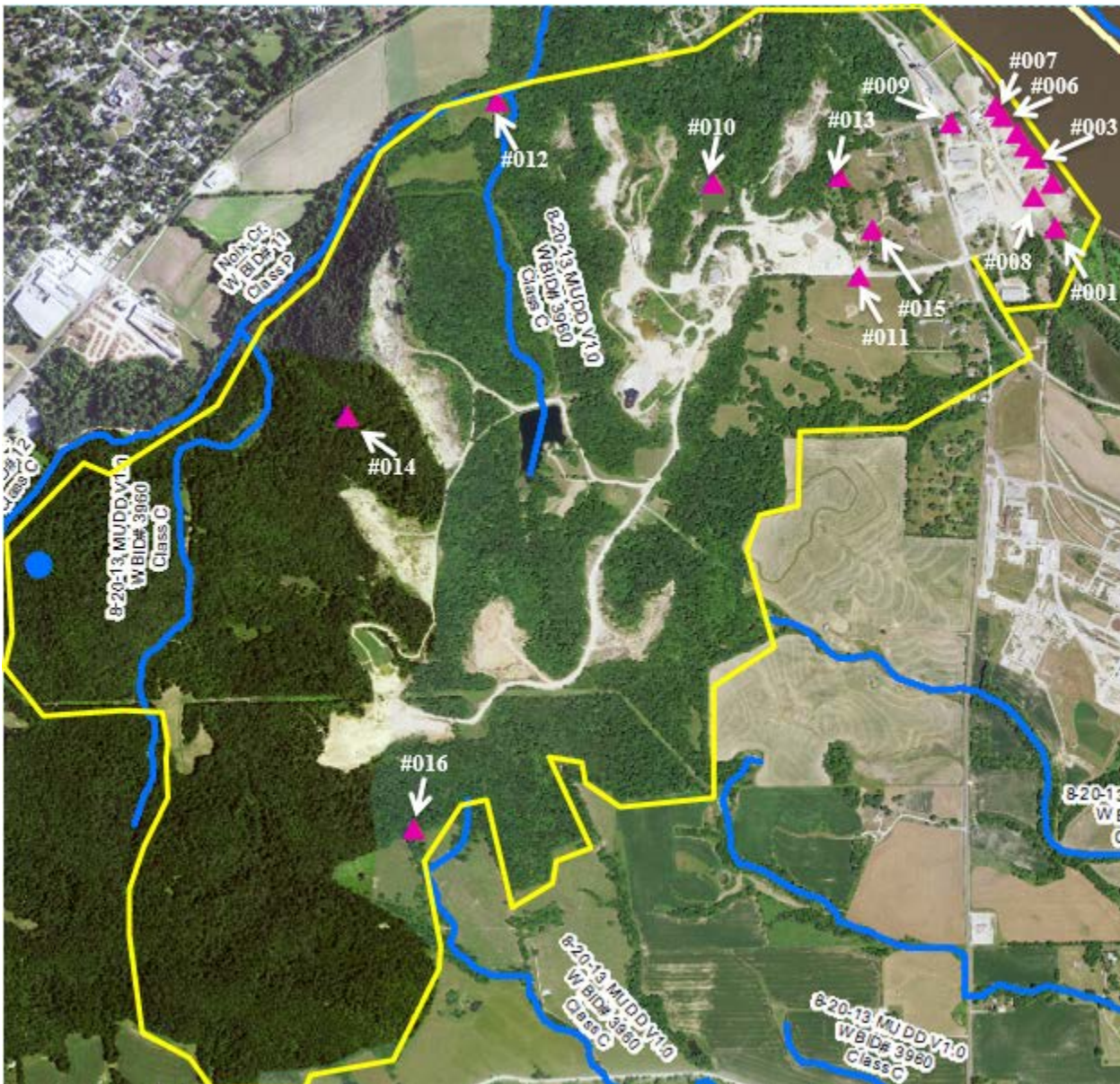
The most recent site inspection to determine compliance with MSOP MO-0127132 was conducted on January 29, 2014. The facility was found to be in compliance during the time of the inspection.

EPA conducted a site-inspection of the facility on January 25, 2010, which resulted in an Administrative Compliance Order dated October 1, 2010. The following observations were made during the time of the inspection:

- pH data was potentially not valid due to its exceeding the required hold time.
- There were several comments regarding potential issues with the required effluent monitoring and submitted DMRs.
- The facility failed to report violations properly (verbally within 24 hours followed by a written summary within five days).
- The permittee was not checking each outfall after every major rainfall to determine if the outfall was discharging (and was still reporting "no discharge" on some of these outfalls).
- There were also potential issues with the SWPPP and monthly site inspections.
- The retention pond at Outfall #010 had a seep at the toe of the dam that is not monitored.

On October 1, 2010, the EPA issued a Findings of Violation and Order for Compliance (CWA 07-2010-0156). The facility was cited for violations of effluent limitations, failure to properly conduct compliance monitoring, failure to report non-compliance, failure to amend the permit to reflect site conditions, failure to install and maintain best management practices, and failure to properly conduct monthly inspections. On August 26, 2011, the EPA terminated the Order for Compliance and the facility compliance status return to good standing with EPA.

**FACILITY MAP:**



## **PART II. RECEIVING WATERBODY INFORMATION**

### **RECEIVING WATERBODY'S WATER QUALITY:**

The tributaries to Noix Creek and Buffalo Creek are classified as C streams with the waterbody identification number of 3960 under the EPA approved Missouri Use Designation Dataset. No representative stream surveys exist for the Mississippi River, Noix Creek, Buffalo Creek or their tributaries. A stream survey does exist on the Mississippi River upstream of this facility at a quarry discharge; however, this survey would not be representative as it is conducted for the quarry. None of these streams are listed on the Missouri 303(d) list of impaired waters. The Noix Creek and Buffalo Creek do not have Total Maximum Daily Load (TMDL) evaluations. The Mississippi River does have a TMDL evaluation for Chlordane and PCBs in fish tissue. The use of Chlordane and PCBs have been banned so the TMDL does not identify specific remedies for this impairment. The facility is not authorized to discharge these pollutants. The facility must turn in any existing stores, stashes and unused inventory to the State of Missouri for proper disposal.

### **303(D) LIST:**

Section 303(d) of the federal Clean Water Act requires each state identify waters not meeting water quality standards and for which adequate water pollution controls have not been required. Water quality standards protect such beneficial uses of water as whole body contact (such as swimming), maintaining fish and other aquatic life, and providing drinking water for people, livestock, and wildlife. The 303(d) list helps state and federal agencies keep track of impaired waters not addressed by normal water pollution control programs. <http://dnr.mo.gov/env/wpp/waterquality/303d/303d.htm>

✓ Not applicable; this facility does not discharge to an impaired segment of a 303(d) listed stream.

### **TOTAL MAXIMUM DAILY LOAD (TMDL):**

A TMDL is a calculation of the maximum amount of a given pollutant that a body of water can absorb before its water quality is affected; hence, the purpose of a TMDL is to determine the pollutant loading a specific waterbody can assimilate without exceeding water quality standards. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan or TMDL may be developed. The TMDL shall include the WLA calculation. <http://dnr.mo.gov/env/wpp/tmdl/>

- ✓ Applicable; Mississippi River (P) (3699) is associated with the 2006 EPA Approved TMDL for chlordane and polychlorinated biphenyls (PCBs).
- ✓ This facility is not considered to be a source of the above listed pollutant(s) or considered to contribute to the impairment of Mississippi River (P) (3699).

### **APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:**

Per Missouri's Effluent Regulations [10 CSR 20-7.015(1)(B)], waters of the state are divided into seven categories. Each category lists effluent limitations for specific parameters, which are presented in each outfall's effluent limitation table and further discussed in Part IV: Effluents Limits Determinations

- ✓ Missouri or Mississippi River
- ✓ All Other Waters

**RECEIVING WATERBODY TABLE:**

OUTFALL	WATERBODY NAME	CLASS	WBID	DESIGNATED USES	DISTANCE TO CLASSIFIED SEGMENT	12-DIGIT HUC
001	Mississippi River	P	3699	IRR, LWP, WWH, WBC-A*, SCR, DWS, IND	0.0	07110004 - 0701 07110004 - 0702
003	Mississippi River	P	3699	IRR, LWP, WWH, WBC-A*, SCR, DWS, IND	0.0	07110004 - 0701 07110004 - 0702
006	Mississippi River	P	3699	IRR, LWP, WWH, WBC-A*, SCR, DWS, IND	0.0	07110004 - 0701 07110004 - 0702
007	Mississippi River	P	3699	IRR, LWP, WWH, WBC-A*, SCR, DWS, IND	0.0	
008	Mississippi River	P	3699	IRR, LWP, WWH, WBC-A*, SCR, DWS, IND	0.0	
009	Mississippi River	P	3699	IRR, LWP, WWH, WBC-A*, SCR, DWS, IND	0.0	
010	Tributary to Mississippi River	-	-	GEN	~ 0.5	
	Mississippi River	P	3699	IRR, LWP, WWH, WBC-A*, SCR, DWS, IND		
011	Tributary to Mississippi River	-	-	GEN	~ 0.5	
	Mississippi River	P	3699	IRR, LWP, WWH, WBC-A*, SCR, DWS, IND		
012	Noix Creek	P	0011	IRR, LWP, WWH, WBC-B, SCR	0.0	07110004 - 0701
013	Tributary to Mississippi River	-	-	GEN	~ 0.5	07110004 - 0701 07110004 - 0702
	Mississippi River	P	3699	IRR, LWP, WWH, WBC-A*, SCR, DWS, IND		
014	8-20-13 MUDD V 1.0 (Tributary to Noix Creek)	C	3960	IRR, LWP, WWH, WBC-B, SCR	~ 0.1	07110004 - 0701
	Noix Creek	P	0011	IRR, LWP, WWH, WBC-B, SCR		
015	Tributary to Mississippi River	-	-	GEN	~ 0.5	07110004 - 0701 07110004 - 0702
	Mississippi River	P	3699	IRR, LWP, WWH, WBC-A*, SCR, DWS, IND		
016	8-20-13 MUDD V 1.0 (Tributary to Buffalo Creek)	C	3960	IRR, LWP, WWH, WBC-B, SCR	~ 2.0	07110004 - 0702
	Buffalo Creek	P	0014	IRR, LWP, WWH, WBC-B, SCR		

\* the facility does not encourage swimming near its property, nor allow trespass across the property

n/a not applicable

Classes are hydrologic classes as defined in 10 CSR 20-7.031(1)(F). L1: Lakes with drinking water supply - wastewater discharges are not permitted to occur to L1 watersheds per 10 CSR 20-7.015(3)(C); L2: major reservoirs; L3: all other public and private lakes; P: permanent streams; C: streams which may cease flow in dry periods but maintain pools supporting aquatic life; E: streams which do not maintain surface flow; and W: wetland. Losing streams are defined in 10 CSR 20-7.031(1)(O) and are designated on the Losing Stream dataset or determined by the Department to lose 30% or more of flow to the subsurface.

WBID = Waterbody Identification: Missouri Use Designation Dataset per 10 CSR 20-7.031(1)(Q) and (S) as 8-20-13 MUDD V1.0 or newer; data can be found as an ArcGIS shapefile on MSDIS at [ftp://msdis.missouri.edu/pub/Inland\\_Water\\_Resources/MO\\_2014\\_WQS\\_Stream\\_Classifications\\_and\\_Use\\_shp.zip](ftp://msdis.missouri.edu/pub/Inland_Water_Resources/MO_2014_WQS_Stream_Classifications_and_Use_shp.zip); New C streams described on the dataset per 10 CSR 20-7.031(2)(A)3. as 100K Extent Remaining Streams.

Per 10 CSR 20-7.031, the Department defines the Clean Water Commission's water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and 1<sup>st</sup> classified receiving stream's beneficial water uses are to be maintained in the receiving streams in accordance with [10 CSR 20-7.031(1)(C)]. Uses which may be found in the receiving streams table, above:

10 CSR 20-7.031(1)(C)1.: **ALP** = Aquatic Life Protection (formerly AQL; current uses are defined to ensure the protection and propagation of fish shellfish and wildlife, further subcategorized as: WWH = Warm Water Habitat; CLH = Cool Water Habitat; CDH = Cold Water Habitat; EAH = Ephemeral Aquatic Habitat; MAH = Modified Aquatic Habitat; LAH = Limited Aquatic Habitat. This permit uses ALP effluent limitations in 10 CSR 20-7.031 Table A1-A2 for all habitat designations unless otherwise specified.



10 CSR 20-7.031(1)(C)2.: Recreation in and on the water

WBC = Whole Body Contact recreation where the entire body is capable of being submerged;

WBC-A = whole body contact recreation supporting swimming uses and has public access;

WBC-B = whole body contact recreation not supported in WBC-A;

SCR = Secondary Contact Recreation (like fishing, wading, and boating)

10 CSR 20-7.031(1)(C)3. to 7.:

HHP (formerly HHF) = Human Health Protection as it relates to the consumption of fish and drinking of water;

IRR = irrigation for use on crops utilized for human or livestock consumption

LWW = Livestock and Wildlife Watering (current narrative use is defined as LWP = Livestock and Wildlife Protection);

DWS = Drinking Water Supply

IND = industrial water supply

10 CSR 20-7.031(1)(C)8-11.: Wetlands (10 CSR 20-7.031 Tables A1-B3 currently does not have corresponding habitat use criteria for these defined uses): WSA = storm- and flood-water storage and attenuation; WHP = habitat for resident and migratory wildlife species; WRC = recreational, cultural, educational, scientific, and natural aesthetic values and uses; WHC = hydrologic cycle maintenance.

10 CSR 20-7.031(6): GRW = Groundwater

#### RECEIVING STREAM(S) LOW-FLOW VALUES TABLE:

RECEIVING STREAM (U, C, P)	LOW-FLOW VALUES (CFS)		
	1Q10	7Q10	30Q10
Tributary to Mississippi River	0.0	0.0	0.0
Mississippi River (P)*	27,475	30,517	35,377
8-20-13 MUDD V 1.0 Tributary to Noix Creek	0.0	0.0	0.0
Noix Creek (P)	-	-	-
8-20-13 MUDD V 1.0 Unnamed tributary to Buffalo Creek	0.0	0.0	0.0
Buffalo Creek (P)	-	-	-

\* No flow data exists for the Mississippi River near Louisiana, MO. These flow values were calculated by collecting data from a gaging station at St. Louis, MO and subtracting the additional flow from the Missouri River by collecting flow of the Missouri River at St. Charles, MO. This is more representative of the flows near the discharges from this facility because it removes the additional flows from the confluence of the Missouri River. These values are similar to those presented in the previous permit. The following data was collected from the USGS Gage Station Database: <http://waterdata.usgs.gov/nwis/sw>. The flow data is available upon request.

RECEIVING STREAM (U, C, P)	LOW-FLOW VALUES (CFS)		
	1Q10	7Q10	30Q10
Mississippi River (P)	50,743	54,183	60,546
Missouri River (P)	23,268	23,666	25,169

#### MIXING CONSIDERATIONS TABLE(S):

##### OUTFALLS #001, 003, 006, 007, 008, 009

MIXING ZONE (CFS) [10 CSR 20-7.031(5)(A)4.B.(III)(a)]			ZONE OF INITIAL DILUTION (CFS) [10 CSR 20-7.031(5)(A)4.B.(III)(b)]*		
1Q10	7Q10	30Q10	1Q10	7Q10	30Q10
6,869	7,629	8,844	686.9	762.9	786.5

\*Per the regulations, Zone of Initial Dilution (ZID) shall be one-tenth the mixing zone but no more than ten-times the effluent design flow. The cumulative design flow for the outfalls addressed in this table is 78.65 CFS; therefore, the ZID cannot exceed ten-times 78.65 CFS or 786.5 CFS. Since 786.5 CFS is less than one-tenth of the mixing zone for the 30Q10, 786.5 CFS is the maximum ZID allowed for 30Q10.

##### OUTFALLS #010, 011, 012, 013, 014, 015, 016

MIXING ZONE (CFS) [10 CSR 20-7.031(5)(A)4.B.(I)(a)]			ZONE OF INITIAL DILUTION (CFS) [10 CSR 20-7.031(5)(A)4.B.(I)(b)]		
1Q10	7Q10	30Q10	1Q10	7Q10	30Q10
0	0	0	0	0	0

#### RECEIVING STREAM MONITORING REQUIREMENTS:

No receiving water monitoring requirements recommended at this time.

### **PART III. RATIONALE AND DERIVATION OF EFFLUENT LIMITATIONS & PERMIT CONDITIONS**

#### **ALTERNATIVE EVALUATIONS FOR NEW FACILITIES:**

As per [10 CSR 20-7.015(4)(A)], discharges to losing streams shall be permitted only after other alternatives including land application, discharges to a gaining stream and connection to a regional wastewater treatment facility have been evaluated and determined to be unacceptable for environmental and/or economic reasons.

- ✓ Not applicable; the facility does not discharge to a losing stream as defined by [10 CSR 20-2.010(36)] & [10 CSR 20-7.031(1)(N)], or is an existing facility.

#### **ANTIBACKSLIDING:**

Federal Regulations [CWA §303(d)(4); CWA §402(c); 40 CFR Part 122.44(l)] require a reissued permit to be as stringent as the previous permit with some exceptions. Backsliding (a less stringent permit limitation) is only allowed under certain conditions.

- ✓ The Department determined technical mistakes or mistaken interpretations of law were made in issuing the permit under section 402(a)(1)(b).
  - The previous permit special condition stated: "Permittee shall maintain records of all pumped discharges that enter surface water of the state. These records must include the date and time(s), an estimate of the volume, and the location of each discharge."  
The permit writer has determined this special condition was outside the scope of NPDES permitting and was removed.
  - The previous permit special condition stated: "Release of a hazardous substance must be reported to the department in accordance with 10 CSR 24-3.010. A record of each reportable spill shall be retained with the SWPPP and made available to the department upon request."  
The permit writer has determined this special condition was outside the scope of NPDES permitting and was removed.
  - The previous permit special condition stated: "An **annual operating report** must be submitted to the Northeast Regional Office by **October 28** of each year (notwithstanding any reporting requirements contained in the attached "Standard Conditions"). The report shall detail any unusual occurrences such as spills, overflows, fish kills, fire-fighting activities, flooding, other upsets at the facility, and any deficiencies/corrections of BMPs as required by special condition #10 and #12. This report will specifically include, but is not limited to, loss or spills of any fertilizer, fuel, oil, and/or paint. The report shall also detail any remedial work undertaken to recover any spilled material or to clean up the site. The report must also indicate if nothing unusual occurred. Please include your permit number with the report."  
The permit writer has determined this special condition was outside the scope of NPDES permitting and was removed.

#### **ANTIDEGRADATION REVIEW:**

Process water discharges with new, altered, or expanding flows, the Department is to document, by means of antidegradation review, if the use of a water body's available assimilative capacity is justified. In accordance with Missouri's water quality regulations for antidegradation [10 CSR 20-7.031(3)], degradation may be justified by documenting the socio-economic importance of a discharge after determining the necessity of the discharge. Facilities must submit the antidegradation review request to the Department prior to establishing, altering, or expanding discharges. See <http://dnr.mo.gov/env/wpp/permits/antideg-implementation.htm>

- ✓ Not applicable; the facility has not submitted information proposing expanded or altered process water discharge; no further degradation proposed therefore no further review necessary.

This permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) which must include an alternative analysis (AA) of the BMPs. The SWPPP must be developed, implemented, updated, and maintained at the facility. Failure to implement and maintain the chosen alternative, is a permit violation. The AA is a structured evaluation of BMPs to determine which are reasonable and cost effective. Analysis should include practices designed to be 1) non-degrading, 2) less degrading, or 3) degrading water quality. The chosen BMP will be the most reasonable and cost effective while ensuring the highest statutory and regulatory requirements are achieved and the highest quality water attainable for the facility is discharged. The analysis must demonstrate why "no discharge" or "no exposure" are not feasible alternatives at the facility. Existing facilities with established SWPPPs and BMPs need not conduct an additional alternatives analysis unless new BMPs are established to address BMP failures or benchmark exceedances. This structured analysis of BMPs serves as the antidegradation review, fulfilling the requirements of 10 CSR 20-7.015(9)(A)5 and 7.031(3). For stormwater discharges with new, altered, or expanding discharges, the stormwater BMP chosen for the facility, through the AA performed by the facility, must be implemented and maintained at the facility. Failure to implement and maintain the chosen BMP alternative is a permit violation; see SWPPP.

- ✓ Applicable; the facility must review and maintain stormwater BMPs as appropriate.

#### **CHANGES IN DISCHARGES OF TOXIC POLLUTANT:**

This special condition reiterates the federal rules found in 40 CFR 122.44(f) and 122.42(a)(1). In these rules, the facility is required to report changes in amounts of toxic substances discharged. Toxic substances are defined in 40 CFR 122.2 as "...any pollutant listed as toxic under section 307(a)(1) or, in the case of "sludge use or disposal practices," any pollutant identified in regulations implementing section 405(d) of the CWA." Section 307 of the clean water act then refers to those parameters found in 40 CFR 401.15. The permittee should also consider any other toxic pollutant in the discharge as reportable under this condition.

**COMPLIANCE AND ENFORCEMENT:**

Enforcement is the action taken by the Water Protection Program (WPP) to bring an entity into compliance with the Missouri Clean Water Law, its implementing regulations, and/or any terms and conditions of an operating permit. The primary purpose of the enforcement activity in the WPP is to resolve violations and return the entity to compliance.

- ✓ Not applicable; the permittee/facility is not currently under Water Protection Program enforcement action.

**DOMESTIC WASTEWATER:**

Domestic wastewater is defined as wastewater (i.e., human sewage) originating primarily from the sanitary conveniences of residences, commercial buildings, factories, and institutions, including any water which may have infiltrated the sewers. Domestic wastewater excludes stormwater, animal waste, process waste, and other similar waste.

- ✓ Not applicable; domestic wastewater is managed on-site in a sub-surface system but flows are less than 3000 gallons per day; therefore the subsurface unit is regulated by the Department of Health. This permit does not authorize any industrial wastewater introduction into the sub-surface system.

**EFFLUENT LIMITATION GUIDELINE:**

Effluent Limitation Guidelines, or ELGs, are found at 40 CFR 400-499. These are limitations established by the EPA based on the SIC code and the type of work a facility is conducting. Most ELGs are for process wastewater and some address stormwater. All are technology based limitations which must be met by the applicable facility at all times.

- ✓ The facility has an associated Effluent Limit Guideline (ELG) at 40 CFR 400-499 applicable to the wastewater/stormwater discharge at this site, and is applied under 40 CFR 125.3(a). Should Reasonable Potential be established for any particular parameter, and water-quality derived effluent limits are more protective of the receiving water's quality, the WQS will be used as the limiting factor in accordance with 40 CFR 122.44(d) and 10 CSR 20-7.015(9)(A). See Part IV: EFFLUENT LIMITS DETERMINATION.

**GROUNDWATER MONITORING:**

Groundwater is a water of the state according to 10 CSR 20-2.010(82), and is subject to regulations at 10 CSR 20-7.015(7) and 10 CSR 20-7.031(6) and must be protected accordingly.

- ✓ This facility is not required to monitor groundwater for the water protection program.

**MAJOR WATER USER:**

Any surface or groundwater user with a water source and the equipment necessary to withdraw or divert 100,000 gallons (or 70 gallons per minute) or more per day combined from all sources from any stream, river, lake, well, spring, or other water source is considered a major water user in Missouri. All major water users are required by law to register water use annually (Missouri Revised Statutes Chapter 256.400 Geology, Water Resources and Geodetic Survey Section). <https://dnr.mo.gov/pubs/pub2337.htm>

- ✓ Not applicable; this permittee cannot withdraw water from the state in excess of 70 gpm/0.1 MGD.

**NO-DISCHARGE LAND APPLICATION:**

Land application of wastewater or sludge shall comply with the all applicable no-discharge requirements listed in 10 CSR 20-6.015 and all facility operations and maintenance requirements listed in 10 CSR 20-8.020(15). These requirements ensure appropriate operation of the no-discharge land application systems and prevent unauthorized and illicit discharges to waters of the state. Land applications by a contract hauler on fields the permittee has a spreading agreement on are not required to be in this permit. A spreading agreement does not constitute the field being rented or leased by the permittee as they do not have any control over management of the field.

- ✓ Not applicable; this permit does not authorize operation of a no-discharge land application system to treat wastewater or sludge.

**OIL/WATER SEPARATORS:**

Oil water separators (OWS) are frequently found at industrial sites where process water and stormwater may contain oils and greases, oily wastewaters, or other immiscible liquids requiring separation. Food industry discharges typically require pretreatment prior to discharge to municipally owned treatment works. Per 10 CSR 26-2.010(2)(B), all oil water separators must be operated according to manufacturer's specifications and authorized in NPDES permits or may be regulated as a petroleum tank.

- ✓ Not applicable; the permittee has not disclosed the use of any oil water separators at this permitted facility and therefore oil water separator tanks are not authorized by this permit.

**REASONABLE POTENTIAL (RP):**

Federal regulation [40 CFR Part 122.44(d)(1)(i)] requires effluent limitations for all pollutants which are (or may be) discharged at a level causing or have the reasonable potential to cause (or contribute to) an in-stream excursion above narrative or numeric water quality standards. Per 10 CSR 20-7.031(4), general criteria shall be applicable to all waters of the state at all times; however, acute toxicity criteria may be exceeded by permit in zones of initial dilution, and chronic toxicity criteria may be exceeded by permit in mixing zones. If the permit writer determines any given pollutant has the reasonable potential to cause or contribute to an in-stream excursion above the WQS, the permit must contain effluent limits for the pollutant per 40 CFR Part 122.44(d)(1)(iii) and the most stringent limits per 10 CSR 20-7.031(9)(A). Permit writers may use mathematical reasonable potential analysis (RPA) using the

Technical Support Document for Water Quality Based Toxics Control (TSD) methods (EPA/505/2-90-001) as found in Section 3.3.2, or may also use reasonable potential determinations (RPD) as provided in Sections 3.1.2, 3.1.3, and 3.2 of the TSD.

- ✓ Not applicable; a mathematical RPA was not conducted for this facility. This permit establishes permit limits and benchmarks for stormwater. The Department has determined stormwater is not a continuous discharge and is therefore not necessarily dependent on mathematical RPAs. However, the permit writer completed an RPD, a reasonable potential determination, using best professional judgment for all of the appropriate parameters in this permit. An RPD consists of reviewing application data and/or discharge monitoring data for the last five years and comparing those data to narrative or numeric water quality criteria.

#### **SCHEDULE OF COMPLIANCE (SOC):**

A schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements (actions, effluent limits, operations, or milestone events) leading to compliance with the Missouri Clean Water Law, its implementing regulations, and/or the terms and conditions of an operating permit. SOC's are allowed under 40 CFR 122.47 providing certain conditions are met. A SOC is not allowed:

- For effluent limitations based on technology-based standards established in accordance with federal requirements, if the deadline for compliance established in federal regulations has passed. 40 CFR § 125.3.
- For a newly constructed facility in most cases. Newly constructed facilities must meet applicable effluent limitations when discharge begins, because the facility has installed the appropriate control technology as specified in a permit or antidegradation review. A SOC is allowed for a new water quality based effluent limit not included in a previously public noticed permit or antidegradation review, which may occur if a regulation changes during construction.
- To develop a TMDL, UAA, or other study associated with development of a site specific criterion. A facility is not prohibited from conducting these activities, but a SOC may not be granted for conducting these activities.

In order to provide guidance in developing SOC's, and to attain a greater level of consistency, the Department issued a policy on development of SOC's on October 25, 2012. The policy provides guidance to permit writers on standard time frames for schedules for common activities, and guidance on factors to modify the length of the schedule.

- ✓ Not applicable; this permit does not contain a SOC.

#### **SPILL REPORTING:**

Per 260.505 RSMo, any emergency involving a hazardous substance must be reported to the Department's 24 hour Environmental Emergency Response hotline at (573) 634-2436 at the earliest practicable moment after discovery. The Department may require the submittal of a written report detailing measures taken to clean up a spill. These reporting requirements apply whether or not the spill results in chemicals or materials leaving the permitted property or reaching waters of the state. This requirement is in addition to the noncompliance reporting requirement found in Standard Conditions Part I. <http://dnr.mo.gov/env/esp/spillbill.htm>

#### **SLUDGE – DOMESTIC BIOSOLIDS:**

Biosolids are solid materials resulting from domestic wastewater treatment meeting federal and state criteria for beneficial use (i.e. fertilizer). Sewage sludge is solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works; including but not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works. Additional information: <http://extension.missouri.edu/main/DisplayCategory.aspx?C=74> (WQ422 through WQ449).

- ✓ Not applicable; the facility has not disclosed domestic wastewater is managed on-site.

#### **SLUDGE – INDUSTRIAL:**

Industrial sludge is solid, semi-solid, or liquid residue generated during the treatment of industrial process wastewater in a treatment works; including but not limited to, scum or solids removed in primary, secondary, or advanced wastewater treatment process; scum and solids filtered from water supplies and backwashed; and a material derived from industrial sludge.

- ✓ Not applicable; industrial sludge is not generated at this facility.

#### **STANDARD CONDITIONS:**

The standard conditions Part I attached to this permit incorporate all sections of 40 CFR 122.41(a) through (n) by reference as required by law. These conditions, in addition to the conditions enumerated within the standard conditions should be reviewed by the permittee to ascertain compliance with this permit, state regulations, state statutes, federal regulations, and the Clean Water Act.

#### **STORMWATER PERMITTING: LIMITATIONS AND BENCHMARKS:**

Because of the fleeting nature of stormwater discharges, the Department, under the direction of EPA guidance, has determined monthly averages are capricious measures of stormwater discharges. The *Technical Support Document for Water Quality Based Toxics Control* (EPA/505/2-90-001; 1991) Section 3.1 indicates most procedures within the document apply only to water quality based approaches, not end-of-pipe technology-based controls. Hence, stormwater-only outfalls will generally only contain a maximum daily limit (MDL), benchmark, or monitoring requirement as dictated by site specific conditions, the BMPs in place, past performance of the facility, and the receiving water's current quality.

Sufficient rainfall to cause a discharge for one hour or more from a facility would not necessarily cause significant flow in a receiving stream. Acute Water Quality Standards (WQSs) are based on one hour of exposure, and must be protected at all times. Therefore, industrial stormwater facilities with toxic contaminants present in the stormwater may have the potential to cause a violation of acute WQSs if toxic contaminants occur in sufficient amounts. In this instance, the permit writer may apply daily maximum limitations.

Conversely, it is unlikely for rainfall to cause a discharge for four continuous days from a facility; if this does occur however, the receiving stream will also likely sustain a significant amount of flow providing dilution. Most chronic WQSs are based on a four-day exposure with some exceptions. Under this scenario, most industrial stormwater facilities have limited potential to cause a violation of chronic water quality standards in the receiving stream.

A standard mass-balance equation cannot be calculated for stormwater because stormwater flow and flow in the receiving stream cannot be determined for conditions on any given day or storm event. The amount of stormwater discharged from the facility will vary based on current and previous rainfall, soil saturation, humidity, detention time, BMPs, surface permeability, etc. Flow in the receiving stream will vary based on climatic conditions, size of watershed, area of surfaces with reduced permeability (houses, parking lots, and the like) in the watershed, hydrogeology, topography, etc. Decreased permeability may increase the stream flow dramatically over a short period of time (flash).

Numeric benchmark values are based on site specific requirements taking in to account a number of factors but cannot be applied to any process water discharges. First, the technology in place at the site to control pollutant discharges in stormwater is evaluated. The permit writer also evaluates other similar permits for similar activities. A review of the guidance forming the basis of Environmental Protection Agency's (EPA's) *Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity* (MSGP) may also occur. Because precipitation events are sudden and momentary, benchmarks based on state or federal standards or recommendations use the Criteria Maximum Concentration (CMC) value, or acute standard may also be used. The CMC is the estimate of the highest concentration of a material in surface water to which an aquatic community can be exposed briefly without resulting in an unacceptable effect. The CMC for aquatic life is intended to be protective of the vast majority of the aquatic communities in the United States. If a facility has not disclosed BMPs applicable to the pollutants for the site, the permittee may not be eligible for benchmarks.

40 CFR 122.44(b)(1) requires the permit implement the most stringent limitations for each discharge, including industrially exposed stormwater; and 40 CFR 122.44(d)(1)(i) and (iii) requires the permit to include water-quality based effluent limitations where reasonable potential has been found. However, because of the non-continuous nature of stormwater discharges, staff are unable to perform statistical Reasonable Potential Analysis (RPA) under most stormwater discharge scenarios. Reasonable potential determinations (RPDs; see REASONABLE POTENTIAL above) using best professional judgment are performed.

Benchmarks require the facility to monitor, and if necessary, replace and update stormwater control measures. Benchmark concentrations are not effluent limitations. A benchmark exceedance, therefore, is not a permit violation; however, failure to take corrective action is a violation of the permit. Benchmark monitoring data is used to determine the overall effectiveness of control measures and to assist the permittee in knowing when additional corrective actions may be necessary to comply with the conditions of the permit.

BMP inspections typically occur more frequently than sampling. Sampling frequencies are based on the facility's ability to comply with the benchmarks and the requirements of the permit. Inspections should occur after large rain events and any other time an issue is noted; sampling after a benchmark exceedance may need to occur to show the corrective action taken was meaningful.

When a permitted feature or outfall consists of only stormwater, a benchmark may be implemented at the discretion of the permit writer, if there is no RP for water quality excursions.

- ✓ Applicable, this facility has stormwater-only outfalls where benchmarks or limitations were deemed appropriate contaminant measures.

### **STORMWATER POLLUTION PREVENTION PLAN (SWPPP):**

In accordance with 40 CFR 122.44(k), Best Management Practices (BMPs) must be used to control or abate the discharge of pollutants when: 1) Authorized under section 304(e) of the Clean Water Act (CWA) for the control of toxic pollutants and hazardous substances from ancillary industrial activities; 2) Authorized under section 402(p) of the CWA for the control of stormwater discharges; 3) Numeric effluent limitations are infeasible; or 4) the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA. In accordance with the EPA's *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (EPA 833-B-09-002) published by the EPA in 2015 [https://www.epa.gov/sites/production/files/2015-11/documents/swppp\\_guide\\_industrial\\_2015.pdf](https://www.epa.gov/sites/production/files/2015-11/documents/swppp_guide_industrial_2015.pdf), BMPs are measures or practices used to reduce the amount of pollution entering waters of the state from a permitted facility. BMPs may take the form of a process, activity, or physical structure. Additionally in accordance with the Stormwater Management, a SWPPP is a series of steps and activities to 1) identify sources of pollution or contamination, and 2) select and carry out actions which prevent or control the pollution of storm water discharges. Additional information can be found in *Stormwater Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices* (EPA 832-R-92-006; September 1992).

A SWPPP must be prepared by the permittee if the SIC code is found in 40 CFR 122.26(b)(14) and/or 10 CSR 20-6.200(2). A SWPPP may be required of other facilities where stormwater has been identified as necessitating better management. The purpose of a SWPPP is to comply with all applicable stormwater regulations by creating an adaptive management plan to control and mitigate stream pollution from stormwater runoff. Developing a SWPPP provides opportunities to employ appropriate BMPs to minimize the risk of pollutants being discharged during storm events. The following paragraph outlines the general steps the permittee should take to determine which BMPs will work to achieve the benchmark values or limits in the permit. This section is not intended to be all encompassing or restrict the use of any physical BMP or operational and maintenance procedure assisting in pollution control. Additional steps or revisions to the SWPPP may be required to meet the requirements of the permit.

Areas which should be included in the SWPPP are identified in 40 CFR 122.26(b)(14). Once the potential sources of stormwater pollution have been identified, a plan should be formulated to best control the amount of pollutant being released and discharged by each activity or source. This should include, but is not limited to, minimizing exposure to stormwater, good housekeeping measures, proper facility and equipment maintenance, spill prevention and response, vehicle traffic control, and proper materials handling. Once a plan has been developed the facility will employ the control measures determined to be adequate to achieve the benchmark values discussed above. The facility will conduct monitoring and inspections of the BMPs to ensure they are working properly and re-evaluate any BMP not achieving compliance with permitting requirements. For example, if sample results from an outfall show values of TSS above the benchmark value, the BMP being employed is deficient in controlling stormwater pollution. Corrective action should be taken to repair, improve, or replace the failing BMP. This internal evaluation is required at least once per month but should be continued more frequently if BMPs continue to fail. If failures do occur, continue this trial and error process until appropriate BMPs have been established.

For new, altered, or expanded stormwater discharges, the SWPPP shall identify reasonable and effective BMPs while accounting for environmental impacts of varying control methods. The antidegradation analysis must document why no discharge or no exposure options are not feasible. The selection and documentation of appropriate control measures shall serve as an alternative analysis of technology and fulfill the requirements of antidegradation [10 CSR 20-7.031(3)]. For further guidance, consult the antidegradation implementation procedure (<http://dnr.mo.gov/env/wpp/docs/AIP050212.pdf>).

Alternative Analysis (AA) evaluation of the BMPs is a structured evaluation of BMPs which are reasonable and cost effective. The AA evaluation should include practices designed to be: 1) non-degrading; 2) less degrading; or 3) degrading water quality. The glossary of AIP defines these three terms. The chosen BMP will be the most reasonable and effective management strategy while ensuring the highest statutory and regulatory requirements are achieved and the highest quality water attainable for the facility is discharged. The AA evaluation must demonstrate why "no discharge" or "no exposure" is not a feasible alternative at the facility. This structured analysis of BMPs serves as the antidegradation review, fulfilling the requirements of 10 CSR 20-7.031(3) Water Quality Standards and *Antidegradation Implementation Procedure* (AIP), Section II.B.

If parameter-specific numeric benchmark exceedances continue to occur and the permittee feels there are no practicable or cost-effective BMPs which will sufficiently reduce a pollutant concentration in the discharge to the benchmark values established in the permit, the permittee can submit a request to re-evaluate the benchmark values. This request needs to include 1) a detailed explanation of why the facility is unable to comply with the permit conditions and unable to establish BMPs to achieve the benchmark values; 2) financial data of the company and documentation of cost associated with BMPs for review and 3) the SWPPP, which should contain adequate documentation of BMPs employed, failed BMPs, corrective actions, and all other required information. This will allow the Department to conduct a cost analysis on control measures and actions taken by the facility to determine cost-effectiveness of BMPs. The request shall be submitted in the form of an operating permit modification; the application is found at:

<https://dnr.mo.gov/forms/#WaterPollution>

✓ Applicable; a SWPPP shall be developed and implemented for this facility.

#### WASTELOAD ALLOCATIONS (WLA) FOR LIMITS:

As per [10 CSR 20-2.010(78)], the WLA is the amount of pollutant each discharger is allowed to discharge into the receiving stream without endangering water quality. Two general types of effluent limitations, technology-based effluent limits (TBELs) and water quality based effluent limits (WQBELs) are reviewed. If one limit does not provide adequate protection for the receiving water, then the other must be used per 10 CSR 20-7.015(9)(A).

✓ Not applicable; wasteload allocations were not calculated.

#### WLA MODELING:

Permittees may submit site specific studies to better determine the site specific wasteload allocations applied in permits.

✓ Not applicable; a WLA study was either not submitted or determined not applicable by Department staff.

### PART IV. EFFLUENT LIMITS DETERMINATIONS

Much like the previous permit, this permit will consider the following general permits to assist in determining appropriateness of specific pollutant monitoring requirements or effluent limitations for each outfall:

- MO-G49 - Stormwater and process water discharges from limestone and rock quarries, concrete, glass and asphalt industries
- MO-G50 - Stormwater and process water discharges from sand and gravel operations
- MO-G698 - Stormwater and process water discharges from aggregate dredging operations on the Missouri and Mississippi Rivers
- MO-R80C - Stormwater discharges from motor freight transportation, watercraft transportation, warehousing activities, and U.S. Postal Service maintenance facilities.
- MSGP - EPA's Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity.
  - Subsector J1 (SIC 1442) – Sand and gravel operations
  - Subsector J2 (SIC 1422) – Crushed and broken limestone
  - Subsector P1 (SIC 4226) – Chemical bulk storage and special warehousing (the facility handles fertilizers and other materials on site and in warehouses)
  - Subsector Q1 (SIC 4491) – Marine terminals and marine cargo operations

The following table shows the pollutants of concern listed in each permit listed above.

General Permit #		MO-G49	MO-G50	MO-G698	MO-R80C	MSGP			
Parameter	Units					J1	J2	P1	Q1
Physical									
Flow	MGD	X	X	X	X	X	X	X	X
Precipitation*	Inches	X	X	X	X	X	X	X	X
Conventional									
Oil and Grease	mg/L	X	X	X	X	-	-	-	-
pH	SU	X	X	X	-	-	X	-	-
Settleable Solids	mL/L/hr	X	X	X	-	-		-	-
Total Suspended Solids	mg/L	X	-	X	X	X	X	-	-
Nutrients									
Nitrate plus Nitrite as N	mg/L	-	-	-	-	X	-	-	-
Metals									
Aluminum, Total Recoverable	µg/L	-	-	-	-	-	-	-	X
Iron, Total Recoverable	µg/L	-	-	-	-	-	-	-	X
Lead, Total Recoverable	µg/L	-	-	-	-	-	-	-	X
Zinc, Total Recoverable	µg/L	-	-	-	-	-	-	-	X

X – parameter present in permit

- - parameter not present in permit

\* - Although flow and precipitation may not be listed as monitoring parameters in all the permits, these are inherent parameters as these permits address stormwater discharges in contact with industrial activities.

The following table shows which permits apply to each outfall. This is based on the SIC codes associated with each outfall, the description of activities found in the previous permit for each outfall and the description of activities found in the permit application for each outfall.

General Permit # Outfall #	MO- G49	MO- G50	MO- G698	MO- R80C	MSGP			
					J1	J2	P1	Q1
001	-	X	X	-	X	-	X	-
003	X	X	X	-	X	X	X	-
006	X	X	X	-	X	X	X	-
007	X	X	X	X	X	X	X	X
008	-	-	-	-	X	-	X	-
009	X	X	-	-	X	X	X	-
010	X	X	-	-	-	X	X	-
011	X	X	-	-	-	X	X	-
012	X	-	-	-	-	X	-	-
013	X	-	-	-	-	X	-	-
014	X	-	-	-	-	X	-	-
015	X	X	-	-	-	X	X	-
016	X	-	-	-	-	X	-	-

X – general permit applies  
-- general permit does not apply

The following table shows the pollutants of concern applied to each outfall according to the general permits and the previous permit.

Outfall #		001	003	006	007	008	009	010	011	012	013	014	015	016
Parameter	Units													
Physical														
Flow	MGD	G, P	G, P	G, P	G, P	G, P	G, P	G, P	G, P	G, P	G, P	G, P	G, P	G, P
Precipitation	Inches	G, P	G, P	G, P	G, P	G, P	G, P	G, P	G, P	G, P	G, P	G, P	G, P	G, P
Conventional														
Chloride	mg/L	-	B	B	B	B	B	-	-	-	-	-	-	-
Oil and Grease	mg/L	G, P	G, P	G, P	G, P	P	G, P	G, P	G, P	G, P	G, P	G, P	G, P	G, P
pH	SU	G, P	G, P	G, P	G, P	P	G, P	G, P	G, P	G, P	G, P	G, P	G, P	G, P
Settleable Solids	mL/L/hr	G, P	G, P	G, P	G, P	P	G, P	G, P	G, P	G, P	G, P	G, P	G, P	G, P
Total Suspended Solids	mg/L	G, P	G, P	G, P	G, P	G, P	G, P	G, P	G, P	G, P	G, P	G, P	G, P	G, P
Nutrients														
Ammonia as N	mg/L	P	P	P	P	P	P	P	P	P	P	P	P	P
Nitrate as N	mg/L	P	P	P	P	P	P	P	P	-	P	-	P	-
Nitrate plus Nitrite as N	mg/L	G, P	G, P	G, P	G	G, P	G	-	-	-	-	-	-	-
Metals														
Aluminum, Dissolved	µg/L	P	P	P	P	P	P	P	P	P	P	P	P	P
Aluminum, Total Recoverable	µg/L	-	-	-	G, P	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	µg/L	-	-	-	G, P	-	-	-	-	-	-	-	-	-
Lead, Total Recoverable	µg/L	-	-	-	G, P	-	-	-	-	-	-	-	-	-
Zinc, Total Recoverable	µg/L	-	-	-	G, P	-	-	-	-	-	-	-	-	-

B – added per permit writer's best professional judgment, salt handling and storage occurs on site  
G – parameter based on general permits listed above  
P – parameter present in previous permit  
-- parameter not present in general permits or previous permit



# **OUTFALL #001**

Industrial stormwater runoff from sand and gravel loading and unloading areas and storage piles.

Non-stormwater flows include any wash water, process water, or return water from sand and gravel loading and unloading areas, or gravel stockpile areas that have been diverted to Outfall #001. The following effluent limitations mirror the MO-G698 general permit for aggregate dredging operations on the Missouri and Mississippi Rivers. Although this facility is not be dredging, they are collecting material from dredging operations.

Effluent limitation derived and established in the below Effluent Limitations Table are based on current operations of the facility. Future permit action due to facility modification may contain new operating permit terms and conditions that supersede the terms and conditions, including effluent limitations, of this operating permit.

## **EFFLUENT LIMITATIONS TABLE:**

PARAMETERS	UNIT	DAILY MAX	BENCH-MARK	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	REPORTING FREQUENCY	SAMPLE TYPE
PHYSICAL							
FLOW	MGD	*	-	SAME	ONCE/QUARTER	ONCE/QUARTER	24 HR. ESTIMATE
PRECIPITATION	INCHES	*	-	SAME	ONCE/DAY	ONCE/QUARTER	MEASURED
CONVENTIONAL							
OIL & GREASE	mg/L	**	10	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
pH †	SU	6.5 TO 9.0	-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
SETTLEABLE SOLIDS	mL/L/HR	**	2.0	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
TOTAL SUSPENDED SOLIDS (TSS)	mg/L	**	100	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
NUTRIENTS							
AMMONIA AS N	MG/L	*	-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
NITRATE AS N	MG/L	*	-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
NITRATE PLUS NITRITE AS N	MG/L	**	0.68	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
PARAMETERS	UNIT	DAILY MAX	MONTHLY AVG	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	REPORTING FREQUENCY	SAMPLE TYPE
NON-STORMWATER							
PHYSICAL							
FLOW	MGD		*	SAME	*/*	ONCE/DAY	24 HR. ESTIMATE
CONVENTIONAL							
OIL & GREASE	MG/L	15	10	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
pH ‡	SU	6.5 TO 9.0	-	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
SETTLEABLE SOLIDS	mL/L/HR	1.5	1.0	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
TOTAL SUSPENDED SOLIDS	MG/L	110	70	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
NUTRIENTS							
AMMONIA AS N	MG/L	*	-	NEW	ONCE/MONTH	ONCE/MONTH	GRAB
NITRATE AS N	MG/L	*	-	NEW	ONCE/MONTH	ONCE/MONTH	GRAB
NITRATE PLUS NITRITE AS N	MG/L	**	0.68	NEW	ONCE/MONTH	ONCE/MONTH	GRAB
NITROGEN, KJELDAHL, AS N	MG/L	*	-	NEW	ONCE/MONTH	ONCE/MONTH	GRAB
PHOSPHORUS, TOTAL	MG/L	*	-	NEW	ONCE/MONTH	ONCE/MONTH	GRAB

\* - Monitoring requirement only

\*\* - Monitoring with associated benchmark

‡ The facility will report the minimum and maximum pH values; pH is not to be averaged

## **DERIVATION AND DISCUSSION OF LIMITS:**

### **INDUSTRIAL STORMWATER**

#### **PHYSICAL:**

##### **Flow**

In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification. The facility will report the total flow in millions of gallons per day (MGD), monitoring continued from previous permit.

##### **Precipitation**

Monitoring only requirement; measuring the amount of precipitation [(10 CSR 20-6.200(2)(C)1.E(VI)] during an event is necessary to ensure adequate stormwater management exists at the site. Knowing the amount of potential stormwater runoff can provide the permittee a better understanding of any specific control measures be employed to ensure protection of water quality. The facility will provide the 24 hour accumulation value of precipitation from the day of sampling the other parameters.

#### **CONVENTIONAL:**

##### **Oil & Grease**

Monitoring only with associated benchmark. The source of pollution remains on site. Trucks and machinery are used throughout the site. Monitoring will allow the permittee to determine if oil, gasoline, or lubricants are leaving the property. MO-G50 and MO-G698 establish effluent limitations of 15 mg/L as a daily maximum and 10 mg/L as a monthly average. For these reasons, the permit writer used best professional judgement to establish a benchmark value of 10 mg/L for this parameter to assist in evaluating effectiveness of best management practices at preventing pollution of stormwater.

##### **pH**

6.5-9.0 SU. Technology based effluent limitations of 6.0-9.0 SU [10 CSR 20-7.015] are not protective of the Water Quality Standard, which states that water contaminants shall not cause pH to be outside the range of 6.5-9.0 SU. No mixing zone is allowed due to the classification of the receiving stream, therefore the water quality standard must be met at the outfall.

##### **Settleable Solids (SS)**

Monitoring with associated benchmark. There is no water quality standard for settleable solids; however, sediment discharges can negatively impact aquatic life habitat. Settleable solids are also a valuable indicator parameter. Settleable solids monitoring allows the permittee to identify increases in solids that may indicate uncontrolled materials leaving the site. MO-G50 contains limits for this parameter. The previous permit established a benchmark value of 2.0 mL/L/hr. Therefore, it is the permit writer's best professional judgment to implement the benchmark of 2.0 mL/L/hr in this permit.

##### **Total Suspended Solids (TSS)**

Monitoring with associated benchmark. There is no water quality standard for TSS; however, sediment discharges can negatively impact aquatic life habitat. TSS is also a valuable indicator parameter. TSS monitoring allows the permittee to identify increases in TSS that may indicate uncontrolled materials leaving the site. The EPA's MSGP has a benchmark of 100 mg/L for Subsector J1. Therefore, it is the permit writer's best professional judgment to implement the benchmark of 100 mg/L in this permit.

#### **NUTRIENTS:**

##### **Ammonia, Total as Nitrogen**

Monitoring only requirement. This facility handles bulk fertilizer products. Monitoring allows the permittee to identify fertilizer products coming into contact with stormwater indicating a need for maintenance or improvement of BMPs.

##### **Nitrate as N**

Monitoring only requirement. This facility handles bulk fertilizer products. Monitoring allows the permittee to identify fertilizer products coming into contact with stormwater indicating a need for maintenance or improvement of BMPs.

##### **Nitrate plus Nitrite as N**

Monitoring with associated benchmark. This facility handles bulk fertilizer products and sand and gravel storage. Monitoring allows the permittee to identify fertilizer products or sand and gravel coming into contact with stormwater indicating a need for maintenance or improvement of BMPs. The EPA's MSGP has a benchmark of 0.68 mg/L for Subsector J1. Therefore, it is the permit writer's best professional judgment to implement the benchmark of 0.68 mg/L in this permit.

## NON-STORMWATER FLOWS

### PHYSICAL:

#### Flow

In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.

### CONVENTIONAL:

#### Total Suspended Solids (TSS)

MO-G50 and MO-G698 contain this parameter for process and wash water discharges. MO-G50 specifically sets effluent limitations of 110 mg/L as a daily maximum and 70 mg/L as a monthly average. For this reason, this permit will implement the same effluent limitations for this parameter.

#### Settleable Solids

MO-G50 and MO-G698 contain this parameter for process and wash water discharges. MO-G50 specifically sets effluent limitations of 1.5 mL/L/hr as a daily maximum and 1.0 mL/L/hr as a monthly average. For this reason, this permit will implement the same effluent limitations for this parameter.

#### pH

MO-G50 and MO-G698 contain this parameter for process and wash water discharges. Both permits set effluent limitations of 6.5-9.0 SU. For this reason, this permit will implement the same effluent limitations for this parameter. This also complies with 10 CSR 20-7.031 water quality standard of 6.5-9.0 SU.

#### Oil & Grease

MO-G698 contains this parameter for process and wash water discharges. MO-G698 specifically sets effluent limitations of 15 mg/L as a daily maximum and 10 mg/L as a monthly average. For this reason, this permit will implement the same effluent limitations for this parameter. This also complies with 10 CSR 20-7.031 Table A effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum.

### NUTRIENTS:

#### Ammonia, Total as Nitrogen

Monitoring only requirement. This facility handles bulk fertilizer products. Monitoring allows the permittee to identify fertilizer products coming into contact with stormwater indicating a need for maintenance or improvement of BMPs.

#### Nitrate as N

Monitoring only requirement. This facility handles bulk fertilizer products. Monitoring allows the permittee to identify fertilizer products coming into contact with stormwater indicating a need for maintenance or improvement of BMPs.

#### Nitrate plus Nitrite as N

Monitoring with associated benchmark. This facility handles bulk fertilizer products and sand and gravel storage. Monitoring allows the permittee to identify fertilizer products or sand and gravel coming into contact with stormwater indicating a need for maintenance or improvement of BMPs. The EPA's MSGP has a benchmark of 0.68 mg/L for Subsector J1. Therefore, it is the permit writer's best professional judgment to implement the benchmark of 0.68 mg/L in this permit.

#### Nitrogen, Kjeldahl, as N

Monitoring only requirement. Per 10 CSR 20-7.015(9), point sources that have the design capacity of greater than 100,000 gpd that typically discharge nitrogen and phosphorus shall collect and analyze influent and effluent samples for total phosphorus, ammonia, total kjeldahl nitrogen and nitrate plus nitrite.

#### Phosphorus, Total

Monitoring only requirement. Per 10 CSR 20-7.015(9), point sources that have the design capacity of greater than 100,000 gpd that typically discharge nitrogen and phosphorus shall collect and analyze influent and effluent samples for total phosphorus, ammonia, total kjeldahl nitrogen and nitrate plus nitrite.

**OUTFALL #003, #006, #008 & #009**

Industrial stormwater runoff from materials loading and unloading areas and materials storage areas.

Effluent limitations derived and established in the below Effluent Limitations Table are based on current operations of the facility. Future permit action due to facility modification may contain new operating permit terms and conditions that supersede the terms and conditions, including effluent limitations, of this operating permit.

PARAMETERS	UNIT	DAILY MAX	BENCH-MARK	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	REPORTING FREQUENCY	SAMPLE TYPE
PHYSICAL							
FLOW	MGD	*	-	SAME	ONCE/QUARTER	ONCE/QUARTER	24 HR. ESTIMATE
PRECIPITATION	INCHES	*	-	SAME	ONCE/DAY	ONCE/QUARTER	MEASURED
CONVENTIONAL							
CHLORIDE	MG/L	*	-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
OIL & GREASE	MG/L	**	10	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
pH ‡	SU	6.5 TO 9.0	-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
SETTLEABLE SOLIDS	ML/L/HR	**	1.0	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
TOTAL SUSPENDED SOLIDS	MG/L	**	100	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
NUTRIENTS							
AMMONIA AS N	MG/L	*	-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
NITRATE AS N	MG/L	*	-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
NITRATE PLUS NITRITE AS N	MG/L	**	0.68	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
METALS							
ALUMINUM, DISSOLVED	µG/L	**	750	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
PARAMETERS	UNIT	DAILY MAX	MONTHLY AVERAGE LIMIT	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	REPORTING FREQUENCY	SAMPLE TYPE
NON-STORMWATER							
PHYSICAL							
FLOW	MGD	*	*	SAME	ONCE/DAY	ONCE/MONTH	24 HR. ESTIMATE
CONVENTIONAL							
OIL & GREASE	MG/L	15	10	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
pH ‡	SU	6.5 TO 9.0	-	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
SETTLEABLE SOLIDS	ML/L/HR	1.5	1.0	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
TOTAL SUSPENDED SOLIDS	MG/L	70	70	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
NUTRIENTS							
AMMONIA AS N	MG/L	*	-	NEW	ONCE/MONTH	ONCE/MONTH	GRAB
NITRATE AS N	MG/L	*	-	NEW	ONCE/MONTH	ONCE/MONTH	GRAB
NITRATE PLUS NITRITE AS N	MG/L	**	0.68	NEW	ONCE/MONTH	ONCE/MONTH	GRAB
NITROGEN, KJELDAHL, AS N	MG/L	*	-	NEW	ONCE/MONTH	ONCE/MONTH	GRAB
PHOSPHORUS, TOTAL	MG/L	*	-	NEW	ONCE/MONTH	ONCE/MONTH	GRAB

\* - Monitoring requirement only

\*\* - Monitoring with associated benchmark

‡ The facility will report the minimum and maximum pH values; pH is not to be averaged

## **DERIVATION AND DISCUSSION OF LIMITS:**

### **INDUSTRIAL STORMWATER**

#### **PHYSICAL:**

##### **Flow**

In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.

##### **Precipitation**

Monitoring only requirement. Measuring the amount of rainfall during an event is necessary to ensure adequate stormwater management exists at the site. Knowing the amount of potential stormwater runoff can provide the permittee a better understanding of specific control measure that should be employed to ensure protection of water quality.

#### **CONVENTIONAL:**

##### **Chloride**

Monitoring only requirement. The federal Effluent Limitation Guideline (ELG) 40 CFR 436 Subpart N addresses potash. Specifically, 40 CFR 436.142 states there shall be no discharge of process wastewater pollutants from potash operations into navigable waters. This facility is not producing potash or wastewater related to potash manufacturing. However, this site discharges stormwater runoff from areas where potash is handled or temporarily stored. Monitoring this parameter will indicate if potash is leaving the property and potentially causing a water quality concern. The permittee should use best management practices to reduce stormwater contact with potash piles to the maximum extent practicable.

##### **Oil & Grease**

Monitoring with associated benchmark. The source of pollution remains on site. Trucks and machinery are used throughout the site. Monitoring will allow the permittee to determine if oil, gasoline or lubricants are leaving the property. MO-G49 and MO-R80C establish benchmark values of 10 mg/L for this parameter. MO-G50, MO-G698 and MO-R80C establish effluent limitations of 15 mg/L as a daily maximum and 10 mg/L as a monthly average. The previous permit established a benchmark of 10 mg/L. For these reasons, the permit writer used best professional judgement to establish a benchmark value of 10 mg/L for this parameter to assist in evaluating effectiveness of best management practices at prevent pollution of stormwater.

##### **pH**

6.5-9.0 SU. Technology based effluent limitations of 6.0-9.0 SU [10 CSR 20-7.015] are not protective of the Water Quality Standard, which states that water contaminants shall not cause pH to be outside the range of 6.5-9.0 SU. No mixing zone is allowed due to the classification of the receiving stream, therefore the water quality standard must be met at the outfall.

##### **Settleable Solids**

Monitoring with associated benchmark. There is no water quality standard for settleable solids; however, sediment discharges can negatively impact aquatic life habitat. Settleable solids are also a valuable indicator parameter. Settleable solids monitoring allows the permittee to identify increases in solids that may indicate uncontrolled materials leaving the site. MO-G50 contains limits of 1.5 mL/L/hr as a daily maximum and 1.0 mL/L/hr as a monthly average. MO-G49 establishes a benchmark of 1.0 mL/L/hr. MO-G698 establishes monitoring requirements. The previous permit established a benchmark of 1.0 mL/L/hr. Therefore, it is the permit writer's best professional judgment to continue the benchmark of 1.0 mL/L/hr.

##### **Total Suspended Solids (TSS)**

Monitoring with associated benchmark. There is no water quality standard for TSS; however, sediment discharges can negatively impact aquatic life habitat. TSS is also a valuable indicator parameter. TSS monitoring allows the permittee to identify increases in TSS that may indicate uncontrolled materials leaving the site. MO-G49 and EPA's MSGP Subsector J1 both have benchmark values of 100 mg/L. MO-R80C establishes a benchmark of 50 mg/L. MO-G50 and MO-G698 include monitoring for this parameter as a pollutant of concern. Therefore, it is the permit writer's best professional judgment to implement the benchmark of 100 mg/L in this permit.

#### **NUTRIENTS:**

##### **Ammonia, Total as Nitrogen**

Monitoring only requirement. This facility handles bulk fertilizer products. Monitoring allows the permittee to identify fertilizer products coming into contact with stormwater indicating a need for maintenance or improvement of BMPs.

##### **Nitrate as N**

Monitoring only requirement. This facility handles bulk fertilizer products. Monitoring allows the permittee to identify fertilizer products coming into contact with stormwater indicating a need for maintenance or improvement of BMPs.

### **Nitrate plus Nitrite as N**

Monitoring with associated benchmark. This facility handles bulk fertilizer products and sand and gravel storage. Monitoring allows the permittee to identify fertilizer products or sand and gravel coming into contact with stormwater indicating a need for maintenance or improvement of BMPs. The EPA's MSGP has a benchmark of 0.68 mg/L for Subsector J1. Therefore, it is the permit writer's best professional judgment to implement the benchmark of 0.68 mg/L in this permit.

### **METALS:**

#### **Aluminum, Dissolved**

Monitoring with associated benchmark. This permit establishes monitoring requirements for the dissolved fraction rather than the total recoverable fraction for this metal. The justification for this includes the following: 1) The discharges flow to the Mississippi River and thus, there is no reasonable potential to violate total recoverable water quality standards; 2) The natural background aluminum content in the soil is high; 3) the EPA's MSGP considers natural background concentrations in evaluation of benchmark values; and 4) the state regulations require metals to be analyzed for the dissolved fraction of metals [10 CSR 20-7.031(5)(B)2.A.(II)]. Additionally, the federal regulation 40 CFR 122.45(c)(2) allows the permit writer to include dissolved metals on a case-by-case basis, which has been described in the list of previous permit justifications above. During the previous permit review and issuance, EPA did not object to the use of the dissolved fraction for compliance monitoring of aluminum. The permittee requested continuance of this requirement. The permit writer used best professional judgment to continue monitoring for dissolved aluminum. The dissolved fraction is toxic to aquatic life and, in conjunction with the reasons listed above, is determined to be more appropriate for monitoring at this site.

### **NON-STORMWATER FLOWS**

### **PHYSICAL:**

#### **Flow**

In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.

### **CONVENTIONAL:**

#### **Oil & Grease**

MO-G49 and MO-G698 contains this parameter for process and wash water discharges. Both permits set effluent limitations of 15 mg/L as a daily maximum and 10 mg/L as a monthly average. For this reason, this permit will implement the same effluent limitations for this parameter. This also complies with 10 CSR 20-7.031 Table A effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum.

#### **pH**

MO-G49, MO-G50 and MO-G698 contain this parameter for process and wash water discharges. All permits set effluent limitations of 6.5-9.0 SU. For this reason, this permit will implement the same effluent limitations for this parameter. This also complies with 10 CSR 20-7.031 water quality standard of 6.5-9.0 SU.

#### **Settleable Solids**

MO-G49, MO-G50 and MO-G698 contain this parameter for process and wash water discharges. MO-G49 and MO-G50 specifically set effluent limitations of 1.5 mL/L/hr as a daily maximum and 1.0 mL/L/hr as a monthly average. For this reason, this permit will implement the same effluent limitations for this parameter.

#### **Total Suspended Solids (TSS)**

MO-G49, MO-G50 and MO-G698 contain this parameter for process and wash water discharges. MO-G49 specifically sets effluent limitations of 70 mg/L as a daily maximum and 70 mg/L as a monthly average. For this reason, this permit will implement the same effluent limitations in this permit. The previous permit included limits of 70 mg/L as a daily maximum and 35 mg/L as a monthly average for Outfall #007 to address coal storage piles. Federal ELG 40 CFR 434 Subpart B contains limits for wash water from coal preparation plants and associated areas. The facility stores coal throughout the property but is not a coal mining or preparation facility. This facility does not generate process wastewater from coal operations and the ELG for process wastewater does not apply. Therefore, it is the permit writer's best professional judgment implement only the MO-G49 limits.

### **NUTRIENTS:**

#### **Ammonia, Total as Nitrogen**

Monitoring only requirement. This facility handles bulk fertilizer products. Monitoring allows the permittee to identify fertilizer products coming into contact with stormwater indicating a need for maintenance or improvement of BMPs.

**Nitrate as N**

Monitoring only requirement. This facility handles bulk fertilizer products. Monitoring allows the permittee to identify fertilizer products coming into contact with stormwater indicating a need for maintenance or improvement of BMPs.

**Nitrate plus Nitrite as N**

Monitoring with associated benchmark. This facility handles bulk fertilizer products and sand and gravel storage. Monitoring allows the permittee to identify fertilizer products or sand and gravel coming into contact with stormwater indicating a need for maintenance or improvement of BMPs. The EPA's MSGP has a benchmark of 0.68 mg/L for Subsector J1. Therefore, it is the permit writer's best professional judgment to implement the benchmark of 0.68 mg/L in this permit.

**Nitrogen, Kjeldahl, as N**

Monitoring only requirement. Per 10 CSR 20-7.015(9), point sources that have the design capacity of greater than 100,000 gpd that typically discharge nitrogen and phosphorus shall collect and analyze influent and effluent samples for total phosphorus, ammonia, total kjeldahl nitrogen and nitrate plus nitrite.

**Phosphorus, Total**

Monitoring only requirement. Per 10 CSR 20-7.015(9), point sources that have the design capacity of greater than 100,000 gpd that typically discharge nitrogen and phosphorus shall collect and analyze influent and effluent samples for total phosphorus, ammonia, total kjeldahl nitrogen and nitrate plus nitrite.

# **OUTFALL #007**

Industrial stormwater runoff from materials loading and unloading areas, materials storage areas, quarry operations, and crushing operations.

Effluent limitations derived and established in the below Effluent Limitations Table are based on current operations of the facility. Future permit action due to facility modification may contain new operating permit terms and conditions that supersede the terms and conditions, including effluent limitations, of this operating permit.

**EFFLUENT LIMITATIONS TABLE:**

PARAMETERS	UNIT	DAILY MAX	BENCH-MARK	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	REPORTING FREQUENCY	SAMPLE TYPE
PHYSICAL							
FLOW	MGD	*	-	SAME	ONCE/QUARTER	ONCE/QUARTER	24 HR. ESTIMATE
PRECIPITATION	INCHES	*	-	SAME	ONCE/DAY	ONCE/QUARTER	MEASURED
CONVENTIONAL							
CHLORIDE	MG/L	*	-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
OIL & GREASE	MG/L	**	10	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
pH ‡	SU	6.5 TO 9.0	-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
SETTLEABLE SOLIDS	ML/L/HR	**	1.0	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
TOTAL SUSPENDED SOLIDS	MG/L	**	100	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
NUTRIENTS							
AMMONIA AS N	MG/L	*	-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
NITRATE AS N	MG/L	*	-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
NITRATE PLUS NITRITE AS N	MG/L	**	0.68	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
METALS							
ALUMINUM, DISSOLVED	µG/L	*	-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
IRON, TOTAL RECOVERABLE	µG/L	*	-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
LEAD, TOTAL RECOVERABLE	µG/L	*	-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
ZINC, TOTAL RECOVERABLE	µG/L	*	-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
PARAMETERS	UNIT	DAILY MAX	MONTHLY AVERAGE LIMIT	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	REPORTING FREQUENCY	SAMPLE TYPE
NON-STORMWATER							
PHYSICAL							
FLOW	MGD	*	*	SAME	ONCE/DAY	ONCE/MONTH	24 HR. ESTIMATE
CONVENTIONAL							
OIL & GREASE	MG/L	15	10	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
pH ‡	SU	6.5 TO 9.0	-	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
SETTLEABLE SOLIDS	ML/L/HR	1.5	1.0	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
TOTAL SUSPENDED SOLIDS	MG/L	70	70	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
NUTRIENTS							
AMMONIA AS N	MG/L	*	-	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
NITRATE AS N	MG/L	*	-	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
NITRATE PLUS NITRITE AS N	MG/L	**	0.68	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
NITROGEN, KJELDAHL, AS N	MG/L	*	-	NEW	ONCE/MONTH	ONCE/MONTH	GRAB
PHOSPHORUS, TOTAL	MG/L	*	-	NEW	ONCE/MONTH	ONCE/MONTH	GRAB

\* - Monitoring requirement only

\*\* - Monitoring with associated benchmark

‡ The facility will report the minimum and maximum pH values; pH is not to be averaged



## **DERIVATION AND DISCUSSION OF LIMITS:**

### **INDUSTRIAL STORMWATER**

#### **PHYSICAL:**

##### **Flow**

In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.

##### **Precipitation**

Monitoring only requirement. Measuring the amount of rainfall during an event is necessary to ensure adequate stormwater management exists at the site. Knowing the amount of potential stormwater runoff can provide the permittee a better understanding of specific control measure that should be employed to ensure protection of water quality.

#### **CONVENTIONAL:**

##### **Chloride**

Monitoring only requirement. The federal Effluent Limitation Guideline (ELG) 40 CFR 436 Subpart N addresses potash. Specifically, 40 CFR 436.142 states there shall be no discharge of process wastewater pollutants from potash operations into navigable waters. This facility is not producing potash or wastewater related to potash manufacturing. However, this site discharges stormwater runoff from areas where potash is handled or temporarily stored. Monitoring this parameter will indicate if potash is leaving the property and potentially causing a water quality concern. The permittee should use best management practices to reduce stormwater contact with potash piles to the maximum extent practicable.

##### **Oil & Grease**

Monitoring with associated benchmark. The source of pollution remains on site. Trucks and machinery are used throughout the site. Monitoring will allow the permit to determine if oil, gasoline or lubricants are leaving the property. MO-G49 and MO-R80C establish benchmark values of 10 mg/L for this parameter. MO-G50, MO-G698 and MO-R80C establish effluent limitations of 15 mg/L as a daily maximum and 10 mg/L as a monthly average. The previous permit established a benchmark of 10 mg/L. For these reasons, the permit writer used best professional judgement to establish a benchmark value of 10 mg/L for this parameter to assist in evaluating effectiveness of best management practices at prevent pollution of stormwater.

##### **pH**

6.5-9.0 SU. Technology based effluent limitations of 6.0-9.0 SU [10 CSR 20-7.015] are not protective of the Water Quality Standard, which states that water contaminants shall not cause pH to be outside the range of 6.5-9.0 SU. No mixing zone is allowed due to the classification of the receiving stream, therefore the water quality standard must be met at the outfall.

##### **Settleable Solids**

Monitoring with associated benchmark. The previous permit established a benchmark of 1.0 mL/L/hr. Therefore, it is the permit writer's best professional judgment to continue the benchmark of 1.0 mL/L/hr. There is no water quality standard for settleable solids; however, sediment discharges can negatively impact aquatic life habitat. Settleable solids are also a valuable indicator parameter. Settleable solids monitoring allows the permittee to identify increases in solids that may indicate uncontrolled materials leaving the site. MO-G50 contains limits of 1.5 mL/L/hr as a daily maximum and 1.0 mL/L/hr as a monthly average. MO-G49 establishes a benchmark of 1.0 mL/L/hr. MO-G698 establishes monitoring requirements.

##### **Total Suspended Solids (TSS)**

Monitoring with associated benchmark. There is no water quality standard for TSS; however, sediment discharges can negatively impact aquatic life habitat. TSS is also a valuable indicator parameter. TSS monitoring allows the permittee to identify increases in TSS that may indicate uncontrolled materials leaving the site. MO-G49 and EPA's MSGP Subsector J1 both have benchmark values of 100 mg/L. MO-R80C establishes a benchmark of 50 mg/L. MO-G50 and MO-G698 include monitoring for this parameter as a pollutant of concern. Therefore, it is the permit writer's best professional judgment to implement the benchmark of 100 mg/L in this permit.

#### **NUTRIENTS:**

##### **Ammonia, Total as Nitrogen**

Monitoring only requirement. This facility handles bulk fertilizer products. Monitoring allows the permittee to identify fertilizer products coming into contact with stormwater indicating a need for maintenance or improvement of BMPs.

##### **Nitrate as N**

Monitoring only requirement. This facility handles bulk fertilizer products. Monitoring allows the permittee to identify fertilizer products coming into contact with stormwater indicating a need for maintenance or improvement of BMPs.

### **Nitrate plus Nitrite as N**

Monitoring with associated benchmark. This facility handles bulk fertilizer products and sand and gravel storage. Monitoring allows the permittee to identify fertilizer products or sand and gravel coming into contact with stormwater indicating a need for maintenance or improvement of BMPs. The EPA's MSGP has a benchmark of 0.68 mg/L for Subsector J1. Therefore, it is the permit writer's best professional judgment to implement the benchmark of 0.68 mg/L in this permit.

## **METALS:**

### **Aluminum, Dissolved**

Monitoring only requirement. This permit establishes monitoring requirements for the dissolved fraction rather than the total recoverable fraction for this metal. The justification for this includes the following: 1) The discharges flow to the Mississippi River and thus, there is no reasonable potential to violate total recoverable water quality standards; 2) The natural background aluminum content in the soil is high; 3) the EPA's MSGP considers natural background concentrations in evaluation of benchmark values; and 4) the state regulations require metals to be analyzed for the dissolved fraction of metals [10 CSR 20-7.031(5)(B)2.A.(II)]. Additionally, the federal regulation 40 CFR 122.45(c)(2) allows the permit writer to include dissolved metals on a case-by-case basis, which has been described in the list of previous permit justifications above. During the previous permit review and issuance, EPA did not object to the use of the dissolved fraction for compliance monitoring of aluminum. The permittee requested continuance of this requirement. The permit writer used best professional judgment to continue monitoring for dissolved aluminum. The dissolved fraction is toxic to aquatic life and, in conjunction with the reasons listed above, is determined to be more appropriate for monitoring at this site.

### **Iron, Total Recoverable**

Monitoring only requirement. This facility handles a variety of materials from the loading and unloading of barges that can all contribute to this pollutant in stormwater runoff. MSGP Subsector Q1 identifies this parameter as a pollutant of concern associated with marine cargo operations. Therefore, it is the permit writer's best professional judgment to continue monitoring this parameter at this time.

### **Lead, Total Recoverable**

Monitoring only requirement. This facility handles a variety of materials from the loading and unloading of barges that can all contribute to this pollutant in stormwater runoff. MSGP Subsector Q1 identifies this parameter as a pollutant of concern associated with marine cargo operations. Therefore, it is the permit writer's best professional judgment to continue monitoring this parameter at this time.

### **Zinc, Total Recoverable**

Monitoring only requirement. This facility handles a variety of materials from the loading and unloading of barges that can all contribute to this pollutant in stormwater runoff. MSGP Subsector Q1 identifies this parameter as a pollutant of concern associated with marine cargo operations. Therefore, it is the permit writer's best professional judgment to continue monitoring this parameter at this time.

## **NON-STORMWATER FLOWS**

### **PHYSICAL:**

#### **Flow**

In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.

### **CONVENTIONAL:**

#### **Oil & Grease**

MO-G49 and MO-G698 contains this parameter for process and wash water discharges. Both permits set effluent limitations of 15 mg/L as a daily maximum and 10 mg/L as a monthly average. For this reason, this permit will implement the same effluent limitations for this parameter. This also complies with 10 CSR 20-7.031 Table A effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum.

#### **pH**

MO-G49, MO-G50 and MO-G698 contain this parameter for process and wash water discharges. All permits set effluent limitations of 6.5-9.0 SU. For this reason, this permit will implement the same effluent limitations for this parameter. This also complies with 10 CSR 20-7.031 water quality standard of 6.5-9.0 SU.

### **Settleable Solids**

MO-G49, MO-G50 and MO-G698 contain this parameter for process and wash water discharges. MO-G49 and MO-G50 specifically set effluent limitations of 1.5 mL/L/hr as a daily maximum and 1.0 mL/L/hr as a monthly average. For this reason, this permit will implement the same effluent limitations for this parameter.

### **Total Suspended Solids (TSS)**

MO-G49, MO-G50 and MO-G698 contain this parameter for process and wash water discharges. MO-G49 specifically sets effluent limitations of 70 mg/L as a daily maximum and 70 mg/L as a monthly average. For this reason, this permit will implement the same effluent limitations in this permit. The previous permit included limits of 70 mg/L as a daily maximum and 35 mg/L as a monthly average for Outfall #007 to address coal storage piles. Federal ELG 40 CFR 434 Subpart B contains limits for wash water from coal preparation plants and associated areas. The facility stores coal throughout the property but is not a coal mining or preparation facility. This facility does not generate process wastewater from coal operations and the ELG for process wastewater does not apply. Therefore, it is the permit writer's best professional judgment implement only the MO-G49 limits.

## **NUTRIENTS:**

### **Ammonia, Total as Nitrogen**

Monitoring only requirement. This facility handles bulk fertilizer products. Monitoring allows the permittee to identify fertilizer products coming into contact with stormwater indicating a need for maintenance or improvement of BMPs.

### **Nitrate as N**

Monitoring only requirement. This facility handles bulk fertilizer products. Monitoring allows the permittee to identify fertilizer products coming into contact with stormwater indicating a need for maintenance or improvement of BMPs.

### **Nitrate plus Nitrite as N**

Monitoring with associated benchmark. This facility handles bulk fertilizer products and sand and gravel storage. Monitoring allows the permittee to identify fertilizer products or sand and gravel coming into contact with stormwater indicating a need for maintenance or improvement of BMPs. The EPA's MSGP has a benchmark of 0.68 mg/L for Subsector J1. Therefore, it is the permit writer's best professional judgment to implement the benchmark of 0.68 mg/L in this permit.

### **Nitrogen, Kjeldahl, as N**

Monitoring only requirement. Per 10 CSR 20-7.015(9), point sources that have the design capacity of greater than 100,000 gpd that typically discharge nitrogen and phosphorus shall collect and analyze influent and effluent samples for total phosphorus, ammonia, total kjeldahl nitrogen and nitrate plus nitrite.

### **Phosphorus, Total**

Monitoring only requirement. Per 10 CSR 20-7.015(9), point sources that have the design capacity of greater than 100,000 gpd that typically discharge nitrogen and phosphorus shall collect and analyze influent and effluent samples for total phosphorus, ammonia, total kjeldahl nitrogen and nitrate plus nitrite.

# **OUTFALL #010, #011, #013 & #015**

Industrial stormwater runoff from quarry operations, crushing operations and materials storage areas.

Effluent limitations derived and established in the below Effluent Limitations Table are based on current operations of the facility. Future permit action due to facility modification may contain new operating permit terms and conditions that supersede the terms and conditions, including effluent limitations, of this operating permit.

**EFFLUENT LIMITATIONS TABLE:**

PARAMETERS	UNIT	DAILY MAX	BENCH-MARK	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	REPORTING FREQUENCY	SAMPLE TYPE
PHYSICAL							
FLOW	MGD	*	-	SAME	ONCE/QUARTER	ONCE/QUARTER	24 HR. ESTIMATE
PRECIPITATION	INCHES	*	-	SAME	ONCE/DAY	ONCE/QUARTER	MEASURED
CONVENTIONAL							
OIL & GREASE	MG/L	**	10	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
pH ‡	SU	6.5 TO 9.0	-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
SETTLEABLE SOLIDS	ML/L/HR	**	1.0	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
TOTAL SUSPENDED SOLIDS	MG/L	**	100	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
NUTRIENTS							
AMMONIA AS N	MG/L	*	-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
NITRATE AS N	MG/L	*	-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
NITRATE PLUS NITRITE AS N	MG/L	**	0.68	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
PARAMETERS	UNIT	DAILY MAX	MONTHLY AVERAGE LIMIT	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	REPORTING FREQUENCY	SAMPLE TYPE
NON-STORMWATER							
PHYSICAL							
FLOW	MGD	*	*	SAME	ONCE/DAY	ONCE/MONTH	24 HR. ESTIMATE
CONVENTIONAL							
OIL & GREASE	MG/L	15	10	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
pH ‡	SU	6.5 TO 9.0	-	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
SETTLEABLE SOLIDS	ML/L/HR	1.5	1.0	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
TOTAL SUSPENDED SOLIDS	MG/L	70	70	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
NUTRIENTS							
AMMONIA AS N	MG/L	*	-	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
NITRATE AS N	MG/L	*	-	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
NITRATE PLUS NITRITE AS N	MG/L	**	0.68	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
NITROGEN, KJELDAHL, AS N	MG/L	*	-	NEW	ONCE/MONTH	ONCE/MONTH	GRAB
PHOSPHORUS, TOTAL	MG/L	*	-	NEW	ONCE/MONTH	ONCE/MONTH	GRAB

\* - Monitoring requirement only

\*\* - Monitoring with associated benchmark

‡ The facility will report the minimum and maximum pH values; pH is not to be averaged

## **DERIVATION AND DISCUSSION OF LIMITS:**

### **INDUSTRIAL STORMWATER**

#### **PHYSICAL:**

##### **Flow**

In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.

##### **Precipitation**

Monitoring only requirement. Measuring the amount of rainfall during an event is necessary to ensure adequate stormwater management exists at the site. Knowing the amount of potential stormwater runoff can provide the permittee a better understanding of specific control measure that should be employed to ensure protection of water quality.

#### **CONVENTIONAL:**

##### **Oil & Grease**

Monitoring with associated benchmark. The source of pollution remains on site. Trucks and machinery are used throughout the site. Monitoring will allow the permit to determine if oil, gasoline or lubricants are leaving the property. MO-G49 and MO-R80C establish benchmark values of 10 mg/L for this parameter. MO-G50, MO-G698 and MO-R80C establish effluent limitations of 15 mg/L as a daily maximum and 10 mg/L as a monthly average. The previous permit established a benchmark of 10 mg/L. For these reasons, the permit writer used best professional judgement to establish a benchmark value of 10 mg/L for this parameter to assist in evaluating effectiveness of best management practices at prevent pollution of stormwater.

##### **pH**

6.5-9.0 SU. Technology based effluent limitations of 6.0-9.0 SU [10 CSR 20-7.015] are not protective of the Water Quality Standard, which states that water contaminants shall not cause pH to be outside the range of 6.5-9.0 SU. No mixing zone is allowed due to the classification of the receiving stream, therefore the water quality standard must be met at the outfall.

##### **Settleable Solids**

Monitoring with associated benchmark. There is no water quality standard for settleable solids; however, sediment discharges can negatively impact aquatic life habitat. Settleable solids are also a valuable indicator parameter. Settleable solids monitoring allows the permittee to identify increases in solids that may indicate uncontrolled materials leaving the site. MO-G50 contains limits of 1.5 mL/L/hr as a daily maximum and 1.0 mL/L/hr as a monthly average. MO-G49 establishes a benchmark of 1.0 mL/L/hr. MO-G698 establishes monitoring requirements. The previous permit established a benchmark of 1.0 mL/L/hr. Therefore, it is the permit writer's best professional judgment to continue the benchmark of 1.0 mL/L/hr.

##### **Total Suspended Solids (TSS)**

Monitoring with associated benchmark. There is no water quality standard for TSS; however, sediment discharges can negatively impact aquatic life habitat. TSS is also a valuable indicator parameter. TSS monitoring allows the permittee to identify increases in TSS that may indicate uncontrolled materials leaving the site. MO-G49 and EPA's MSGP Subsector J1 both have benchmark values of 100 mg/L. MO-R80C establishes a benchmark of 50 mg/L. MO-G50 and MO-G698 include monitoring for this parameter as a pollutant of concern. Therefore, it is the permit writer's best professional judgment to implement the benchmark of 100 mg/L in this permit.

#### **NUTRIENTS:**

##### **Ammonia, Total as Nitrogen**

Monitoring only requirement. This facility handles bulk fertilizer products. Monitoring allows the permittee to identify fertilizer products coming into contact with stormwater indicating a need for maintenance or improvement of BMPs.

##### **Nitrate as N**

Monitoring only requirement. This facility handles bulk fertilizer products. Monitoring allows the permittee to identify fertilizer products coming into contact with stormwater indicating a need for maintenance or improvement of BMPs.

##### **Nitrate plus Nitrite as N**

Monitoring with associated benchmark. This facility handles bulk fertilizer products and sand and gravel storage. Monitoring allows the permittee to identify fertilizer products or sand and gravel coming into contact with stormwater indicating a need for maintenance or improvement of BMPs. The EPA's MSGP has a benchmark of 0.68 mg/L for Subsector J1. Therefore, it is the permit writer's best professional judgment to implement the benchmark of 0.68 mg/L in this permit.

## NON-STORMWATER FLOWS

### PHYSICAL:

#### Flow

In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.

### CONVENTIONAL:

#### Oil & Grease

MO-G49 and MO-G698 contains this parameter for process and wash water discharges. Both permits set effluent limitations of 15 mg/L as a daily maximum and 10 mg/L as a monthly average. For this reason, this permit will implement the same effluent limitations for this parameter. This also complies with 10 CSR 20-7.031 Table A effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum.

#### pH

MO-G49, MO-G50 and MO-G698 contain this parameter for process and wash water discharges. All permits set effluent limitations of 6.5-9.0 SU. For this reason, this permit will implement the same effluent limitations for this parameter. This also complies with 10 CSR 20-7.031 water quality standard of 6.5-9.0 SU.

#### Settleable Solids

MO-G49, MO-G50 and MO-G698 contain this parameter for process and wash water discharges. MO-G49 and MO-G50 specifically set effluent limitations of 1.5 mL/L/hr as a daily maximum and 1.0 mL/L/hr as a monthly average. For this reason, this permit will implement the same effluent limitations for this parameter.

#### Total Suspended Solids (TSS)

MO-G49, MO-G50 and MO-G698 contain this parameter for process and wash water discharges. MO-G49 specifically sets effluent limitations of 70 mg/L as a daily maximum and 70 mg/L as a monthly average. For this reason, this permit will implement the same effluent limitations in this permit. The previous permit included limits of 70 mg/L as a daily maximum and 35 mg/L as a monthly average for Outfall #007 to address coal storage piles. Federal ELG 40 CFR 434 Subpart B contains limits for wash water from coal preparation plants and associated areas. The facility stores coal throughout the property but is not a coal mining or preparation facility. This facility does not generate process wastewater from coal operations and the ELG for process wastewater does not apply. Therefore, it is the permit writer's best professional judgment implement only the MO-G49 limits.

### NUTRIENTS:

#### Ammonia, Total as Nitrogen

Monitoring only requirement. This facility handles bulk fertilizer products. Monitoring allows the permittee to identify fertilizer products coming into contact with stormwater indicating a need for maintenance or improvement of BMPs.

#### Nitrate as N

Monitoring only requirement. This facility handles bulk fertilizer products. Monitoring allows the permittee to identify fertilizer products coming into contact with stormwater indicating a need for maintenance or improvement of BMPs.

#### Nitrate plus Nitrite as N

Monitoring with associated benchmark. This facility handles bulk fertilizer products and sand and gravel storage. Monitoring allows the permittee to identify fertilizer products or sand and gravel coming into contact with stormwater indicating a need for maintenance or improvement of BMPs. The EPA's MSGP has a benchmark of 0.68 mg/L for Subsector J1. Therefore, it is the permit writer's best professional judgment to implement the benchmark of 0.68 mg/L in this permit.

#### Nitrogen, Kjeldahl, as N

Monitoring only requirement. Per 10 CSR 20-7.015(9), point sources that have the design capacity of greater than 100,000 gpd that typically discharge nitrogen and phosphorus shall collect and analyze influent and effluent samples for total phosphorus, ammonia, total kjeldahl nitrogen and nitrate plus nitrite.

### **Phosphorus, Total**

Monitoring only requirement. Per 10 CSR 20-7.015(9), point sources that have the design capacity of greater than 100,000 gpd that typically discharge nitrogen and phosphorus shall collect and analyze influent and effluent samples for total phosphorus, ammonia, total kjeldahl nitrogen and nitrate plus nitrite.

### **OUTFALL #012, #014 & #016**

Industrial stormwater runoff from quarry operations and limestone storage piles.

Effluent limitations derived and established in the below Effluent Limitations Table are based on current operations of the facility. Future permit action due to facility modification may contain new operating permit terms and conditions that supersede the terms and conditions, including effluent limitations, of this operating permit.

**EFFLUENT LIMITATIONS TABLE:**

PARAMETERS	UNIT	DAILY MAX	BENCH-MARK	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	REPORTING FREQUENCY	SAMPLE TYPE
<b>PHYSICAL</b>							
FLOW	MGD	*	-	SAME	ONCE/QUARTER	ONCE/QUARTER	24 HR. ESTIMATE
PRECIPITATION	INCHES	*	-	SAME	ONCE/DAY	ONCE/QUARTER	MEASURED
<b>CONVENTIONAL</b>							
OIL & GREASE	MG/L	**	10	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
pH ‡	SU	6.5 TO 9.0	-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
SETTLEABLE SOLIDS	ML/L/HR	**	1.0	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
TOTAL SUSPENDED SOLIDS	MG/L	**	100	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
<b>NUTRIENTS</b>							
AMMONIA AS N	MG/L	*	-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
NITRATE AS N	MG/L	*	-	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
NITRATE PLUS NITRITE AS N	MG/L	**	0.68	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
PARAMETERS	UNIT	DAILY MAX	MONTHLY AVERAGE LIMIT	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	REPORTING FREQUENCY	SAMPLE TYPE
<b>NON-STORMWATER</b>							
<b>PHYSICAL</b>							
FLOW	MGD	*	*	SAME	ONCE/DAY	ONCE/MONTH	24 HR. ESTIMATE
<b>CONVENTIONAL</b>							
OIL & GREASE	MG/L	15	10	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
pH ‡	SU	6.5 TO 9.0	-	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
SETTLEABLE SOLIDS	ML/L/HR	70	70	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
TOTAL SUSPENDED SOLIDS	MG/L	1.5	1.0	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
<b>NUTRIENTS</b>							
AMMONIA AS N	MG/L	*	-	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
NITRATE AS N	MG/L	*	-	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
NITRATE PLUS NITRITE AS N	MG/L	**	0.68	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
NITROGEN, KJELDAHL, AS N	MG/L	*	-	NEW	ONCE/MONTH	ONCE/MONTH	GRAB
PHOSPHORUS, TOTAL	MG/L	*	-	NEW	ONCE/MONTH	ONCE/MONTH	GRAB

\* - Monitoring requirement only

\*\* - Monitoring with associated benchmark

‡ The facility will report the minimum and maximum pH values; pH is not to be averaged

## **DERIVATION AND DISCUSSION OF LIMITS:**

### **INDUSTRIAL STORMWATER**

#### **PHYSICAL:**

##### **Flow**

In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.

##### **Precipitation**

Monitoring only requirement. Measuring the amount of rainfall during an event is necessary to ensure adequate stormwater management exists at the site. Knowing the amount of potential stormwater runoff can provide the permittee a better understanding of specific control measure that should be employed to ensure protection of water quality.

#### **CONVENTIONAL:**

##### **Oil & Grease**

Monitoring with associated benchmark. The source of pollution remains on site. Trucks and machinery are used throughout the site. Monitoring will allow the permit to determine if oil, gasoline or lubricants are leaving the property. MO-G49 establishes a benchmark value of 10 mg/L for this parameter. The previous permit established a benchmark of 10 mg/L. For these reasons, the permit writer used best professional judgement to establish a benchmark value of 10 mg/L for this parameter to assist in evaluating effectiveness of best management practices at prevent pollution of stormwater.

##### **pH**

6.5-9.0 SU. Technology based effluent limitations of 6.0-9.0 SU [10 CSR 20-7.015] are not protective of the Water Quality Standard, which states that water contaminants shall not cause pH to be outside the range of 6.5-9.0 SU. No mixing zone is allowed due to the classification of the receiving stream, therefore the water quality standard must be met at the outfall.

##### **Settleable Solids**

Monitoring with associated benchmark. There is no water quality standard for settleable solids; however, sediment discharges can negatively impact aquatic life habitat. Settleable solids are also a valuable indicator parameter. Settleable solids monitoring allows the permittee to identify increases in solids that may indicate uncontrolled materials leaving the site. MO-G49 establishes a benchmark of 1.0 mL/L/hr. The previous permit established a benchmark of 1.0 mL/L/hr. Therefore, it is the permit writer's best professional judgment to continue the benchmark of 1.0 mL/L/hr.

##### **Total Suspended Solids (TSS)**

Monitoring with associated benchmark. There is no water quality standard for TSS; however, sediment discharges can negatively impact aquatic life habitat. TSS is also a valuable indicator parameter. TSS monitoring allows the permittee to identify increases in TSS that may indicate uncontrolled materials leaving the site. MO-G49 and EPA's MSGP Subsector J1 have benchmark values of 100 mg/L. Therefore, it is the permit writer's best professional judgment to implement the benchmark of 100 mg/L in this permit.

#### **NUTRIENTS:**

##### **Ammonia, Total as Nitrogen**

Monitoring only requirement. This facility handles bulk fertilizer products. Monitoring allows the permittee to identify fertilizer products coming into contact with stormwater indicating a need for maintenance or improvement of BMPs. The previous permit established a dynamic benchmark evaluation based on the pH of the discharge. The method for establishing the benchmark value is consistent with the methods for determining water quality standards for this parameter in the state regulations. Due to the fact that the benchmark is placed in the permit to evaluate effectiveness of stormwater control measures from preventing pollution of stormwater runoff from the site, the permit writer feels that the method can be continued. However, DMR history shows pH values between 7.4 and 8.8 pH SU for these outfalls. In order to simplify the benchmark value, the permit writer will take the lowest pH value from the range, which corresponds to the highest ammonia value within that range. The benchmark value will be set at 23.0 mg/L for these outfalls at all times, regardless of fluctuations in pH. This will assist in determining if BMPs are effective at removing pollutants from stormwater.

##### **Nitrate as N**

Monitoring only requirement. Per 10 CSR 20-7.015(9), point sources that have the design capacity of greater than 100,000 gpd that typically discharge nitrogen and phosphorus shall collect and analyze influent and effluent samples for total phosphorus, ammonia, total kjeldahl nitrogen and nitrate plus nitrite.



### **Nitrate plus Nitrite as N**

Monitoring with associated benchmark. This facility handles bulk fertilizer products and sand and gravel storage. Monitoring allows the permittee to identify fertilizer products or sand and gravel coming into contact with stormwater indicating a need for maintenance or improvement of BMPs. The EPA's MSGP has a benchmark of 0.68 mg/L for Subsector J1. Therefore, it is the permit writer's best professional judgment to implement the benchmark of 0.68 mg/L in this permit.

## **NON-STORMWATER FLOWS**

### **PHYSICAL:**

#### **Flow**

In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.

### **CONVENTIONAL:**

#### **Oil & Grease**

MO-G49 contains this parameter for process and wash water discharges. This permit sets effluent limitations of 15 mg/L as a daily maximum and 10 mg/L as a monthly average. For this reason, this permit will implement the same effluent limitations for this parameter. This also complies with 10 CSR 20-7.031 Table A effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum.

#### **pH**

MO-G49 contains this parameter for process and wash water discharges. All permits set effluent limitations of 6.5-9.0 SU. For this reason, this permit will implement the same effluent limitations for this parameter. This also complies with 10 CSR 20-7.031 water quality standard of 6.5-9.0 SU.

#### **Settleable Solids**

MO-G49 contains this parameter for process and wash water discharges. This permit sets effluent limitations of 1.5 mL/L/hr as a daily maximum and 1.0 mL/L/hr as a monthly average. For this reason, this permit will implement the same effluent limitations for this parameter.

#### **Total Suspended Solids (TSS)**

MO-G49 contains this parameter for process and wash water discharges. This permit sets effluent limitations of 70 mg/L as a daily maximum and 70 mg/L as a monthly average. For this reason, this permit will implement the same effluent limitations in this permit.

### **NUTRIENTS:**

#### **Ammonia, Total as Nitrogen**

Monitoring only requirement. This facility handles bulk fertilizer products. Monitoring allows the permittee to identify fertilizer products coming into contact with stormwater indicating a need for maintenance or improvement of BMPs.

#### **Nitrate as N**

Monitoring only requirement. This facility handles bulk fertilizer products. Monitoring allows the permittee to identify fertilizer products coming into contact with stormwater indicating a need for maintenance or improvement of BMPs.

#### **Nitrate plus Nitrite as N**

Monitoring with associated benchmark. This facility handles bulk fertilizer products and sand and gravel storage. Monitoring allows the permittee to identify fertilizer products or sand and gravel coming into contact with stormwater indicating a need for maintenance or improvement of BMPs. The EPA's MSGP has a benchmark of 0.68 mg/L for Subsector J1. Therefore, it is the permit writer's best professional judgment to implement the benchmark of 0.68 mg/L in this permit.

#### **Nitrogen, Kjeldahl, as N**

Monitoring only requirement. Per 10 CSR 20-7.015(9), point sources that have the design capacity of greater than 100,000 gpd that typically discharge nitrogen and phosphorus shall collect and analyze influent and effluent samples for total phosphorus, ammonia, total kjeldahl nitrogen and nitrate plus nitrite.

#### **Phosphorus, Total**

Monitoring only requirement. Per 10 CSR 20-7.015(9), point sources that have the design capacity of greater than 100,000 gpd that typically discharge nitrogen and phosphorus shall collect and analyze influent and effluent samples for total phosphorus, ammonia, total kjeldahl nitrogen and nitrate plus nitrite.

## **PART V. SAMPLING AND REPORTING REQUIREMENTS**

Refer to each outfall's derivation and discussion of limits section to review individual sampling and reporting frequencies and sampling type. Additionally, see Standard Conditions Part I attached at the end of this permit and fully incorporated within.

### **ELECTRONIC DISCHARGE MONITORING REPORT (EDMR) SUBMISSION SYSTEM:**

The U.S. Environmental Protection Agency (EPA) promulgated a final rule on October 22, 2015, to modernize Clean Water Act reporting for municipalities, industries, and other facilities by converting to an electronic data reporting system. The final rule requires regulated entities and state and federal regulators to use information technology to electronically report data required by the National Pollutant Discharge Elimination System (NPDES) permit program instead of filing paper reports. To comply with the federal rule, the Department is requiring all permittees to begin submitting discharge monitoring data and reports online.

Per 40 CFR 127.15 and 127.24, permitted facilities may request a temporary waiver for up to 5 years or a permanent waiver from electronic reporting from the Department. To obtain an electronic reporting waiver, a permittee must first submit an eDMR Waiver Request Form: <http://dnr.mo.gov/forms/780-2692-f.pdf>. A request must be made for each facility. If more than one facility is owned or operated by a single entity, then the entity must submit a separate request for each facility based on its specific circumstances. An approved waiver is not transferable.

The Department must review and notify the facility within 120 calendar days of receipt if the waiver request has been approved or rejected [40 CFR 124.27(a)]. During the Department review period as well as after a waiver is granted, the facility must continue submitting a hard-copy of any reports required by their permit. The Department will enter data submitted in hard-copy from those facilities allowed to do so and electronically submit the data to the EPA on behalf of the facility.

✓ The permittee/facility is currently using the eDMR data reporting system.

### **SAMPLING FREQUENCY JUSTIFICATION:**

Sampling and reporting frequency was generally retained from previous permit. The sampling and reporting frequency for metals in stormwater is quarterly. This is consistent with general permit sampling requirements. This will also allow the permittee to evaluate effectiveness of BMPs on a more regular basis and will provide the Department with sufficient data to make compliance determinations on the ability of the permittee to manage prevention of stormwater pollution. Additionally, the sampling and reporting frequency for flow of non-stormwater is monthly to align with the other parameters being monitored in non-stormwater discharges. There is no environmental benefit to monitoring the non-stormwater flow more frequently than the rest of the parameters.

### **SAMPLING TYPE JUSTIFICATION:**

Sampling type was continued from the previous permit. The sampling types are representative of the discharges, and are protective of water quality. Discharges with altering effluent should have composite sampling; discharges with uniform effluent can have grab samples. Grab samples are usually appropriate for stormwater.

### **SUFFICIENTLY SENSITIVE ANALYTICAL METHODS:**

Please review Standard Conditions Part 1, section A, number 4. The analytical and sampling methods used shall conform to the reference methods listed in 10 CSR 20-7.015 and/or 40 CFR 136 unless alternates are approved by the Department. The facility shall use sufficiently sensitive analytical methods for detecting, identifying, and measuring the concentrations of pollutants. The facility shall ensure the selected methods are able to quantify the presence of pollutants in a given discharge at concentrations are low enough to determine compliance with Water Quality Standards in 10 CSR 20-7.031 or effluent limitations unless provisions in the permit allow for other alternatives. A method is "sufficiently sensitive" when; 1) the method quantifies the pollutant below the level of the applicable water quality criterion or; 2) the method minimum level is above the applicable water quality criterion, but the amount of pollutant in a facility's discharge is high enough the method detects and quantifies the level of pollutant in the discharge, or 3) the method has the lowest minimum level of the analytical methods approved under 10 CSR 20-7.015 and or 40 CFR 136. These methods are also required for parameters listed as monitoring only, as the data collected may be used to determine if numeric limitations need to be established. A permittee is responsible for working with their contractors to ensure the analysis performed is sufficiently sensitive. 40 CFR 136 lists the approved methods accepted by the Department. Tables A1-B3 at 10 CSR 20-7.031 shows water quality standards.

## **PART VI. ADMINISTRATIVE REQUIREMENTS**

On the basis of preliminary staff review and the application of applicable standards and regulations, the Department, as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions contained herein and within the operating permit. The proposed determinations are tentative pending public comment.

### **PERMIT SYNCHRONIZATION:**

The Department of Natural Resources is currently undergoing a synchronization process for operating permits. Permits are normally issued on a five-year term, but to achieve synchronization many permits will need to be issued for less than the full five years allowed by regulation. The intent is all permits within a watershed will move through the Watershed Based Management (WBM) cycle together will all expire in the same fiscal year. <http://dnr.mo.gov/env/wpp/cpp/docs/watershed-based-management.pdf>. This will allow further streamlining by placing multiple permits within a smaller geographic area on public notice simultaneously, thereby reducing repeated administrative efforts. This will also allow the Department to explore a watershed based permitting effort at some point in the future. Renewal applications must continue to be submitted within 180 days of expiration, however, in instances where effluent data from the previous renewal is less than two years old, such data may be re-submitted to meet the requirements of the renewal application. If the permit provides a schedule of compliance for meeting new water quality based effluent limits beyond the expiration date of the permit, the time remaining in the schedule of compliance will be allotted in the renewed permit.

✓ This permit will become synchronized by expiring the end of the 1st quarter, 2024.

### **PUBLIC NOTICE:**

The Department shall give public notice a draft permit has been prepared and its issuance is pending.

<http://dnr.mo.gov/env/wpp/permits/pn/index.html>. Additionally, public notice will be issued if a public hearing is to be held because of a significant degree of interest in or with water quality concerns related to a draft permit. No public notice is required when a request for a permit modification or termination is denied; however, the requester and permittee must be notified of the denial in writing.

The Department must issue public notice of a pending operating permit or of a new or reissued statewide general permit. The public comment period is the length of time not less than 30 days following the date of the public notice which interested persons may submit written comments about the proposed permit.

For persons wanting to submit comments regarding this proposed operating permit, then please refer to the Public Notice page located at the front of this draft operating permit. The Public Notice page gives direction on how and where to submit appropriate comments.

✓ The Public Notice period for this operating permit was from June 21, 2019 to July 22, 2019. No responses were received.

**DATE OF FACT SHEET:** APRIL 12, 2019

### **COMPLETED BY:**

KYLE O'ROURKE, ENVIRONMENTAL SPECIALIST  
MISSOURI DEPARTMENT OF NATURAL RESOURCES  
WATER PROTECTION PROGRAM  
OPERATING PERMITS SECTION - INDUSTRIAL UNIT  
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STANDARD CONDITIONS FOR NPDES PERMITS  
ISSUED BY  
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES  
MISSOURI CLEAN WATER COMMISSION  
REVISED  
AUGUST 1, 2014

These Standard Conditions incorporate permit conditions as required by 40 CFR 122.41 or other applicable state statutes or regulations. These minimum conditions apply unless superseded by requirements specified in the permit.

## Part I – General Conditions

### Section A – Sampling, Monitoring, and Recording

1. **Sampling Requirements.**
  - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
  - b. All samples shall be taken at the outfall(s) or Missouri Department of Natural Resources (Department) approved sampling location(s), and unless specified, before the effluent joins or is diluted by any other body of water or substance.
2. **Monitoring Requirements.**
  - a. Records of monitoring information shall include:
    - i. The date, exact place, and time of sampling or measurements;
    - ii. The individual(s) who performed the sampling or measurements;
    - iii. The date(s) analyses were performed;
    - iv. The individual(s) who performed the analyses;
    - v. The analytical techniques or methods used; and
    - vi. The results of such analyses.
  - b. If the permittee monitors any pollutant more frequently than required by the permit at the location specified in the permit using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring shall be included in the calculation and reported to the Department with the discharge monitoring report data (DMR) submitted to the Department pursuant to Section B, paragraph 7.
3. **Sample and Monitoring Calculations.** Calculations for all sample and monitoring results which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in the permit.
4. **Test Procedures.** The analytical and sampling methods used shall conform to the reference methods listed in 10 CSR 20-7.015 unless alternates are approved by the Department. The facility shall use sufficiently sensitive analytical methods for detecting, identifying, and measuring the concentrations of pollutants. The facility shall ensure that the selected methods are able to quantify the presence of pollutants in a given discharge at concentrations that are low enough to determine compliance with Water Quality Standards in 10 CSR 20-7.031 or effluent limitations unless provisions in the permit allow for other alternatives. A method is “sufficiently sensitive” when; 1) the method minimum level is at or below the level of the applicable water quality criterion for the pollutant or, 2) the method minimum level is above the applicable water quality criterion, but the amount of pollutant in a facility’s discharge is high enough that the method detects and quantifies the level of pollutant in the discharge, or 3) the method has the lowest minimum level of the analytical methods approved under 10 CSR 20-7.015. These methods are also required for parameters that are listed as monitoring only, as the data collected may be used to determine if limitations need to be established. A permittee is responsible for working with their contractors to ensure that the analysis performed is sufficiently sensitive.
5. **Record Retention.** Except for records of monitoring information required by the permit related to the permittee’s sewage sludge use and disposal activities, which shall be retained for a period of at least five (5) years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

6. **Illegal Activities.**
  - a. The Federal Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under the permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than two (2) years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four (4) years, or both.
  - b. The Missouri Clean Water Law provides that any person or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained pursuant to sections 644.006 to 644.141 shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than six (6) months, or by both. Second and successive convictions for violation under this paragraph by any person shall be punished by a fine of not more than \$50,000 per day of violation, or by imprisonment for not more than two (2) years, or both.

### Section B – Reporting Requirements

1. **Planned Changes.**
  - a. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility when:
    - i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
    - ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42;
    - iii. The alteration or addition results in a significant change in the permittee’s sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;
    - iv. Any facility expansions, production increases, or process modifications which will result in a new or substantially different discharge or sludge characteristics must be reported to the Department 60 days before the facility or process modification begins. Notification may be accomplished by application for a new permit. If the discharge does not violate effluent limitations specified in the permit, the facility is to submit a notice to the Department of the changed discharge at least 30 days before such changes. The Department may require a construction permit and/or permit modification as a result of the proposed changes at the facility.
2. **Non-compliance Reporting.**
  - a. The permittee shall report any noncompliance which may endanger health or the environment. Relevant information shall be provided orally or via the current electronic method approved by the Department, within 24 hours from the time the permittee becomes aware of the circumstances, and shall be reported to the appropriate Regional Office during normal business hours or the Environmental Emergency Response hotline at 573-634-2436 outside of normal business hours. A written submission shall also be provided within five (5) business days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.



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- b. The following shall be included as information which must be reported within 24 hours under this paragraph.
    - i. Any unanticipated bypass which exceeds any effluent limitation in the permit.
    - ii. Any upset which exceeds any effluent limitation in the permit.
    - iii. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit required to be reported within 24 hours.
  - c. The Department may waive the written report on a case-by-case basis for reports under paragraph 2. b. of this section if the oral report has been received within 24 hours.
3. **Anticipated Noncompliance.** The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The notice shall be submitted to the Department 60 days prior to such changes or activity.
  4. **Compliance Schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date. The report shall provide an explanation for the instance of noncompliance and a proposed schedule or anticipated date, for achieving compliance with the compliance schedule requirement.
  5. **Other Noncompliance.** The permittee shall report all instances of noncompliance not reported under paragraphs 2, 3, and 6 of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph 2. a. of this section.
  6. **Other Information.** Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.
  7. **Discharge Monitoring Reports.**
    - a. Monitoring results shall be reported at the intervals specified in the permit.
    - b. Monitoring results must be reported to the Department via the current method approved by the Department, unless the permittee has been granted a waiver from using the method. If the permittee has been granted a waiver, the permittee must use forms provided by the Department.
    - c. Monitoring results shall be reported to the Department no later than the 28<sup>th</sup> day of the month following the end of the reporting period.
- b. Notice.
    - i. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.
    - ii. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Section B – Reporting Requirements, paragraph 5 (24-hour notice).
  - c. Prohibition of bypass.
    - i. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:
      1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
      2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
      3. The permittee submitted notices as required under paragraph 2. b. of this section.
    - ii. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three (3) conditions listed above in paragraph 2. c. i. of this section.
3. **Upset Requirements.**
    - a. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph 3. b. of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
    - b. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
      - i. An upset occurred and that the permittee can identify the cause(s) of the upset;
      - ii. The permitted facility was at the time being properly operated; and
      - iii. The permittee submitted notice of the upset as required in Section B – Reporting Requirements, paragraph 2. b. ii. (24-hour notice).
      - iv. The permittee complied with any remedial measures required under Section D – Administrative Requirements, paragraph 4.
    - c. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

## Section C – Bypass/Upset Requirements

1. **Definitions.**
  - a. *Bypass*: the intentional diversion of waste streams from any portion of a treatment facility, except in the case of blending.
  - b. *Severe Property Damage*: substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
  - c. *Upset*: an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
2. **Bypass Requirements.**
  - a. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2. b. and 2. c. of this section.

## Section D – Administrative Requirements

1. **Duty to Comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Missouri Clean Water Law and Federal Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.
  - a. The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
  - b. The Federal Clean Water Act provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The Federal Clean Water Act provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement





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imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.

- c. Any person may be assessed an administrative penalty by the EPA Director for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000.
  - d. It is unlawful for any person to cause or permit any discharge of water contaminants from any water contaminant or point source located in Missouri in violation of sections 644.006 to 644.141 of the Missouri Clean Water Law, or any standard, rule or regulation promulgated by the commission. In the event the commission or the director determines that any provision of sections 644.006 to 644.141 of the Missouri Clean Water Law or standard, rules, limitations or regulations promulgated pursuant thereto, or permits issued by, or any final abatement order, other order, or determination made by the commission or the director, or any filing requirement pursuant to sections 644.006 to 644.141 of the Missouri Clean Water Law or any other provision which this state is required to enforce pursuant to any federal water pollution control act, is being, was, or is in imminent danger of being violated, the commission or director may cause to have instituted a civil action in any court of competent jurisdiction for the injunctive relief to prevent any such violation or further violation or for the assessment of a penalty not to exceed \$10,000 per day for each day, or part thereof, the violation occurred and continues to occur, or both, as the court deems proper. Any person who willfully or negligently commits any violation in this paragraph shall, upon conviction, be punished by a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than one year, or both. Second and successive convictions for violation of the same provision of this paragraph by any person shall be punished by a fine of not more than \$50,000 per day of violation, or by imprisonment for not more than two (2) years, or both.
2. **Duty to Reapply.**
- a. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.
  - b. A permittee with a currently effective site-specific permit shall submit an application for renewal at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Department. (The Department shall not grant permission

for applications to be submitted later than the expiration date of the existing permit.)

- c. A permittee with currently effective general permit shall submit an application for renewal at least 30 days before the existing permit expires, unless the permittee has been notified by the Department that an earlier application must be made. The Department may grant permission for a later submission date. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)
3. **Need to Halt or Reduce Activity Not a Defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
4. **Duty to Mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
5. **Proper Operation and Maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
6. **Permit Actions.**
- a. Subject to compliance with statutory requirements of the Law and Regulations and applicable Court Order, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:
    - i. Violations of any terms or conditions of this permit or the law;
    - ii. Having obtained this permit by misrepresentation or failure to disclose fully any relevant facts;
    - iii. A change in any circumstances or conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge; or
    - iv. Any reason set forth in the Law or Regulations.
  - b. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
7. **Permit Transfer.**
- a. Subject to 10 CSR 20-6.010, an operating permit may be transferred upon submission to the Department of an application to transfer signed by the existing owner and the new owner, unless prohibited by the terms of the permit. Until such time the permit is officially transferred, the original permittee remains responsible for complying with the terms and conditions of the existing permit.
  - b. The Department may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Missouri Clean Water Law or the Federal Clean Water Act.
  - c. The Department, within 30 days of receipt of the application, shall notify the new permittee of its intent to revoke or reissue or transfer the permit.
8. **Toxic Pollutants.** The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Federal Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
9. **Property Rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.



STANDARD CONDITIONS FOR NPDES PERMITS  
ISSUED BY  
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES  
MISSOURI CLEAN WATER COMMISSION  
REVISED  
AUGUST 1, 2014

10. **Duty to Provide Information.** The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.
11. **Inspection and Entry.** The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the Department), upon presentation of credentials and other documents as may be required by law, to:
  - a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
  - d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Federal Clean Water Act or Missouri Clean Water Law, any substances or parameters at any location.
12. **Closure of Treatment Facilities.**
  - a. Persons who cease operation or plan to cease operation of waste, wastewater, and sludge handling and treatment facilities shall close the facilities in accordance with a closure plan approved by the Department.
  - b. Operating Permits under 10 CSR 20-6.010 or under 10 CSR 20-6.015 are required until all waste, wastewater, and sludges have been disposed of in accordance with the closure plan approved by the Department and any disturbed areas have been properly stabilized. Disturbed areas will be considered stabilized when perennial vegetation, pavement, or structures using permanent materials cover all areas that have been disturbed. Vegetative cover, if used, shall be at least 70% plant density over 100% of the disturbed area.
13. **Signatory Requirement.**
  - a. All permit applications, reports required by the permit, or information requested by the Department shall be signed and certified. (See 40 CFR 122.22 and 10 CSR 20-6.010)
  - b. The Federal Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six (6) months per violation, or by both.
  - c. The Missouri Clean Water Law provides that any person who knowingly makes any false statement, representation or certification in any application, record, report, plan, or other document filed or required to be maintained pursuant to sections 644.006 to 644.141 shall, upon conviction, be punished by a fine of not more than ten thousand dollars, or by imprisonment for not more than six months, or by both.
14. **Severability.** The provisions of the permit are severable, and if any provision of the permit, or the application of any provision of the permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of the permit, shall not be affected thereby.

AP29550

RECEIVED

MAR 19 2018



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
WATER PROTECTION PROGRAM  
**FORM A – APPLICATION FOR NONDOMESTIC PERMIT UNDER MISSOURI  
CLEAN WATER LAW**

Water Protection Program

## FOR AGENCY USE ONLY

CHECK NUMBER

DATE RECEIVED

FEE SUBMITTED

Note ▶ PLEASE READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM.

1. This application is for:

☐ An operating permit for a new or unpermitted facility:

Please indicate the original Construction Permit # \_\_\_\_\_

☒ An operating permit renewal:

Please indicate the permit # MO- 0127132 Expiration Date September 30, 2018

☐ An operating permit modification:

Please indicate the permit # MO- \_\_\_\_\_ Modification Reason: \_\_\_\_\_

1.1 Is the appropriate fee included with the application? (See instructions for appropriate fee) ☐ YES ☒ NO

## 2. FACILITY

NAME

SSS Inc. aka SSS Lumber Company, Inc.

TELEPHONE NUMBER WITH AREA CODE

(573) 754-4566

FAX

(573) 754-4565

ADDRESS (PHYSICAL)

10415 Hwy 79

CITY

Louisiana

STATE

MO

ZIP CODE

63353

## 3. OWNER

NAME

SSS, Inc. c/o Gerald Smith

EMAIL ADDRESS

jsmith@waynebsmithinc.com

TELEPHONE NUMBER WITH AREA CODE

(573) 754-4566

FAX

(573) 754-4565

ADDRESS (MAILING)

P.O. Box 474

CITY

Louisiana

STATE

MO

ZIP CODE

63353

3.1 Request review of draft permit prior to public notice? ☒ YES ☐ NO

## 4. CONTINUING AUTHORITY

NAME

Same as 3.0

EMAIL ADDRESS

TELEPHONE NUMBER WITH AREA CODE

FAX

ADDRESS (MAILING)

Same as 3.0

CITY

STATE

ZIP CODE

## 5. OPERATOR

NAME

Same as 3.0

CERTIFICATE NUMBER

TELEPHONE NUMBER WITH AREA CODE

FAX

ADDRESS (MAILING)

Same as 3.0

CITY

STATE

ZIP CODE

## 6. FACILITY CONTACT

NAME

Mr. Michael Stevinson

TITLE

Gen Mgr/ Eng.

TELEPHONE NUMBER WITH AREA CODE

(573) 754-4566

E-MAIL ADDRESS

mstevinson@waynebsmithinc.com

FAX

(573) 754-4565

## 7. ADDITIONAL FACILITY INFORMATION

7.1 Legal Description of Outfalls. (Attach additional sheets if necessary.)

001 \_\_\_\_\_ 1/4 \_\_\_\_\_ 1/4 Sec \_\_\_\_\_ T \_\_\_\_\_ R \_\_\_\_\_ County

UTM Coordinates Easting (X): \_\_\_\_\_ Northing (Y): \_\_\_\_\_  
For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)

002 \_\_\_\_\_ 1/4 \_\_\_\_\_ 1/4 Sec \_\_\_\_\_ T \_\_\_\_\_ R \_\_\_\_\_ County

UTM Coordinates Easting (X): \_\_\_\_\_ Northing (Y): \_\_\_\_\_

003 \_\_\_\_\_ 1/4 \_\_\_\_\_ 1/4 Sec \_\_\_\_\_ T \_\_\_\_\_ R \_\_\_\_\_ County

UTM Coordinates Easting (X): \_\_\_\_\_ Northing (Y): \_\_\_\_\_

004 \_\_\_\_\_ 1/4 \_\_\_\_\_ 1/4 Sec \_\_\_\_\_ T \_\_\_\_\_ R \_\_\_\_\_ County

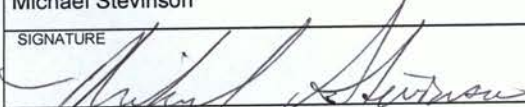
UTM Coordinates Easting (X): \_\_\_\_\_ Northing (Y): \_\_\_\_\_

7.2 Primary Standard Industrial Classification (SIC) and Facility North American Industrial Classification System (NAICS) Codes.

001 – SIC 1422 and NAICS \_\_\_\_\_ 002 – SIC 1442 and NAICS \_\_\_\_\_

003 – SIC 4491 and NAICS \_\_\_\_\_ 004 – SIC \_\_\_\_\_ and NAICS \_\_\_\_\_



<b>8. ADDITIONAL FORMS AND MAPS NECESSARY TO COMPLETE THIS APPLICATION</b> (Complete all forms that are applicable.)			
A.	Is your facility a manufacturing, commercial, mining or silviculture waste treatment facility? If yes, complete Form C or 2F. (2F is the U.S. EPA's Application for Storm Water Discharges Associate with Industrial Activity.)	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
B.	Is application for storm water discharges only? If yes, complete Form C or 2F.	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
C.	Is your facility considered a "Primary Industry" under EPA guidelines: If yes, complete Forms C or 2F and D.	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
D.	Is wastewater land applied? If yes, complete Form I.	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
E.	Is sludge, biosolids, ash or residuals generated, treated, stored or land applied? If yes, complete Form R.	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
F.	If you are a Class IA CAFO, please disregard part D and E of this section. However, please attach any revision to your Nutrient Management Plan.		
F.	Attach a map showing all outfalls and the receiving stream at 1" = 2,000' scale.		
<b>9. ELECTRONIC DISCHARGE MONITORING REPORT (eDMR) SUBMISSION SYSTEM</b>			
Per 40 CFR Part 127 National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule, reporting of effluent limits and monitoring shall be submitted by the permittee via an electronic system to ensure timely, complete, accurate, and nationally consistent set of data. <b>One of the following must be checked in order for this application to be considered complete.</b> Please visit <a href="http://dnr.mo.gov/env/wpp/edmr.htm">http://dnr.mo.gov/env/wpp/edmr.htm</a> to access the Facility Participation Package.			
<input type="checkbox"/> - You have completed and submitted with this permit application the required documentation to participate in the eDMR system.			
<input checked="" type="checkbox"/> - You have previously submitted the required documentation to participate in the eDMR system and/or you are currently using the eDMR system.			
<input type="checkbox"/> - You have submitted a written request for a waiver from electronic reporting. See instructions for further information regarding waivers.			
<b>10. DOWNSTREAM LANDOWNER(S)</b> Attach additional sheets as necessary. See Instructions. (PLEASE SHOW LOCATION ON MAP. SEE 8.D ABOVE).			
NAME			
Please see attached documentation			
ADDRESS		CITY	STATE
			ZIP CODE
<b>11.</b> I certify that I am familiar with the information contained in the application, that to the best of my knowledge and belief such information is true, complete and accurate, and if granted this permit, I agree to abide by the Missouri Clean Water Law and all rules, regulations, orders and decisions, subject to any legitimate appeal available to applicant under the Missouri Clean Water Law to the Missouri Clean Water Commission.			
NAME AND OFFICIAL TITLE (TYPE OR PRINT)		TELEPHONE NUMBER WITH AREA CODE	
Michael Stevinson		(573) 754-4566	
SIGNATURE		DATE SIGNED	
		3-13-18	

MO 750-1479 (09-16)

**BEFORE MAILING, PLEASE ENSURE ALL SECTIONS ARE COMPLETED AND ADDITIONAL FORMS, IF APPLICABLE, ARE INCLUDED.**

Submittal of an incomplete application may result in the application being returned.

HAVE YOU INCLUDED:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Appropriate Fees?<br><input checked="" type="checkbox"/> Map at 1" = 2000' scale?<br><input checked="" type="checkbox"/> Signature?<br><input checked="" type="checkbox"/> Form C or 2F, if applicable?<br><input type="checkbox"/> Form D, if applicable? | <input type="checkbox"/> Form I (Irrigation), if applicable?<br><input type="checkbox"/> Form R (Sludge), if applicable?<br><input type="checkbox"/> Revised Nutrient Management Plan, if applicable? |
|--|---|

## FORM A-APPLICATION FOR PERMIT RENEWAL #MO127132

## PART 7.1 Legal Description of Outfalls

## PART 7.2 Primary SIC/NAICS

PART 7.1 Legal Description of Outcrops												Primary		Primary	
PART 7.2 Primary SIC/NAICS												SIC		NAICS	
Outfall #	Quarter-Quarter	Section	Township	Range	County	Latitude Deg. Dec. Min.	Longitude Deg. Dec. Min.	Latitude Deg. Deg.	Longitude Deg. Deg.	Latitude Deg. Min. Sec.	Longitude Deg. Min. Sec.	Primary SIC	Primary NAICS		
001	NW	1/4	SE	20	T 54 N	R 1 W	39 26.177	91 1.823	39.43628	91.03038	39 26 15.48	91 1 49.38	1442	212321	
002	NW	1/4	SE	20	T 54 N	R 1 W	39 26.258	91 1.827	39.43763	91.03045	39 26 15.48	91 1 49.62	1442	212321	
003	SW	1/4	NE	20	T 54 N	R 1 W	39 26.299	91 1.866	39.43832	91.03110	39 26 17.94	91 1 51.96	1442	121321	
004	SW	1/4	NE	20	T 54 N	R 1 W	39 26.321	91 1.884	39.43868	91.03140	39 26 19.26	91 1 53.04	4491	488320	
005	SW	1/4	NE	20	T 54 N	R 1 W	39 26.343	91 1.904	39.43905	91.03173	39 26 20.58	91 1 54.24	4491	488320	
006	SW	1/4	NE	20	T 54 N	R 1 W	39 26.373	91 1.934	39.43965	91.03223	39 26 22.38	91 1 56.04	1442	212321	
007	SW	1/4	NE	20	T 54 N	R 1 W	39 26.390	91 1.951	39.43983	91.03252	39 26 23.40	91 1 57.06	4491	488320	
008	NW	1/4	SE	20	T 54 N	R 1 W	39 26.234	91 1.921	39.43723	91.03202	39 26 14.04	91 1 55.26	1442	212321	
009	SW	1/4	NE	20	T 54 N	R 1 W	39 26.364	91 2.051	39.43940	91.03418	39 26 21.84	91 2 3.06	4226	493190	
010	SW	1/4	NW	20	T 54 N	R 1 W	39 26.269	91 2.580	39.43782	91.04300	39 26 16.14	91 2 34.80	1422	212312	
011	NE	1/4	SW	20	T 54 N	R 1 W	39 26.103	91 2.260	39.43707	91.03767	39 26 6.18	91 2 15.60	1422	212312	
012	SW	1/4	NE	20	T 54 N	R 1 W	39 26.416	91 3.056	39.44025	91.05093	39 26 24.96	91 3 3.36	1422	212312	
013	SE	1/4	NW	20	T 54 N	R 1 W	39 26.274	91 2.300	39.43790	91.03833	39 26 16.44	91 2 18.00	1422	212312	
014	SW	1/4	SW	19	T 54 N	R 1 W	39 25.986	91 3.578	39.43310	91.05963	39 25 59.16	91 3 34.68	1422	212312	
NEW LOCATION PROPOSED FOR 141															
014	SW	1/4	SW	20	T 55 N	R 2 W	39 25.900	91 3.462	39.43167	91.05770	39 25 54.01	91 3 27.71	1422	212312	
015	NE	1/4	SW	20	T 54 N	R 1 W	39 26.184	91 2.229	39.43640	91.03715	39 26 11.04	91 2 13.74	1422	212312	
016	NE	1/4	SW	30	T 54 N	R 1 W	39 25.170	91 3.275	39.41950	91.05458	39 25 10.20	91 3 16.50	1422	212312	



# ATTACHMENT 2.0

FORM A- APPLICATION FOR RENEWAL OF WATER DISCHARGE PERMIT MO0127132

S-S-S Incorporated

QUESTION 9.0 RESPONSE

## DOWNSTREAM LANDOWNERS

Outfall #	Receiving Stream	NAME	ADDRESS	CITY	STATE	ZIP	MAP ID#
001	Mississippi River	Commander -US Army Corps of Engineers	1222 Spruce Street	St. Louis	MO	63103-2833	DS 1, 11, 15
002	Mississippi River	Commander -US Army Corps of Engineers	1222 Spruce Street	St. Louis	MO	63103-2833	DS 2-9
003	Mississippi River	Commander -US Army Corps of Engineers	1222 Spruce Street	St. Louis	MO	63103-2833	DS 2-9
004	Mississippi River	Commander -US Army Corps of Engineers	1222 Spruce Street	St. Louis	MO	63103-2833	DS 2-9
005	Mississippi River	Commander -US Army Corps of Engineers	1222 Spruce Street	St. Louis	MO	63103-2833	DS 2-9
006	Mississippi River	Commander -US Army Corps of Engineers	1222 Spruce Street	St. Louis	MO	63103-2833	DS 2-9
007	Mississippi River	Commander -US Army Corps of Engineers	1222 Spruce Street	St. Louis	MO	63103-2833	DS 2-9
008	Mississippi River	Commander -US Army Corps of Engineers	1222 Spruce Street	St. Louis	MO	63103-2833	DS 2-9
009	Mississippi River	Commander -US Army Corps of Engineers	1222 Spruce Street	St. Louis	MO	63103-2833	DS 2-9
010	Unnamed Trib to Noix creek	John Davis	304 Buffalo Street	Louisiana	MO	63353	DS10
011	Unnamed Trib to MS River	Commander -US Army Corps of Engineers	1222 Spruce Street	St. Louis	MO	63103-2833	DS 1, 11, 15
012	Noix Creek	Gateway Western RR Company	6 West Hubbard St.	Chicago	IL	60610	DS12
013	Unnamed Trib to MS River	Abel Oil Company	10406 Hwy 79 South	Louisiana	MO	63353	DS13
014	Noix Creek	Mike Burnett	401 S. 30th St.	Louisiana	MO	63353	DS14
NEW LOCATION PROPOSED FOR #14							
14	Noix Creek	Matt Smith	10500 Highway 79	Louisiana	MO	63353	DS14
015	Unnamed Trib to MS River	Commander -US Army Corps of Engineers	1222 Spruce Street	St. Louis	MO	63103-2833	DS1, 11, 15
016	Unnamed Trib to Buffalo Creek	Fred Naxera III	12130 Hwy. D 63353	Louisiana	MO	63353	DS16





# **LEGEND**

- ◆ DOWNSTREAM PROPERTY OWNER
- ◆ OUTFALL LOCATION (NUMBERED)
- PROPERTY/LEASE BOUNDARY
- WATERSHED BOUNDARY

**WAYNE B. SMITH**  
**INC**

WAYNE B. SMITH INC.-HEX STONE, S.S.S., INC.

DRAWN: MTS

APPD:

DATE: 3-13-18

SCALE: 1"=1500'

REV:

**LOUISIANA QUARRY**

SITE PLAN

NPDES APPLICATION PACKET  
OUTFALLS AND RECEIVING STREAMS

NOTES: YEAR 2011 AERIAL PHOTO









MISSOURI DEPARTMENT OF NATURAL RESOURCES  
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH  
**FORM C - APPLICATION FOR DISCHARGE PERMIT -**  
**MANUFACTURING, COMMERCIAL, MINING,**  
**SILVICULTURE OPERATIONS, PROCESS AND STORMWATER**

RECEIVED  
MAR 19 2018  
Water Pollution Program

**FOR AGENCY USE ONLY**

CHECK NO.

DATE RECEIVED

FEE SUBMITTED

5-19-18

086

**NOTE: DO NOT ATTEMPT TO COMPLETE THIS FORM BEFORE READING THE ACCOMPANYING INSTRUCTIONS**

1.00 NAME OF FACILITY

SSS, Inc. aka SSS Lumber Company, Inc.

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER

MO127132

1.20 THIS IS A NEW FACILITY AND WAS CONSTRUCTED UNDER MISSOURI CONSTRUCTION PERMIT NUMBER (COMPLETE ONLY IF THIS FACILITY DOES NOT HAVE AN OPERATING PERMIT).

2.00 LIST THE STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODES APPLICABLE TO YOUR FACILITY (FOUR DIGIT CODE)

A. FIRST 1422

B. SECOND 1442

C. THIRD 4491

D. FOURTH

2.10 FOR EACH OUTFALL GIVE THE LEGAL DESCRIPTION.

OUTFALL NUMBER (LIST) 1/4 1/4 SEC T R SEE ATTACHMENT 1, FORM C COUNTY

2.20 FOR EACH OUTFALL LIST THE NAME OF THE RECEIVING WATER

OUTFALL NUMBER (LIST)  
REFER TO ATTACHMENT 1, FORM C

RECEIVING WATER

2.30 BRIEFLY DESCRIBE THE NATURE OF YOUR BUSINESS

Mining, crushing and shipping of limestone rock/ dredging of river sand and gravel/ storing and shipping of limestone and sand and gravel. Inland marine cargo handling of fertilizer, bauxite, coal, grain, clay, and salt. The operation has infrastructure to facilitate the unloading, loading and temporary storage of common bulk cargos shipped on river barges.

B. For each outfall, provide a description of 1. All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water and storm water runoff. 2. The average flow contributed by each operation. 3. The treatment received by the wastewater. Continue on additional sheets if necessary.

[illegible]



## 2.40 CONTINUED

C. EXCEPT FOR STORM RUNOFF, LEAKS OR SPILLS, ARE ANY OF THE DISCHARGES DESCRIBED IN ITEMS A OR B INTERMITTENT OR SEASONAL?

☒ YES (COMPLETE THE FOLLOWING TABLE)

☐ NO (GO TO SECTION 2.50)

1. OUTFALL NUMBER <i>(list)</i>	2. OPERATION(S) CONTRIBUTING FLOW <i>(list)</i>	3. FREQUENCY		4. FLOW				C. DURATION <i>(in days)</i>
				A. FLOW RATE <i>(in mgd)</i>		B. TOTAL VOLUME <i>(specify with units)</i>		
		A. DAYS PER WEEK <i>(specify average)</i>	B. MONTHS PER YEAR <i>(specify average)</i>	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	4. LONG TERM DAILY	3. MAXIMUM AVERAGE	
001	Sand stockpiling operations	3	8	0.007	0.010	varies	varies	3 days

## 2.50 MAXIMUM PRODUCTION

A. DOES AN EFFLUENT GUIDELINE LIMITATION PROMULGATED BY EPA UNDER SECTION 304 OF THE CLEAN WATER ACT APPLY TO YOUR FACILITY?

☒ YES (COMPLETE B.)

☐ NO (GO TO SECTION 2.60)

B. ARE THE LIMITATIONS IN THE APPLICABLE EFFLUENT GUIDELINES EXPRESSED IN TERMS OF PRODUCTION (OF OTHER MEASURE OF OPERATION)?

☐ YES (COMPLETE C.)

☒ NO (GO TO SECTION 2.60)

C. IF YOU ANSWERED "YES" TO B. LIST THE QUANTITY THAT REPRESENTS AN ACTUAL MEASUREMENT OF YOUR MAXIMUM LEVEL OF PRODUCTION, EXPRESSED IN THE TERMS AND UNITS USED IN THE APPLICABLE EFFLUENT GUIDELINE AND INDICATE THE AFFECTED OUTFALLS.

1. MAXIMUM QUANTITY			2. AFFECTED OUTFALLS (list outfall numbers)
A. QUANTITY PER DAY	B. UNITS OF MEASURE	C. OPERATION, PRODUCT, MATERIAL, ETC. (specify)	

## 2.60 IMPROVEMENTS

A. ARE YOU NOW REQUIRED BY ANY FEDERAL, STATE OR LOCAL AUTHORITY TO MEET, ANY IMPLEMENTATION SCHEDULE FOR THE CONSTRUCTION, UPGRADING OR OPERATION OF WASTEWATER TREATMENT EQUIPMENT OR PRACTICES OR ANY OTHER ENVIRONMENTAL PROGRAMS THAT MAY AFFECT THE DISCHARGES DESCRIBED IN THIS APPLICATION? THIS INCLUDES, BUT IS NOT LIMITED TO, PERMIT CONDITIONS, ADMINISTRATIVE OR ENFORCEMENT ORDERS, ENFORCEMENT COMPLIANCE SCHEDULE LETTERS, STIPULATIONS, COURT ORDERS AND GRANT OR LOAN CONDITIONS.

☐ YES (COMPLETE THE FOLLOWING TABLE)

☒ NO (GO TO 3.00)

1. IDENTIFICATION OF CONDITION AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
				A. REQUIRED	B. PROJECTED

B. OPTIONAL: YOU MAY ATTACH ADDITIONAL SHEETS DESCRIBING ANY ADDITIONAL WATER POLLUTION CONTROL PROGRAMS (OR OTHER ENVIRONMENTAL PROJECTS WHICH MAY AFFECT YOUR DISCHARGES) YOU NOW HAVE UNDER WAY OR WHICH YOU PLAN. INDICATE WHETHER EACH PROGRAM IS NOW UNDER WAY OR PLANNED, AND INDICATE YOUR ACTUAL OR PLANNED SCHEDULES FOR CONSTRUCTION.

☐ MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED.



[illegible]

## 3.10 BIOLOGICAL TOXICITY TESTING DATA

DO YOU HAVE ANY KNOWLEDGE OR REASON TO BELIEVE THAT ANY BIOLOGICAL TEST FOR ACUTE OR CHRONIC TOXICITY HAS BEEN MADE ON ANY OF YOUR DISCHARGES OR ON RECEIVING WATER IN RELATION TO YOUR DISCHARGE WITHIN THE LAST THREE YEARS?

☐ YES (IDENTIFY THE TEST(S) AND DESCRIBE THEIR PURPOSES BELOW.)

☒ NO (GO TO 3.20)

## 3.20 CONTRACT ANALYSIS INFORMATION

WERE ANY OF THE ANALYSES REPORTED PERFORMED BY A CONTRACT LABORATORY OR CONSULTING FIRM?

☒ YES (LIST THE NAME, ADDRESS AND TELEPHONE NUMBER OF AND POLLUTANTS ANALYZED BY EACH SUCH LABORATORY OR FIRM BELOW.)

☐ NO (GO TO 3.30)

A. NAME	B. ADDRESS	C. TELEPHONE (area code and number)	D. POLLUTANTS ANALYZED (list)
TEKLAB, INC.  Pollutants analyzed for each outfall varies according to permit requirements, please refer to current NPDES permit.	5445 Horseshoe Lake Road Collinsville, IL 62234	618-344-1004	TPH Oil and grease Ammonia as Nitrogen TKN Nitrate Nitrite Total Phosphorus Dissolved Aluminum Total Phosphorus Dissolved Aluminum Total Aluminum Total Magnesium Total Suspended Solids Settleable Solids BOD COD

## 3.30 CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED IN THIS APPLICATION AND ALL ATTACHMENTS AND THAT, BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THAT THE INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.


NAME AND OFFICIAL TITLE (TYPE OR PRINT)

Michael Stevinson, Gen Mgr./ Eng.

TELEPHONE NUMBER WITH AREA CODE

(573) 754-4566

SIGNATURE (SEE INSTRUCTIONS)



DATE SIGNED

3-13-18

**ATTACHMENT 1.0**  
**FORM C- APPLICATION FOR DISCHARGE PERMIT -MINING OPERATIONS**  
**PART 2.10 Legal Description of Outfalls**  
**PART 2.20 List of Receiving Waters**

Outfall #	Quarter-Quarter	Section	Section	Township	Range	County	Latitude		Longitude		Receiving Stream	First Classified Stream	USGS Basin #	USGS Sub Watershed
							Deg.	Minutes	Deg.	Minutes				
001	NW	1/4	SE	20	T 54 N	R 1 W	39	26.088	91	1.474	Trib to MS river	MS River (P) (00001)	07110004	110002
002	NW	1/4	SE	20	T 54 N	R 1 W	39	26.134	91	1.490	Trib to MS river	MS River (P) (00001)	07110004	110002
003	SW	1/4	NE	20	T 54 N	R 1 W	39	26.143	91	1.496	Trib to MS river	MS River (P) (00001)	07110004	110002
004	SW	1/4	NE	20	T 54 N	R 1 W	39	26.161	91	1.513	Trib to MS river	MS River (P) (00001)	07110004	110002
005	SW	1/4	NE	20	T 54 N	R 1 W	39	26.188	91	1.540	Trib to MS river	MS River (P) (00001)	07110004	110002
006	SW	1/4	NE	20	T 54 N	R 1 W	39	26.197	91	1.546	Trib to MS river	MS River (P) (00001)	07110004	110002
007	SW	1/4	NE	20	T 54 N	R 1 W	39	26.222	91	1.569	Trib to MS river	MS River (P) (00001)	07110004	110002
008	NW	1/4	SE	20	T 54 N	R 1 W	39	26.144	91	1.563	Trib to MS river	MS River (P) (00001)	07110004	110002
009	SW	1/4	NE	20	T 54 N	R 1 W	39	26.211	91	2.040	Trib to MS river	Noix Creek (P) (00011)	07110004	110002
010	NW	1/4	SW	20	T 54 N	R 1 W	39	26.145	91	2.328	Trib to MS river	MS River (P) (00001)	07110004	110002
011	NE	1/4	SW	20	T 54 N	R 1 W	39	26.060	91	3.009	Trib to MS river	Noix Creek (P) (00011)	07110004	110001
012	SW	1/4	NE	20	T 54 N	R 1 W	39	26.281	91	3.009	Trib to MS river	Noix Creek (P) (00011)	07110004	110001
013	NW	1/4	NW	20	T 54 N	R 1 W	39	26.284	91	2.324	Trib to MS river	Noix Creek (P) (00011)	07110004	110002
014	SW	1/4	SW	20	T 55 N	R 2 W	39	25.986	91	3.578	Trib to MS river	Noix Creek (P) (00011)	07110004	110001
<b>NEW LOCATION!</b>														
014	SW	1/4	SW	20	T 55 N	R 2 W	39	25.900	91	3.462	Trib to MS river	Noix Creek (P) (00011)	07110004	110001
015	NE	1/4	SW	20	T 54 N	R 1 W	39	26.184	91	2.229	Trib to MS river	MS River (P) (00001)	07110004	110002
016	NE	1/4	SW	30	T 54 N	R 1 W	39	25.170	91	3.275	unamed to buffalo	Buffalo Creek (P) (00014)	07110004	110002



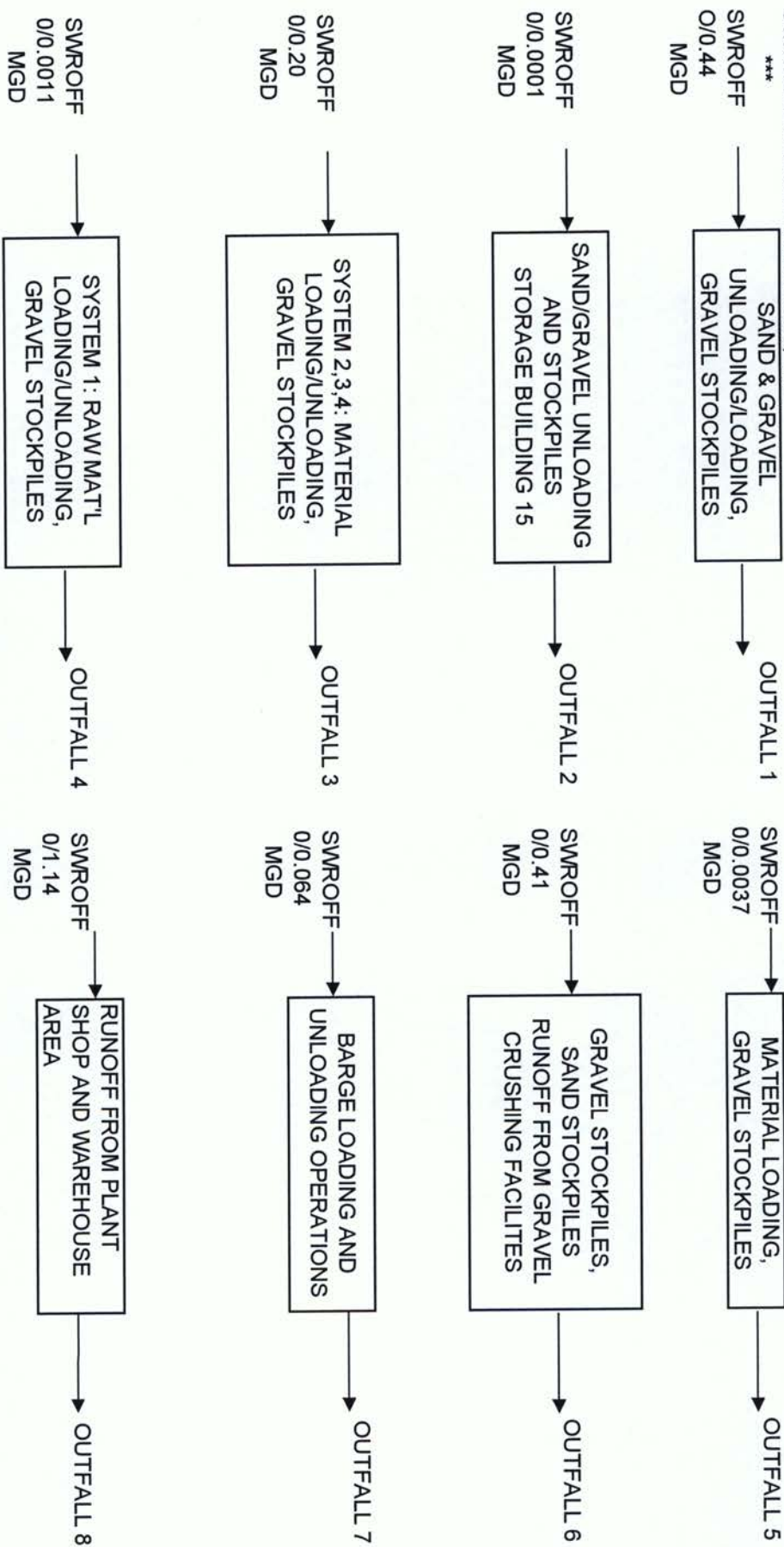
## ATTACHMENT 2.0

FORM C- APPLICATION FOR DISCHARGE PERMIT -MINING OPERATIONS  
S-S-S Incorporated Permit # MO-0127132

1 of 2

### QUESTION 2.40 LINE DRAWING OF WATER FLOW

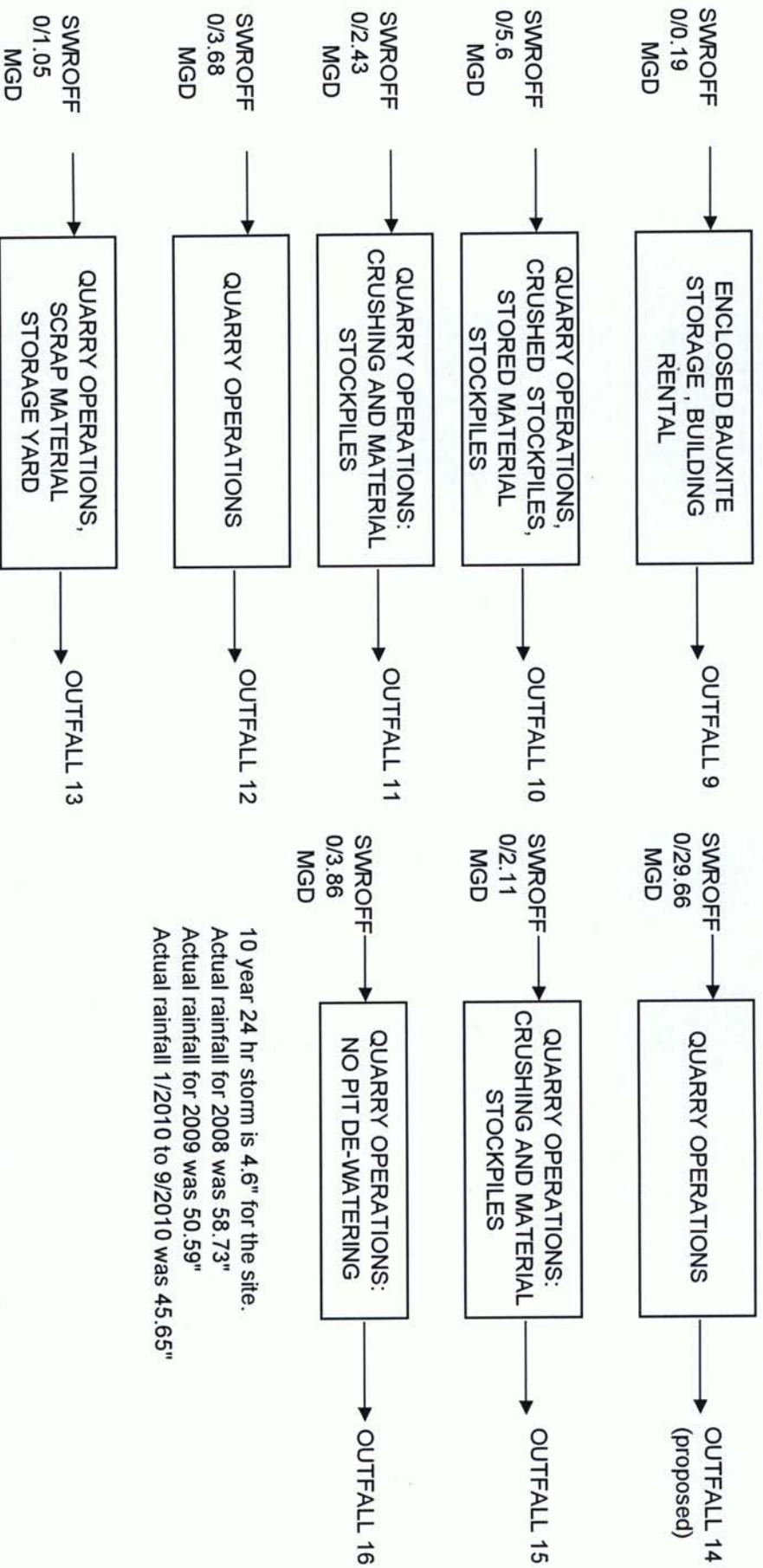
Schematic of Water Flow for SSS, INC



(AVERAGE FLOW/MAXIMUM FLOW) Flow is dependent upon precipitation  
Maximum Flows are taken from the 10 yr 24 hr storm event and are based upon MDNR's statement of basis that was developed for the 3/2017 permit  
Calculations based on actual 2008 to 2010 rainfall volumes indicate a facility average discharge of 0.775 MGD

**ATTACHMENT 2.0 (CONTINUED PAGE 2 OF 2)**  
**FORM C- APPLICATION FOR DISCHARGE PERMIT -MINING OPERATIONS**  
 S-S-S Incorporated

**QUESTION 2.40 LINE DRAWING OF WATER FLOW**  
 Schematic of Water Flow for SSS, INC



(AVERAGE FLOW/MAXIMUM FLOW) Flow is dependent upon precipitation  
 Maximum Flows are taken from the 10 yr 24 hr storm event and are based upon MDNR's statement of basis that was developed for the 3/2017 permit  
 Calculations based on actual 2008 to 2010 rainfall volumes indicate a facility average discharge of 0.775 MGD

\*\*\*

(AVERAGE FLOW/MAXIMUM FLOW)



PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet instead of completing these pages.  
(Use the same format)  
SEE INSTRUCTIONS

FORM C  
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS

OUTFALL NO.  
001

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		2. EFFLUENT								3. UNITS (specify if blank)		4. INTAKE (optional)			
			A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES		
			CONCENTRATION (1)	MASS (2)	CONCENTRATION (1)	MASS (2)	CONCENTRATION (1)	MASS (2)				CONCENTRATION (1)	MASS (2)			
A. Biochemical Oxygen Demand (BOD)																
B. Chemical Oxygen Demand (COD)																
C. Total organic Carbon (TOC)																
D. Total Suspended Solids (TSS)																
E. Ammonia (as N)																
F. Flow																
G. Temperature (winter)																
H. Temperature (summer)																
I. pH																

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results for at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT								4. UNITS		5. INTAKE (optional)			
			A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES		
			CONCENTRATION (1)	MASS (2)	CONCENTRATION (1)	MASS (2)	CONCENTRATION (1)	MASS (2)				CONCENTRATION (1)	MASS (2)			
A. Bromide (24959-67-9)																
B. Chlorine Total Residual																
C. Color																
D. Fecal Coliform																
E. Fluoride (16984-48-8)																
F. Nitrate—Nitrate (as N)																

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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS			5. INTAKE (optional)		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
G. Nitrogen Total Organic (as N)		X												
H. Oil and Grease		X	<5						1	mg/L				
I. Phosphorus (as P) Total (7723-14-0)		X	.153						1	mg/L				
J. Sulfate (as SO <sup>4</sup> ) (14808-79-8)		X												
K. Sulfide (as S)		X												
L. Sulfite (as SO <sup>3</sup> ) (14265-45-3)		X												
M. Surfactants		X												
N. Aluminum Total (7429-90-5)		X												
O. Barium Total (7440-39-3)		X												
P. Boron Total (7440-42-8)		X												
Q. Cobalt Total (7440-48-4)		X												
R. Iron Total (7439-89-6)		X												
S. Magnesium Total (7439-95-4)		X												
T. Molybdenum Total (7439-98-7)		X												
U. Manganese Total (7439-96-5)		X												
V. Tin Total (7440-31-5)		X												
W. Titanium Total (7440-32-6)		X												

MO 780-1514 (05-12)

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MO 780-1514 (05-12)

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, AND TOTAL PHENOLS														
1M. Antimony, Total (7440-36-9)		X												
2M. Beryllium, Total (7440-41-7)		X												
3M. Magnesium, Total (7439-95-4)		X												
4M. Molybdenum, Total (7439-98-7)		X												
5M. Tin, Total (7440-31-5)		X												
6M. Titanium, Total (7440-32-6)		X												
7M. Mercury, Total (7439-97-6)		X												
8M. Selenium, Total (7782-49-2)		X												
9M. Thallium, Total (7440-28-0)		X												
10M. Phenols, Total		X												
RADIOACTIVITY														
(1) Alpha Total		X												
(2) Beta Total		X												
(3) Radium Total		X												
(4) Radium 226 Total		X												

MO 780-1514 (06-12)

PAGE 8



PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet instead of completing these pages.  
(Use the same format)  
SEE INSTRUCTIONS

FORM C  
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS

OUTFALL NO.  
003

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						3. UNITS (specify if blank)			4. INTAKE (optional)		
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
	CONCENTRATION (1)	(2) MASS	CONCENTRATION (1)	(2) MASS	CONCENTRATION (1)	(2) MASS				CONCENTRATION (1)	(2) MASS	
A. Biochemical Oxygen Demand (BOD)	<4		DATA				1	mg/L				
B. Chemical Oxygen Demand (COD)	110		FROM				1	mg/L				
C. Total organic Carbon (TOC)			2006									
D. Total Suspended Solids (TSS)	47						1	mg/L				
E. Ammonia (as N)	1.1						1	mg/L				
F. Flow	VALUE .00576		VALUE		VALUE		1	MGD		VALUE		
G. Temperature (winter)	VALUE		VALUE		VALUE			°C		VALUE		
H. Temperature (summer)	VALUE		VALUE		VALUE			°C		VALUE		
I. pH	MINIMUM 7.6	MAXIMUM	MINIMUM	MAXIMUM			1	STANDARD UNITS				

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results for at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			CONCENTRATION (1)	(2) MASS	CONCENTRATION (1)	(2) MASS	CONCENTRATION (1)	(2) MASS				CONCENTRATION (1)	(2) MASS	
A. Bromide (24959-67-9)		X												
B. Chlorine Total Residual		X												
C. Color		X												
D. Fecal Coliform		X												
E. Fluoride (16984-48-8)		X												
F. Nitrate—Nitrate (as N)		X												

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT								4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES		
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS			
G. Nitrogen Total Organic (as N)		X														
H. Oil and Grease		X	<5						1	mg/L						
I. Phosphorus (as P) Total (7723-14-0)		X	0.2						1	mg/L						
J. Sulfate (as SO <sup>4</sup> ) (14808-79-8)		X														
K. Sulfide (as S)		X														
L. Sulfite (as SO <sup>3</sup> ) (14265-45-3)		X														
M. Surfactants		X														
N. Aluminum Total (7429-90-5)		X	0.28						1	mg/L						
O. Barium Total (7440-39-3)		X														
P. Boron Total (7440-42-8)		X														
Q. Cobalt Total (7440-48-4)		X														
R. Iron Total (7439-89-6)		X														
S. Magnesium Total (7439-95-4)		X	4.8						1	mg/L						
T. Molybdenum Total (7439-98-7)		X														
U. Manganese Total (7439-96-5)		X														
V. Tin Total (7440-31-5)		X														
W. Titanium Total (7440-32-6)		X														

MO 780-1514 (06-12)

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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS						
<b>METALS, AND TOTAL PHENOLS</b>														
1M. Antimony, Total (7440-36-9)	X													
2M. Beryllium, Total (7440-41-7)	X													
3M. Magnesium, Total (7439-95-4)	X		4.8						1	mg/L				
4M. Molybdenum, Total (7439-98-7)	X													
5M. Tin, Total (7440-31-5)	X													
6M. Titanium, Total (7440-32-6)	X													
7M. Mercury, Total (7439-97-6)	X													
8M. Selenium, Total (7782-49-2)	X													
9M. Thallium, Total (7440-28-0)	X													
10M. Phenols, Total	X													
<b>RADIOACTIVITY</b>														
(1) Alpha Total	X													
(2) Beta Total	X													
(3) Radium Total	X													
(4) Radium 226 Total	X													



PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet instead of completing these pages.  
(Use the same format)  
SEE INSTRUCTIONS

FORM C  
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

OUTFALL NO.  
006

1. POLLUTANT AND CAS NUMBER (if available)	2. EFFLUENT										3. UNITS (Specify if blank)		4. INTAKE (optional)		
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES			
	CONCENTRATION (1)	MASS (2)	CONCENTRATION (1)	MASS (2)	CONCENTRATION (1)	MASS (2)				CONCENTRATION (1)	MASS (2)				
A. Biochemical Oxygen Demand (BOD)	<4						1	mg/L							
B. Chemical Oxygen Demand (COD)	46						1	mg/L							
C. Total organic Carbon (TOC)															
D. Total Suspended Solids (TSS)	8						1	mg/L							
E. Ammonia (as N)	56						1	mg/L							
F. Flow	VALUE .0029		VALUE		VALUE		1	MGD		VALUE					
G. Temperature (winter)	VALUE 8.9		VALUE		VALUE			°C		VALUE					
H. Temperature (summer)	VALUE 18.8		VALUE		VALUE			°C		VALUE					
I. pH	MINIMUM 7.8	MAXIMUM 8.2	MINIMUM	MAXIMUM			1	STANDARD UNITS							

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results for at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			CONCENTRATION (1)	MASS (2)	CONCENTRATION (1)	MASS (2)	CONCENTRATION (1)	MASS (2)				CONCENTRATION (1)	MASS (2)	
A. Bromide (24959-67-9)		X												
B. Chlorine Total Residual		X												
C. Color		X												
D. Fecal Coliform		X												
E. Fluoride (16984-48-8)		X												
F. Nitrate—Nitrate (as N)	X		102					<10		mg/L				

5/1

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
G. Nitrogen Total Organic (as N)		X												
H. Oil and Grease		X	<5						1	mg/L				
I. Phosphorus (as P) Total (7723-14-0)		X												
J. Sulfate (as SO <sup>4</sup> ) (14808-79-8)		X												
K. Sulfide (as S)		X												
L. Sulfite (as SO <sup>3</sup> ) (14265-45-3)		X												
M. Surfactants		X												
N. Aluminum Total (7429-90-5)		X												
O. Barium Total (7440-39-3)		X												
P. Boron Total (7440-42-8)		X												
Q. Cobalt Total (7440-48-4)		X												
R. Iron Total (7439-89-6)		X												
S. Magnesium Total (7439-95-4)		X												
T. Molybdenum Total (7439-98-7)		X												
U. Manganese Total (7439-96-5)		X												
V. Tin Total (7440-31-5)		X												
W. Titanium Total (7440-32-6)		X												
MO 780-1514 (06-12)														

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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
1M. Antimony, Total (7440-36-9)	X													
2M. Beryllium, Total (7440-41-7)	X													
3M. Magnesium, Total (7439-95-4)	X													
4M. Molybdenum, Total (7439-98-7)	X													
5M. Tin, Total (7440-31-5)	X													
6M. Titanium, Total (7440-32-6)	X													
7M. Mercury, Total (7439-97-6)	X													
8M. Selenium, Total (7782-49-2)	X													
9M. Thallium, Total (7440-28-0)	X													
10M. Phenols, Total	X													
<b>RADIOACTIVITY</b>														
(1) Alpha Total	X													
(2) Beta Total	X													
(3) Radium Total	X													
(4) Radium 226 Total	X													



PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet instead of completing these pages.  
(Use the same format)  
SEE INSTRUCTIONS

FORM C  
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

OUTFALL NO.  
007

1. POLLUTANT (if available)	2. EFFLUENT						3. UNITS (Specify if blank)		4. INTAKE (optional)			
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
	CONCENTRATION (1)	MASS (2)	CONCENTRATION (1)	MASS (2)	CONCENTRATION (1)	MASS (2)				CONCENTRATION (1)	MASS (2)	
A. Biochemical Oxygen Demand (BOD)	11						1	mg/L				
B. Chemical Oxygen Demand (COD)	93						1	mg/L				
C. Total organic Carbon (TOC)												
D. Total Suspended Solids (TSS)	54						1	mg/L				
E. Ammonia (as N)	1.3						1	mg/L				
F. Flow	VALUE .0072		VALUE		VALUE		1	MGD		VALUE		
G. Temperature (winter)	VALUE 10		VALUE		VALUE			°C		VALUE		
H. Temperature (summer)	VALUE 22		VALUE		VALUE			°C		VALUE		
I. pH	MINIMUM 7.8	MAXIMUM 8.4	MINIMUM	MAXIMUM			1	STANDARD UNITS				

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results for at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS		5. INTAKE (optional)					
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE (1) CONCENTRATION (2) MASS		B. MAXIMUM 30 DAY VALUE (1) CONCENTRATION (2) MASS		C. LONG TERM AVRG. VALUE (1) CONCENTRATION (2) MASS		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE (1) CONCENTRATION (2) MASS		B. NO. OF ANALYSES
A. Bromide (24959-67-9)		X												
B. Chlorine Total Residual		X												
C. Color		X												
D. Fecal Coliform		X												
E. Fluoride (16984-48-8)		X												
F. Nitrate—Nitrate (as N)	X		24					<10		mg/L				

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
G. Nitrogen Total Organic (as N)		X												
H. Oil and Grease		X	<5						1	mg/L				
I. Phosphorus (as P) Total (7723-14-0)		X												
J. Sulfate (as SO <sup>4</sup> ) (14808-79-8)		X												
K. Sulfide (as S)		X												
L. Sulfite (as SO <sup>3</sup> ) (14265-45-3)		X												
M. Surfactants		X												
N. Aluminum Total (7429-90-5)		X	2.2						1	mg/L				
O. Barium Total (7440-39-3)		X												
P. Boron Total (7440-42-8)		X												
Q. Cobalt Total (7440-48-4)		X												
R. Iron Total (7439-89-6)		X	2.16						1	mg/L				
S. Magnesium Total (7439-95-4)		X												
T. Molybdenum Total (7439-98-7)		X												
U. Manganese Total (7439-96-5)		X												
V. Tin Total (7440-31-5)		X												
W. Titanium Total (7440-32-6)		X												

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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCEN- TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS						
<b>METALS AND TOTAL PHENOLS</b>														
1M. Antimony, Total (7440-36-9)		X												
2M. Beryllium, Total (7440-41-7)		X												
3M. Magnesium, Total (7439-95-4)		X												
4M. Molybdenum, Total (7439-98-7)		X												
5M. Tin, Total (7440-31-5)		X												
6M. Titanium, Total (7440-32-6)		X												
7M. Mercury, Total (7439-97-6)		X												
8M. Selenium, Total (7782-49-2)		X												
9M. Thallium, Total (7440-28-0)		X												
10M. Phenols, Total		X												
<b>RADIOACTIVITY</b>														
(1) Alpha Total		X												
(2) Beta Total		X												
(3) Radium Total		X												
(4) Radium 226 Total		X												

PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet instead of completing these pages.  
(Use the same format)  
SEE INSTRUCTIONS

FORM C  
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS

OUTFALL NO.  
008

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)					
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES		
	CONCENTRATION (1)	(2) MASS	CONCENTRATION (1)	(2) MASS	CONCENTRATION (1)	(2) MASS				CONCENTRATION (1)	(2) MASS			
A. Biochemical Oxygen Demand (BOD)	<4						1	mg/L						
B. Chemical Oxygen Demand (COD)	93						1	mg/L						
C. Total organic Carbon (TOC)														
D. Total Suspended Solids (TSS)	10						1	mg/L						
E. Ammonia (as N)	9.8						1	mg/L						
F. Flow	VALUE .0029						1	MGD						
G. Temperature (winter)	VALUE 11.1							*C						
H. Temperature (summer)	VALUE							*C						
I. pH	MINIMUM	MAXIMUM 8.1	MINIMUM	MAXIMUM			1	STANDARD UNITS						
1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS		5. INTAKE (optional)					
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE (1) CONCENTRATION (2) MASS		B. MAXIMUM 30 DAY VALUE (1) CONCENTRATION (2) MASS		C. LONG TERM AVRG. VALUE (1) CONCENTRATION (2) MASS		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE (1) CONCENTRATION (2) MASS		B. NO. OF ANALYSES
A. Bromide (24959-67-9)		X												
B. Chlorine Total Residual		X												
C. Color		X												
D. Fecal Coliform		X												
E. Fluoride (16984-48-8)		X												
F. Nitrate—Nitrate (as N)	X		5.51					<10		mg/L				

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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
G. Nitrogen Total Organic (as N)		X												
H. Oil and Grease		X	<5						1	mg/L				
I. Phosphorus (as P) Total (7723-14-0)		X	12.2						1	mg/L				
J. Sulfate (as SO <sup>4</sup> ) (14808-79-8)		X												
K. Sulfide (as S)		X												
L. Sulfite (as SO <sup>3</sup> ) (14265-45-3)		X												
M. Surfactants		X												
N. Aluminum Total (7429-90-5)		X												
O. Barium Total (7440-39-3)		X												
P. Boron Total (7440-42-8)		X												
Q. Cobalt Total (7440-48-4)		X												
R. Iron Total (7439-89-6)		X												
S. Magnesium Total (7439-95-4)		X												
T. Molybdenum Total (7439-98-7)		X												
U. Manganese Total (7439-96-5)		X												
V. Tin Total (7440-31-5)		X												
W. Titanium Total (7440-32-6)		X												
MO 780-1514 (06-12)														

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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE		C. LONG TERM AVRG. VALUE		D. NO. OF ANALYSES	A. CONCEN- TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
<b>METALS AND TOTAL PHENOLS</b>														
1M. Arsenic, Total (7440-36-9)	X													
2M. Beryllium, Total (7440-41-7)	X													
3M. Magnesium, Total (7439-95-4)	X													
4M. Molybdenum, Total (7439-98-7)	X													
5M. Tin, Total (7440-31-5)	X													
6M. Titanium, Total (7440-32-6)	X													
7M. Mercury, Total (7439-97-6)	X													
8M. Selenium, Total (7782-49-2)	X													
9M. Thallium, Total (7440-28-0)	X													
10M. Phenols, Total	X													
<b>RADIOACTIVITY</b>														
(1) Alpha Total	X													
(2) Beta Total	X													
(3) Radium Total	X													
(4) Radium 226 Total	X													

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SEE INSTRUCTIONS

FORM C  
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS

OUTFALL NO.  
009

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)			
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)				D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				
A. Biochemical Oxygen Demand (BOD)	6						1	mg/L				
B. Chemical Oxygen Demand (COD)	<50						1	mg/L				
C. Total organic Carbon (TOC)												
D. Total Suspended Solids (TSS)	20						1	mg/L				
E. Ammonia (as N)	0.10						1	mg/L				
F. Flow	VALUE .0072		VALUE		VALUE		1	MGD		VALUE		
G. Temperature (winter)	VALUE 15		VALUE		VALUE			*C		VALUE		
H. Temperature (summer)	VALUE 21		VALUE		VALUE			*C		VALUE		
I. pH	MINIMUM 8.0	MAXIMUM 8.7	MINIMUM	MAXIMUM			1	STANDARD UNITS				

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results for at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "x"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
A. Bromide (24959-67-9)		X												
B. Chlorine Total Residual		X												
C. Color		X												
D. Fecal Coliform		X												
E. Fluoride (16984-48-8)		X												
F. Nitrate— Nitrate (as N)		X	1.06											

MO 780-1514 (06-12)

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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCEN- TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS						
G. Nitrogen Total Organic (as N)		X												
H. Oil and Grease		X	<6						1	mg/L				
I. Phosphorus (as P) Total (7723-14-0)		X	0.118						1	mg/L				
J. Sulfate (as SO <sup>4</sup> ) (14808-79-8)		X												
K. Sulfide (as S)		X												
L. Sulfite (as SO <sup>3</sup> ) (14265-45-3)		X												
M. Surfactants		X												
N. Aluminum Total (7429-90-5)		X												
O. Barium Total (7440-39-3)		X												
P. Boron Total (7440-42-8)		X												
Q. Cobalt Total (7440-48-4)		X												
R. Iron Total (7439-89-6)		X												
S. Magnesium Total (7439-95-4)		X												
T. Molybdenum Total (7439-98-7)		X												
U. Manganese Total (7439-96-5)		X												
V. Tin Total (7440-31-5)		X												
W. Titanium Total (7440-32-6)		X												

MO 780-1514 (06-12)

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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
<b>METALS AND TOTAL PHENOLS</b>														
1M. Antimony, Total (7440-36-9)		X												
2M. Beryllium, Total (7440-41-7)		X												
3M. Magnesium, Total (7439-95-4)		X												
4M. Molybdenum, Total (7439-98-7)		X												
5M. Tin, Total (7440-31-5)		X												
6M. Titanium, Total (7440-32-6)		X												
7M. Mercury, Total (7439-97-6)		X												
8M. Selenium, Total (7782-49-2)		X												
9M. Thallium, Total (7440-28-0)		X												
10M. Phenols, Total		X												
<b>RADIOACTIVITY</b>														
(1) Alpha Total		X												
(2) Beta Total		X												
(3) Radium Total		X												
(4) Radium 226 Total		X												

PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet instead of completing these pages.  
(Use the same format)  
SEE INSTRUCTIONS

FORM C  
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS

OUTFALL NO.  
010

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT										3. UNITS (Specify if blank)		4. INTAKE (optional)				
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)				C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION			B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES	
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS									
A. Biochemical Oxygen Demand (BOD)	<5									1	mg/L						
B. Chemical Oxygen Demand (COD)	20									1	mg/L						
C. Total organic Carbon (TOC)																	
D. Total Suspended Solids (TSS)	6									1	mg/L						
E. Ammonia (as N)	0.10									1	mg/L						
F. Flow	VALUE .3168				VALUE			VALUE		1	MGD		VALUE				
G. Temperature (winter)	VALUE 15				VALUE			VALUE			°C		VALUE				
H. Temperature (summer)	VALUE				VALUE			VALUE			°C		VALUE				
I. pH	MINIMUM 8.4	MAXIMUM	MINIMUM	MAXIMUM						1	STANDARD UNITS						
PART B – Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results for at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.																	
1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT								4. UNITS		5. INTAKE (optional)				
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES			
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS				
A. Bromide (24959-67-9)	X																
B. Chlorine Total Residual	X																
C. Color	X																
D. Fecal Coliform	X																
E. Fluoride (16984-48-8)	X																
F. Nitrate—Nitrate (as N)	X		0.111							1	mg/L						

1011



1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
G. Nitrogen Total Organic (as N)		X												
H. Oil and Grease		X	<5						1	mg/L				
I. Phosphorus (as P) Total (7723-14-0)		X	0.024						1	mg/L				
J. Sulfate (as SO <sup>4</sup> ) (14808-79-8)		X												
K. Sulfide (as S)		X												
L. Sulfite (as SO <sup>3</sup> ) (14265-45-3)		X												
M. Surfactants		X												
N. Aluminum Total (7429-90-5)		X	0.0742						1	mg/L				
O. Barium Total (7440-39-3)		X												
P. Boron Total (7440-42-8)		X												
Q. Cobalt Total (7440-48-4)		X												
R. Iron Total (7439-89-6)		X												
S. Magnesium Total (7439-95-4)		X												
T. Molybdenum Total (7439-98-7)		X												
U. Manganese Total (7439-96-5)		X												
V. Tin Total (7440-31-5)		X												
W. Titanium Total (7440-32-6)		X												

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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE		C. LONG TERM AVRG. VALUE		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS						
<b>METALS AND TOTAL PHENOLS</b>														
1M. Antimony, Total (7440-36-9)	X													
2M. Beryllium, Total (7440-41-7)	X													
3M. Magnesium, Total (7439-95-4)	X													
4M. Molybdenum, Total (7439-98-7)	X													
5M. Tin, Total (7440-31-5)	X													
6M. Titanium, Total (7440-32-6)	X													
7M. Mercury, Total (7439-97-6)	X													
8M. Selenium, Total (7782-49-2)	X													
9M. Thallium, Total (7440-28-0)	X													
10M. Phenols, Total	X													
<b>RADIOACTIVITY</b>														
(1) Alpha Total	X													
(2) Beta Total	X													
(3) Radium Total	X													
(4) Radium 226 Total	X													

PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet instead of completing these pages.  
(Use the same format)  
SEE INSTRUCTIONS

FORM C  
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS

OUTFALL NO.  
011

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT (if available)	2. EFFLUENT		3. UNITS (Specify if blank)		4. INTAKE (optional)	
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)	
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS
A. Biochemical Oxygen Demand (BOD)						
B. Chemical Oxygen Demand (COD)						
C. Total organic Carbon (TOC)						
D. Total Suspended Solids (TSS)						
E. Ammonia (as N)						
F. Flow	VALUE		VALUE			VALUE
G. Temperature (winter)	VALUE		VALUE			VALUE
H. Temperature (summer)	VALUE		VALUE			VALUE
I. pH	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM	1	STANDARD UNITS

PART B - Mark 'X' in column 2-a for each pollutant you know or have reason to believe is present. Mark 'X' in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results for at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS		5. INTAKE (optional)		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			
A. Bromide (24959-67-9)		X									
B. Chlorine Total Residual		X									
C. Color		X									
D. Fecal Coliform		X									
E. Fluoride (16984-48-8)		X									
F. Nitrate—Nitrate (as N)		X									



1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS						
G. Nitrogen Total Organic (as N)		X												
H. Oil and Grease		X							1					
I. Phosphorus (as P) Total (7723-14-0)		X							1					
J. Sulfate (as SO <sup>4</sup> ) (14808-79-8)		X												
K. Sulfide (as S)		X												
L. Sulfite (as SO <sup>3</sup> ) (14265-45-3)		X												
M. Surfactants		X												
N. Aluminum Total (7429-90-5)		X							1					
O. Barium Total (7440-39-3)		X												
P. Boron Total (7440-42-8)		X												
Q. Cobalt Total (7440-48-4)		X												
R. Iron Total (7439-89-6)		X												
S. Magnesium Total (7439-95-4)		X												
T. Molybdenum Total (7439-98-7)		X												
U. Manganese Total (7439-96-5)		X												
V. Tin Total (7440-31-5)		X												
W. Titanium Total (7440-32-6)		X												

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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCEN- TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, AND TOTAL PHENOLS														
1M. Antimony, Total (7440-36-9)		X												
2M. Beryllium, Total (7440-41-7)		X												
3M. Magnesium, Total (7439-95-4)		X												
4M. Molybdenum, Total (7439-98-7)		X												
5M. Tin, Total (7440-31-5)		X												
6M. Titanium, Total (7440-32-6)		X												
7M. Mercury, Total (7439-97-6)		X												
8M. Selenium, Total (7782-49-2)		X												
9M. Thallium, Total (7440-28-0)		X												
10M. Phenols, Total		X												
RADIOACTIVITY														
(1) Alpha Total		X												
(2) Beta Total		X												
(3) Radium Total		X												
(4) Radium 226 Total		X												

MO 780-1514 (06-12)



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(Use the same format)  
SEE INSTRUCTIONS

FORM C  
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS

OUTFALL NO.  
012

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

2. EFFLUENT													3. UNITS (specify if blank)			4. INTAKE (optional)			
1. POLLUTANT	A. MAXIMUM DAILY VALUE				B. MAXIMUM 30 DAY VALUE (if available)				C. LONG TERM AVRG. VALUE (if available)				D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES	
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS											
A. Biochemical Oxygen Demand (BOD)	<4																		
B. Chemical Oxygen Demand (COD)	<50																		
C. Total organic Carbon (TOC)																			
D. Total Suspended Solids (TSS)	9																		
E. Ammonia (as N)	<0.10																		
F. Flow	VALUE 0.00144				VALUE					VALUE					1	MGD		VALUE	
G. Temperature (winter)	VALUE 10				VALUE					VALUE								VALUE	
H. Temperature (summer)	VALUE 24				VALUE					VALUE								VALUE	
I. pH	MINIMUM 7.8	MAXIMUM 8.0	MINIMUM	MAXIMUM											1	STANDARD UNITS			

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results for at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
A. Bromide (24959-67-9)		X												
B. Chlorine Total Residual		X												
C. Color		X												
D. Fecal Coliform		X												
E. Fluoride (16984-48-8)		X												
F. Nitrate— Nitrate (as N)		X												

MO 780-1514 (06-12)

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
G. Nitrogen Total Organic (as N)		X												
H. Oil and Grease		X							1					
I. Phosphorus (as P) Total (7723-14-0)		X							1					
J. Sulfate (as SO <sup>4</sup> ) (14808-79-8)		X												
K. Sulfide (as S)		X												
L. Sulfite (as SO <sup>3</sup> ) (14265-45-3)		X												
M. Surfactants		X												
N. Aluminum Total (7429-90-5)		X							1					
O. Barium Total (7440-39-3)		X												
P. Boron Total (7440-42-8)		X												
Q. Cobalt Total (7440-48-4)		X												
R. Iron Total (7439-89-6)		X												
S. Magnesium Total (7439-95-4)		X												
T. Molybdenum Total (7439-98-7)		X												
U. Manganese Total (7439-96-5)		X												
V. Tin Total (7440-31-5)		X												
W. Titanium Total (7440-32-6)		X												
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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
1M. Antimony, Total (7440-36-9)	X													
2M. Beryllium, Total (7440-41-7)	X													
3M. Magnesium, Total (7439-95-4)	X													
4M. Molybdenum, Total (7439-98-7)	X													
5M. Tin, Total (7440-31-5)	X													
6M. Titanium, Total (7440-32-6)	X													
7M. Mercury, Total (7439-97-6)	X													
8M. Selenium, Total (7782-49-2)	X													
9M. Thallium, Total (7440-28-0)	X													
10M. Phenols, Total	X													
<b>RADIOACTIVITY</b>														
(1) Alpha Total	X													
(2) Beta Total	X													
(3) Radium Total	X													
(4) Radium 226 Total	X													



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SEE INSTRUCTIONS

FORM C  
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS

OUTFALL NO.  
013

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT (if available)	2. EFFLUENT		3. UNITS (Specify if blank)		4. INTAKE (optional)	
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)	
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS
A. Biochemical Oxygen Demand (BOD)						
B. Chemical Oxygen Demand (COD)						
C. Total organic Carbon (TOC)						
D. Total Suspended Solids (TSS)						
E. Ammonia (as N)						
F. Flow	VALUE	VALUE	VALUE		VALUE	
G. Temperature (winter)	VALUE	VALUE	VALUE		VALUE	
H. Temperature (summer)	VALUE	VALUE	VALUE		VALUE	
I. pH	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM	STANDARD UNITS	

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results for at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS		5. INTAKE (optional)		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			
A. Bromide (24959-67-9)		X									
B. Chlorine Total Residual		X									
C. Color		X									
D. Fecal Coliform		X									
E. Fluoride (16984-48-8)		X									
F. Nitrate—Nitrate (as N)		X									

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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCEN- TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
G. Nitrogen Total Organic (as N)		X												
H. Oil and Grease		X												
I. Phosphorus (as P) Total (7723-14-0)		X												
J. Sulfate (as SO <sup>4</sup> ) (14808-79-8)		X												
K. Sulfide (as S)		X												
L. Sulfite (as SO <sup>3</sup> ) (14265-45-3)		X												
M. Surfactants		X												
N. Aluminum Total (7429-90-5)		X												
O. Barium Total (7440-39-3)		X												
P. Boron Total (7440-42-8)		X												
Q. Cobalt Total (7440-48-4)		X												
R. Iron Total (7439-89-6)		X												
S. Magnesium Total (7439-95-4)		X												
T. Molybdenum Total (7439-98-7)		X												
U. Manganese Total (7439-96-5)		X												
V. Tin Total (7440-31-5)		X												
W. Titanium Total (7440-32-6)		X												

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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCEN- TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, AND TOTAL PHENOLS														
1M. Antimony, Total (7440-36-9)		X												
2M. Beryllium, Total (7440-41-7)		X												
3M. Magnesium, Total (7439-95-4)		X												
4M. Molybdenum, Total (7439-98-7)		X												
5M. Tin, Total (7440-31-5)		X												
6M. Titanium, Total (7440-32-6)		X												
7M. Mercury, Total (7439-97-6)		X												
8M. Selenium, Total (7782-49-2)		X												
9M. Thallium, Total (7440-28-0)		X												
10M. Phenols, Total		X												
RADIOACTIVITY														
(1) Alpha Total		X												
(2) Beta Total		X												
(3) Radium Total		X												
(4) Radium 226 Total		X												

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MO 780-1514 (06-12)

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SEE INSTRUCTIONS

# INTAKE AND EFFLUENT CHARACTERISTICS

FORM C  
TABLE 1 FOR 3.00 ITEM A AND B

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.													OUTFALL NO. 014	
1. POLLUTANT	2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)					
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES		
	CONCENTRATION (1)	(2) MASS	CONCENTRATION (1)	(2) MASS	CONCENTRATION (1)	(2) MASS				CONCENTRATION (1)	(2) MASS			
A. Biochemical Oxygen Demand (BOD)	<4						1	mg/L						
B. Chemical Oxygen Demand (COD)	<50						1	mg/L						
C. Total organic Carbon (TOC)														
D. Total Suspended Solids (TSS)	<6						1	mg/L						
E. Ammonia (as N)	<0.1						1	mg/L						
F. Flow	VALUE 0.0216						1	MGD						
G. Temperature (winter)	VALUE 10.1						1	°C						
H. Temperature (summer)	VALUE 24						1	°C						
I. pH	MINIMUM 7	MAXIMUM 8.7	MINIMUM	MAXIMUM				STANDARD UNITS						

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results for at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			CONCENTRATION (1)	(2) MASS	CONCENTRATION (1)	(2) MASS	CONCENTRATION (1)	(2) MASS				CONCENTRATION (1)	(2) MASS	
A. Bromide (24959-67-9)		X												
B. Chlorine Total Residual		X												
C. Color		X												
D. Fecal Coliform		X												
E. Fluoride (16984-48-8)		X												
F. Nitrate-Nitrate (as N)		X												

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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
G. Nitrogen Total Organic (as N)		X												
H. Oil and Grease		X												
I. Phosphorus (as P) Total (7723-14-0)		X												
J. Sulfate (as SO <sup>4</sup> ) (14808-79-8)		X												
K. Sulfide (as S)		X												
L. Sulfite (as SO <sup>3</sup> ) (14265-45-3)		X												
M. Surfactants		X												
N. Aluminum Total (7429-90-5)		X												
O. Barium Total (7440-39-3)		X												
P. Boron Total (7440-42-8)		X												
Q. Cobalt Total (7440-48-4)		X												
R. Iron Total (7439-89-6)		X												
S. Magnesium Total (7439-95-4)		X												
T. Molybdenum Total (7439-98-7)		X												
U. Manganese Total (7439-96-5)		X												
V. Tin Total (7440-31-5)		X												
W. Titanium Total (7440-32-6)		X												
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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
<b>METALS, AND TOTAL PHENOLS</b>														
1M. Antimony, Total (7440-36-9)	X													
2M. Beryllium, Total (7440-41-7)	X													
3M. Magnesium, Total (7439-95-4)	X													
4M. Molybdenum, Total (7439-98-7)	X													
5M. Tin, Total (7440-31-5)	X													
6M. Titanium, Total (7440-32-6)	X													
7M. Mercury, Total (7439-97-6)	X													
8M. Selenium, Total (7782-49-2)	X													
9M. Thallium, Total (7440-28-0)	X													
10M. Phenols, Total	X													
<b>RADIOACTIVITY</b>														
(1) Alpha Total	X													
(2) Beta Total	X													
(3) Radium Total	X													
(4) Radium 226 Total	X													



PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet instead of completing these pages.  
(Use the same format)  
SEE INSTRUCTIONS

FORM C  
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS

OUTFALL NO.  
015

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)			
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
A. Biochemical Oxygen Demand (BOD)												
B. Chemical Oxygen Demand (COD)	26						1	mg/L				
C. Total organic Carbon (TOC)												
D. Total Suspended Solids (TSS)	10						1	mg/L				
E. Ammonia (as N)	<0.10						1	mg/L				
F. Flow	0.007		VALUE		VALUE		1	MGD		VALUE		
G. Temperature (winter)	11.7		VALUE		VALUE		1	°C		VALUE		
H. Temperature (summer)	21.9		VALUE		VALUE		1	°C		VALUE		
I. pH	7.7	7.8	MINIMUM	MAXIMUM				STANDARD UNITS				

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results for at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
A. Bromide (24959-67-9)		X												
B. Chlorine Total Residual		X												
C. Color		X												
D. Fecal Coliform		X												
E. Fluoride (16984-48-8)		X												
F. Nitrate— Nitrate (as N)		X	1.17						1	mg/L				

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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS						
G. Nitrogen Total Organic (as N)		X												
H. Oil and Grease		X	<5						1	mg/L				
I. Phosphorus (as P) Total (7723-14-0)		X	0.044						1	mg/L				
J. Sulfate (as SO <sup>4</sup> ) (14808-79-8)		X												
K. Sulfide (as S)		X												
L. Sulfite (as SO <sup>3</sup> ) (14265-45-3)		X												
M. Surfactants		X												
N. Aluminum Total (7429-90-5)		X												
O. Barium Total (7440-39-3)		X												
P. Boron Total (7440-42-8)		X												
Q. Cobalt Total (7440-48-4)		X												
R. Iron Total (7439-89-6)		X												
S. Magnesium Total (7439-95-4)		X												
T. Molybdenum Total (7439-98-7)		X												
U. Manganese Total (7439-96-5)		X												
V. Tin Total (7440-31-5)		X												
W. Titanium Total (7440-32-6)		X												
MO 780-1514 (06-12)														

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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS						
<b>METALS AND TOTAL PHENOLS</b>														
1M. Antimony, Total (7440-36-9)	X													
2M. Beryllium, Total (7440-41-7)	X													
3M. Magnesium, Total (7439-95-4)	X													
4M. Molybdenum, Total (7439-98-7)	X													
5M. Tin, Total (7440-31-5)	X													
6M. Titanium, Total (7440-32-6)	X													
7M. Mercury, Total (7439-97-6)	X													
8M. Selenium, Total (7782-49-2)	X													
9M. Thallium, Total (7440-28-0)	X													
10M. Phenols, Total	X													
<b>RADIOACTIVITY</b>														
(1) Alpha Total	X													
(2) Beta Total	X													
(3) Radium Total	X													
(4) Radium 226 Total	X													



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(Use the same format)  
SEE INSTRUCTIONS

FORM C  
TABLE 1 FOR 3.00 ITEM A AND B

# INTAKE AND EFFLUENT CHARACTERISTICS

OUTFALL NO.  
016

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						3. UNITS (Specify if blank)		4. INTAKE (optional)			
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
A. Biochemical Oxygen Demand (BOD)	<5						1	mg/L				
B. Chemical Oxygen Demand (COD)	<50						1	mg/L				
C. Total organic Carbon (TOC)												
D. Total Suspended Solids (TSS)	7						1	mg/L				
E. Ammonia (as N)	<0.10						1	mg/L				
F. Flow	VALUE 0.0058						1	MGD				
G. Temperature (winter)	VALUE 9.9						1	°C				
H. Temperature (summer)	VALUE 20.9						1	°C				
I. pH	MINIMUM 7.8	MAXIMUM 7.9						STANDARD UNITS				

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results for at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
A. Bromide (24959-67-9)		X												
B. Chlorine Total Residual		X												
C. Color		X												
D. Fecal Coliform		X												
E. Fluoride (16984-48-8)		X												
F. Nitrate (as N)		X												



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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCEN- TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
G. Nitrogen Total Organic (as N)		X												
H. Oil and Grease		X												
I. Phosphorus (as P) Total (7723-14-0)		X												
J. Sulfate (as SO <sup>4</sup> ) (14808-79-8)		X												
K. Sulfide (as S)		X												
L. Sulfite (as SO <sup>3</sup> ) (14265-45-3)		X												
M. Surfactants		X												
N. Aluminum Total (7429-90-5)		X												
O. Barium Total (7440-39-3)		X												
P. Boron Total (7440-42-8)		X												
Q. Cobalt Total (7440-48-4)		X												
R. Iron Total (7439-89-6)		X												
S. Magnesium Total (7439-95-4)		X												
T. Molybdenum Total (7439-98-7)		X												
U. Manganese Total (7439-96-5)		X												
V. Tin Total (7440-31-5)		X												
W. Titanium Total (7440-32-6)		X												

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MO 780-1514 (08-12)

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "x"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE		C. LONG TERM AVRG. VALUE		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
<b>METALS AND TOTAL PHENOLS</b>														
1M. Antimony, Total (7440-36-9)		X												
2M. Beryllium, Total (7440-41-7)		X												
3M. Magnesium, Total (7439-95-4)		X												
4M. Molybdenum, Total (7439-98-7)		X												
5M. Tin, Total (7440-31-5)		X												
6M. Titanium, Total (7440-32-6)		X												
7M. Mercury, Total (7439-97-6)		X												
8M. Selenium, Total (7782-49-2)		X												
9M. Thallium, Total (7440-28-0)		X												
10M. Phenols, Total		X												
<b>RADIOACTIVITY</b>														
(1) Alpha Total		X												
(2) Beta Total		X												
(3) Radium Total		X												
(4) Radium 226 Total		X												