

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, 92nd Congress) as amended,

Permit No. MO-0000159

Owner: Holcim (US) Inc.
Address: P.O. Box 122, Dundee, MI 48131

Continuing Authority: Same as above
Address: Same as above

Facility Name: Holcim (U.S.) Inc.
Facility Address: 14738 Highway 79 North, Clarksville, MO 63336

Legal Description: See Page 2 and 3
Latitude/Longitude: See Page 2 and 3

Receiving Stream: See Page 2 and 3
First Classified Stream and ID: See Page 2 and 3
USGS Basin & Sub-watershed No.: 07110004-110003

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

FACILITY DESCRIPTION

See Page 2 and 3

This permit authorizes only wastewater 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 Section 644.051.6 of the Law.

July 16, 2010
Effective Date


Mark N. Templeton, Director, Department of Natural Resources

July 15, 2015
Expiration Date


Scott B. Totten, Acting Director, Water Protection Program

FACILITY DESCRIPTION (continued)

Outfall #001 - Storm water runoff/six settling basins (series operated).
Hydraulic Cement Plant/Quarry - SIC #3241. This outfall discharges to Outfall #006.

Legal Description: NE ¼, SW ¼, Sec. 7, T53N, R1E, Pike County
UTM Coordinates: X=677358.6 / Y=4360781.4
Receiving Stream: Unclassified tributary to Mississippi River
First Classified Stream and ID: Mississippi River (P) (0001)
USGS Basin & Sub-watershed No.: 07110004-110003
Design flow is 4.0 MGD. Actual flow is variable depending on precipitation.
Stormwater settling basin solids and water plant blowdown solids landfilled on site.

Outfall #002 - Storm water runoff/pumping/swale drains to two settling basins (series operated).
Quarry Operation/Crushed or Broken Limestone - SIC #1422

Legal Description: NW ¼, SE ¼, Sec. 18, T53N, R1E, Pike County
UTM Coordinates: X=677464.5 / Y=4359198.2
Receiving Stream: Tributary to Calumet Creek (U)
First Classified Stream and ID: Calumet Creek (P) (0018)
USGS Basin & Sub-watershed No.: 07110004-110003
Actual Flow is 0.335 MGD; design flow is 3.0 MGD.
Stormwater settling basin solids landfilled on site.

Outfall #003 - An extended aeration treatment plant/ sludge pumped and hauled - SIC #4952. No Certified Operator Required. Discharges to Outfall #001.

Legal Description: NE ¼, SW1/4, Sec. 7, T53N, R1E, Pike County
UTM Coordinates: X=677187.8 / Y=4360709.3
Receiving Stream: Unclassified tributary to Mississippi River
First Classified Stream and ID: Mississippi River (P) (0001)
USGS Basin & Sub-watershed No.: 07110004-110003
Design population equivalent is 500.
Actual flow is < 0.010 MGD; design flow is 0.050 MGD.
Design sludge production is 10.5 dry tons/year.

Outfall #004 – Was an extended aeration treatment plant. Eliminated.

Flow eliminated by septic system.
Legal Description: NW ¼, SW1/4, Sec. 7, T53N, R1E, Pike County
UTM Coordinates: X=677205.5 / Y=43609774.7
Receiving Stream: Eliminated during permit modification
First Classified Stream and ID: Mississippi River (P) (0001)
USGS Basin & Sub-watershed No.: 07110004-110003

Outfall #005 - Storm water runoff from shipping and loading area and railroad. Collection Sump/Sand Filter through percolation to groundwater.
Hydraulic Cement Plant/Quarry – SIC #3241. Discharges to a slough of the Mississippi River.

Legal Description: NE ¼, SE1/4, Sec. 7, T53N, R1E, Pike County
UTM Coordinates: X=677987.9 / Y=4360792.6
Receiving Stream: Unclassified Tributary of Mississippi River
First Classified Stream and ID: Mississippi River (P) (0001)
USGS Basin & Sub-watershed No.: 07110004-110003
Design flow: Intermittent, dependent upon precipitation.
Stormwater settling basin solids landfilled on site.

Outfall #006 - Stormwater runoff from plant area/shipping area, Highway 79, and Railroad tracks – SIC #3241.
Outfall #003 and #001/settling basin

Legal Description: SE ¼, SE1/4, Sec. 7, T53N, R1E, Pike County
UTM Coordinates: X=678211.0 / Y=4360461.5
Receiving Stream: Unclassified Slough of Mississippi River (P) (0001)
First Classified Stream and ID: Mississippi River (P) (0001)
USGS Basin & Sub-watershed No.: 07110004-110003
Actual flow is dependent upon precipitation. Design flow: > 4.0 MGD.
Stormwater settling basin, solids landfilled on site.

FACILITY DESCRIPTION (continued)

Outfall #007 - Stormwater from shipping facility - SIC #3241. Discharges to an unclassified wetland.

Legal Description: NW ¼, SE1/4, Sec. 7, T53N, R1E, Pike County
UTM Coordinates: X=677523.4 / Y=4360902.3
Receiving Stream: Unclassified tributary of Mississippi River
First Classified Stream and ID: Mississippi River (P) (0001)
USGS Basin & Sub-watershed No.: 07110004-110003
Design flow: Intermittent, dependent upon precipitation.

Outfall #008 - An extended aeration treatment plant/sludge pumped and hauled – SIC #4952. No Certified Operator Required. Discharges to an unclassified wetland.

Legal Description: NW ¼, SE1/4, Sec. 7, T53N, R1E, Pike County
UTM Coordinates: X=677621.3 / Y=4360913.8
Receiving Stream: Unclassified tributary of Mississippi River
First Classified Stream and ID: Mississippi River (P) (0001)
USGS Basin & Sub-watershed No.: 07110004-110003
Design population equivalent is 25.
Actual flow is < 0.0025MGD; design flow is 0.0025 MGD.
Design sludge production is < 0.1 dry tons/year.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 4 of 11	
					PERMIT NUMBER MO-0000159	
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 upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001</u> – stormwater***, equipment wash water						
Flow	MGD	*		*	once/month	24 hr. estimate
Precipitation	inches	*		*	once/day***	24 hr. total
Total Suspended Solids	mg/L	*		*	once/month	grab
Oil and Grease	mg/L	15		10	once/month	grab
pH – Units	SU	**		**	once/month	grab
Chemical Oxygen Demand	mg/L	*		*	once/month	grab
Total Petroleum Hydrocarbons	mg/L	10		10	once/month	grab
Settleable Solids	mL/L/hr	1.5		1.0	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>October 28, 2010</u> .						
Total Toxic Organics (Note 2)	mg/L	*		*	once/year	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE <u>October 28, 2010</u> .						
<u>Outfall #002</u> – stormwater***						
Flow	MGD	*		*	once/month	24 hr. estimate
Precipitation	inches	*		*	once/day***	24 hr. total
pH – Units	SU	**		**	once/month	grab
Oil and Grease	mg/L	15		10	once/quarterly	grab
Total Suspended Solids	mg/L	50		50	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>October 28, 2010</u> .						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Part I and III</u> . STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

	PAGE NUMBER 5 of 11
A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS	PERMIT NUMBER MO-0000159

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The interim effluent limitations shall become effective upon issuance and remain in effect for three (3) years after issuance. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

Outfall #003 - extended aeration treatment plant – office and maintenance buildings

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	INTERIM EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow	MGD	*		*	once/quarter*****	24 hr. estimate
Biochemical Oxygen Demand,	mg/L		45	30	once/quarter*****	Note 3
Total Suspended Solids	mg/L		45	30	once/quarter*****	Note 3
pH – Units	SU	**		**	once/quarter*****	grab
Fecal coliform	#/100 mL	*		*	once/quarter*****	grab
Ammonia as N	mg/L	*		*	once/quarter*****	grab

MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE October 28, 2010. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

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 upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

Outfall #006 - multiple sources

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow	MGD	*		*	once/year	24 hr. estimate
Total Suspended Solids (Intake)	mg/L	*		*	once/year*****	grab
Total Suspended Solids (Discharge)	mg/L	*		*	once/year*****	grab
Total Suspended Solids (Net; Note 1)	mg/L	50		50	once/year*****	grab
pH - Units	SU	**		**	once/year	grab
Total Toxic Organics (Note 2)	mg/L	*		*	once/year	grab
Oil and Grease	mg/L	15		10	once/year	grab

MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE October 28, 2010.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 6 of 11	
					PERMIT NUMBER MO-0000159	
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 upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
<u>Outfalls #005 and #007 – stormwater***</u>						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow	MGD	*		*	once/quarter	24 hr. estimate
Precipitation	inches	*		*	once/day***	24 hr. total
Total Suspended Solids	mg/L	50		50	once/quarter****	grab
pH – Units	SU	**		**	once/quarter****	grab
Oil and Grease	mg/L	15		10	once/quarter****	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE <u>October 28, 2010</u> .						
<u>Mississippi River Intake Monitoring</u>						
Total Suspended Solids (Note 1)	mg/L	*		*	once/quarter	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE <u>October 28, 2010</u> .						
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The interim effluent limitations shall become effective upon issuance and remain in effect for three years after issuance. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
<u>Outfalls #008 – Domestic Waste Water – shipping terminal</u>						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	INTERIM EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow	MGD	*		*	once/month	24 hr. estimate
Biochemical Oxygen Demand,	mg/L		45	30	once/month	Note 3
Total Suspended Solids	mg/L		45	30	once/month	Note 3
pH – Units	SU	**		**	once/month	grab
Ammonia as N	mg/L	*		*	once/month	grab
Fecal coliform	#/100 mLs	*		*	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>October 28, 2010</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Part I and III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 7 of 11	
					PERMIT NUMBER MO-0000159	
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 after three years of issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #003 and #008</u>						
Flow	MGD	*		*	once/quarter****	24 hr. estimate
Biochemical Oxygen Demand ₅	mg/L		45	30	once/quarter****	Note 3
Total Suspended Solids	mg/L		45	30	once/quarter****	Note 3
pH – Units	SU	**		**	once/quarter****	grab
Ammonia as N (May 1 – Oct 31) (Nov 1 – April 30)	mg/L	3.7 7.5		1.4 2.9	once/quarter****	grab
Temperature	°C	*		*	once/quarter****	grab
Oil & Grease	mg/L	15		10	once/quarter****	grab
Fecal coliform*****(Note 4)	#/100 mL	1000		400	once/quarter****	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>October 28, 2013</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I, & III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
 - ** 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.
 - *** Storm water 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.
 - **** Sample once per quarter in the months of March, June, September, and December.
 - ***** Numeric Effluent Limitations are based on the proposed rule for *E. Coli* published November 2, 2009, in the Missouri Register, Volume 34, Number 21.
- Note 1 – Total Suspended Solids sampling in river is for Outfall #006 net limits calculation. Sample must be taken at same time as Outfall #006 sample.
- Note 2 - See List on Page 8.
- Note 3 - A composite sample made up from a minimum of four grab samples collected within a 24-hour period with a minimum of two hours between each grab sample.
- Note 4 - Final limitations and monitoring requirements for Fecal coliform are applicable only during the recreational season from April 1 through October 31. The Monthly Average Limit for E. Coli is expressed as a geometric mean.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

Note 3 - Total Toxic Organics

Acenaphthene	4-chlorophenyl phenyl ether
Acrolein	4-bromophenyl phenyl ether
Acrylonitrile	Bis (2-chloroisopropyl) ether
Benzene	Bis (2-chloroethoxy) methane
Benzidine	Methylene Chloride (dichloromethane)
Carbon Tetrachloride (tetrachloromethane)	Methyl Chloride (chloromethane)
Chlorobenzene	Methyl bromide (bromomethane)
1,2,4-trichlorobenzene	Bromoform (tribromomethane)
Hexachlorobenzene	Dichlorobromomethane
1,2-dichloroethane	Chlorodibromomethane
1,1,1-trichloroethane	Hexachlorobutadiene
Hexachloroethane	Hexachlorocyclopentadiene
1,1-dichloroethane	Isophorone
1,1,2-trichloroethane	Naphthalene
1,1,2,2-tetrachloroethane	Nitrobenzene
Chloroethane	2-nitrophenol
Bis (2-chloroethyl) ether	4-nitrophenol
2-chloroethyl vinyl ether	2,4-dinitrophenol
N-nitrosodi-n-propylamine	4,6-dintro-o-cresol
Pentachlorophenol	N-nitrosodimethylamine
Phenol	N-nitrosodiphenylamine
Bis (2-ethylhexyl) phthalate	Phenanthrene
Butyl benzyl phthalate	1,2,5,6-dibenzanthracene (dibenzo(a,h)anthracene)
Di-n-butyl phthalate	Indeno (1,2,3-cd) pyrene
	(2,3-o-phenylene pyrene)
Di-n-octyl phthalate	Pyrene
Diethyl phthalate	Tetrachloroethylene
Dimethyl phthalate	Toluene
1,2-benzanthracene (benzo(a)anthracene)	Trichloroethylene
Benzo(a)pyrene (3,4-benzopyrene)	Vinyl Chloride (chloroethylene)
3,4-benzofluoranthene (benzo(b)fluoranthene)	Aldrin
11,12-benzofluoranthene (benzo(k)fluoranthene)	Dieldrin
Chrysene	Chlordane (technical mixture and metabolites)
Anthracene	4,4-DDT
1,12-benzoperylene (benzo(ghi)perylene)	4,4-DDE (p,p-DDX)
Fluorene	4,4-DDD (p,p-TDE)
2-chloronaphthalene	Alpha-endosulfan
2,4,6-trichlorophenol	Beta-endosulfan
Parachlorometa cresol	Endosulfan sulfat
Chloroform (trichloromethane)	Endrin
2-chlorophenol	Endrin aldehyde
1,2-dichlorobenzene	Heptachlor
1,3-dichlorobenzene	Heptachlor epoxide (BHC hexachlorocyclohexane)
1,4-dichlorobenzene	Alpha-BHC
3,3-dichlorobenzidine	Beta-BHC
1,1-dichloroethylene	Gamma-BHC
1,2-trans-dichloroethylene	Delta-BHC (PCB polychlorinated biphenyls)
2,4-dichlorophenol	PCB-1242 (Arochlor 1242)
1,2-dichloropropane (1,3-dichloropropane)	PCB-1254 (Arochlor 1254)
2,4-dimethylphenol	PCB-1221 (Arochlor 1221)
2,4-dinitrotoluene	PCB-1232 (Arochlor 1232)
2,6-dinitrotoluene	PCB-1248 (Arochlor 1248)
1,2-diphenylhydrazine	PCB-1260 (Arochlor 1260)
Ethylbenzene	PCB-1016 (Arochlor 1016)
Fluoranthene	Toxaphene

C. SPECIAL CONDITIONS

1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.
 - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
 - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

2. All outfalls must be clearly marked in the field.
3. Permittee will cease discharge by connection to a facility with an area-wide management plan per 10 CSR 20-6.010(3)(B) within 90 days of notice of its availability.
4. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge 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; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established in Part A of the permit by the Director.
 - (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
5. Report as no-discharge when a discharge does not occur during the report period.
 6. Water Quality Standards
 - (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
 - (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (5) There shall be no significant human health hazard from incidental contact with the water;
 - (6) There shall be no acute toxicity to livestock or wildlife watering;
 - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

C. SPECIAL CONDITIONS (continued)

7. In accordance with 10 CSR 20-6.020 (12), (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." A closure plan must be submitted to the department's Northeast Regional Office for approval prior to commencing closure activities for any treatment system. A progress report must be submitted to the department within 30-days of commencing closure activities. **The permittee shall provide notice when closure activities are completed.**
8. The permittee shall develop and implement a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must be prepared within 30 days and implemented within 90 days of permit issuance. The SWPPP must be kept on-site and should not be sent to DNR unless specifically requested. 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 the following document:

Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators, (Document number EPA 833-B-09-002) published by the United States Environmental Protection Agency (USEPA) in February 2009.

The SWPPP must include the following:

- (a) An assessment of all storm water discharges associated with this facility. This must include a list of potential contaminants and an annual estimate of amounts that will be used in the described activities.
 - (b) A listing of specific Best Management Practices (BMPs) and a narrative explaining how BMPs will be implemented to control and minimize the amount of potential contaminants that may enter storm water. Minimum BMPs are listed in SPECIAL CONDITIONS #9 below.
 - (c) The SWPPP must include a schedule for monthly site inspections and a brief written report. The inspections must include observation and evaluation of BMP effectiveness, deficiencies, and corrective measures that will be taken. The Department must be notified within fifteen (15) days by letter of any corrections of deficiencies. Deficiencies that consist of minor repairs or maintenance must be corrected within seven (7) days. Deficiencies that require additional time or installation of a treatment device to correct should be detailed in the written notification. Installation of a treatment device, such as an oil water separator, may require a construction permit. Inspection reports must be kept on site with the SWPPP. These must be made available to DNR personnel upon request.
 - (d) A provision for designating an individual to be responsible for environmental matters.
 - (e) A provision for providing training to all personnel involved in material handling and storage, and housekeeping of maintenance and cleaning areas. Proof of training shall be submitted on request of DNR.
8. Permittee shall adhere to the following minimum Best Management Practices:
- (a) Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, or warehouse activities and thereby prevent the contamination of storm water 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 that these materials are not exposed to storm water or provide other prescribed BMP's such as plastic lids and/or portable spill pans to prevent the commingling of storm water 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.
 - (d) Provide good housekeeping practices on the site to keep solid waste from entry into waters of the state.
 - (e) Provide sediment and erosion control sufficient to prevent or control sediment loss off the property. This could include the use of straw bales, silt fences, or sediment basins, if needed, to comply with effluent limits.
9. The purpose of the SWPPP and the BMPs listed therein is to prevent pollutants from entering waters of the state. A deficiency of a BMP means it was not effective in preventing pollution [10 CSR20-2.010(56)] of waters of the state, or failed to achieve compliance with benchmarks. Corrective action means the facility took steps to eliminate the deficiency.

10. All fueling facilities present on the site shall adhere to applicable federal and state regulations concerning underground storage, above ground storage, and dispensers, including spill prevention, control and counter measures.
11. Before releasing water that has accumulated in secondary containment areas it must be examined for hydrocarbon odor and presence of a sheen. When the presence of hydrocarbons is indicated, and at a minimum of once/quarter, this water must be tested for all hydrocarbon parameters listed in Effluent Limitations and Monitoring Requirements. Water shall be taken to a WWTP for treatment before release if it does not meet state requirements.
12. Substances, regulated by federal law under the Resource Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response, Compensation, and Liability Act (CERLA), that are transported, stored, or used for maintenance, cleaning or repair, shall be managed according to RCRA and CERLA.
13. Sludge and Biosolids Use For Domestic Wastewater Treatment Facilities
 - (a) Permittee shall comply with the pollutant limitations, monitoring, reporting, and other requirements in accordance with the attached permit Standard Conditions.
 - (b) If sludge is not removed by a contract hauler, permittee is authorized to land apply biosolids that are removed from the domestic wastewater treatment lagoon during lagoon cleanout and maintenance activities. Permit Standard Conditions, Part III shall apply to the land application of biosolids. Permittee shall notify the department at least 180 days prior to the planned removal of biosolids from the lagoon. The department may require submittal of a biosolids management plan for department review and approval as determined appropriate on a case-by-case basis.

D. SCHEDULE OF COMPLIANCE (For disinfection)

The final shall become effective within three (3) years in accordance with the conditions below.

1. Within one year from the issuance of the permit, the permittee shall submit a construction permit application and an activity schedule toward meeting disinfection requirement.
2. The facility shall submit an interim progress report within twelve months if the construction completion and operation of the disinfection equipment will be more than 1 year.
3. If the permittee will fail to meet any of the interim dates above, the permittee shall notify the Department in writing of the reason for non compliance no later than 14 days following each interim date.
4. Upon completion of construction, the permittee submit a Statement of Work complete and signed by the owner and licensed professional engineer in the state of Missouri (Missouri requirement).

D. SCHEDULE OF COMPLIANCE (To treat ammonia)

The final effluent limitations shall become effective within three (3) years in accordance with the conditions below:

5. Within one year of issuance of this permit, the facility shall submit an engineering report to describe facility upgrades and modifications that will be necessary to allow the facility to meet the final effluent limitations.
6. Within two years of issuance of this permit, the permittee shall submit an application for a construction permit for construction of facilities necessary to achieve compliance with the final effluent limitations.
7. Upon completion of construction, the permittee submit a Statement of Work complete and signed by the owner and licensed professional engineer in the state of Missouri (Missouri requirement).

Missouri Department of Natural Resources
FACT SHEET
FOR THE PURPOSE OF RENEWAL
OF
MO-0000159
HOLCIM (US) INC. – CLARKSVILLE PLANT

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollution 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 storm water 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.

As per [40 CFR Part 124.8(a)] and [10 CSR 20-6.020(1)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 (operating permit) listed below.

A Factsheet is not an enforceable part of an operating permit.

This Factsheet is for a Major , Industrial Facility .

Part I – Facility Information

Facility Type: Industry
Facility SIC Code(s): 3241 - Hydraulic Cement Plant/Quarry
1422 - Quarry Operation/Crushed or Broken Limestone
4952 - Domestic Sewage Treatment Plant

Facility Description:

Holcim (US) Inc. operated a "wet process" cement kiln in Clarksville, Missouri. Limestone and shale were quarried on-site then ground to a fine powder and mixed with water to create a slurry. This slurry would enter the kiln where it was subjected to temperatures 500 degrees F to 3,500 degree F. This process makes a clinker. Grinding the clinker with a small amount of gypsum is the final process. Holcim withdraws water from the Mississippi River for processes, including preparing the slurry to non-contact cooling water.

Have any changes occurred at this facility or in the receiving water body that effects effluent limit derivation?

- Yes; Outfall #004 was eliminated and Outfall #008 was added as a new domestic sewage treatment. Stormwater related parameters and limitations were added to the stormwater outfall to, in part, accurately describe the characteristics of the stormwater and to prepare for the demolition of the plant and office complex.

- No.

Application Date: 07/27/09
Expiration Date: 01/20/09
Last Inspection: 08/27/09 Compliance

OUTFALL(S) TABLE:

OUTFALL	DESIGN FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE	DISTANCE TO CLASSIFIED SEGMENT (MI)
001	6.2	Primary	Stormwater	0.7
002	4.7	Primary	Stormwater runoff	0.3
003	0.08	Secondary	Sanitary wastewater	0.4
004	Eliminated	NA	Sanitary wastewater	NA
005	Intermittent	Primary	Stormwater Runoff	0.1
006	1.55	None	Discharge from Outfall #001	0.4
007	Intermittent	Primary	Stormwater Runoff	0.5
008	0.003	Secondary	Sanitary Runoff	0.5

Outfall #001 - Storm water runoff/six settling basins (series operated).

Legal Description: NW ¼, SW ¼, Sec. 7, T53N, R1E, Pike County

Receiving Stream: This outfall discharges to Outfall #006.

First Classified Stream and ID: Mississippi River (P) (0001)

USGS Basin & Sub-watershed No.: 07110004-110003

Outfall #002 - Storm water runoff/pumping/swale drains to two settling basins (series operated) .

Legal Description: NW ¼, SE ¼ , Sec. 18, T53N, R1E, Pike County

Receiving Stream: Tributary to Calumet Creek (U)

First Classified Stream and ID: Calumet Creek (P) (0018)

USGS Basin & Sub-watershed No.: 07110004-110003

Outfall #003 - An extended aeration treatment plant/ sludge pumped and hauled

Legal Description: NW ¼, SW1/4, Sec. 7, T53N, R1E, Pike County

Receiving Stream: Outfall #001

First Classified Stream and ID: Mississippi River (P) (0001)

USGS Basin & Sub-watershed No.: 07110004-110003

Outfall #004 –Flow eliminated by septic system.

Legal Description: NW ¼, SW1/4, Sec. 7, T53N, R1E, Pike County

Receiving Stream: Eliminated during permit modification

First Classified Stream and ID: Mississippi River (P) (0001)

USGS Basin & Sub-watershed No.: 07110004-110003

Outfall #005 - Storm water runoff from shipping and loading area and railroad. Collection Sump/Sand Filter through percolation to groundwater.

Hydraulic Cement Plant/Quarry – SIC #3241

Legal Description: NW ¼, SW1/4, Sec. 7, T53N, R1E, Pike County

Receiving Stream: Unclassified Slough of Mississippi River (P) (0001)

First Classified Stream and ID: Mississippi River (P) (0001)

USGS Basin & Sub-watershed No.: 07110004-110003

Outfall #006 - Stormwater runoff from plant area/shipping area, Highway 79, and Railroad tracks – SIC #3241

Outfall #003 and #001/settling basin

Legal Description: NW ¼, SW1/4, Sec. 7, T53N, R1E, Pike County

Receiving Stream: Unclassified Slough of Mississippi River (P) (0001)

First Classified Stream and ID: Mississippi River (P) (0001)

USGS Basin & Sub-watershed No.: 07110004-110003

Outfall #007 - Stormwater from shipping facility

Legal Description: SE ¼, SE1/4, Sec. 7, T53N, R1E, Pike County

Receiving Stream: unclassified Wetland (U) of Mississippi River (P)

First Classified Stream and ID: Mississippi River (P) (0001)

USGS Basin & Sub-watershed No.: 07110004-110003

Outfall #008 - An extended aeration treatment plant/sludge pumped and hauled

Legal Description: : NE ¼, SW1/4, Sec. 8, T53N, R1E, Pike County

Receiving Stream: unclassified Wetland (U) of Mississippi River (P)

First Classified Stream and ID: Mississippi River (P) (0001)

USGS Basin & Sub-watershed No.: 07110004-110003

Receiving Water Body's Water Quality & Facility Performance History:

An unpermitted sanitary sewer was reported with the permit renewal application form. Facility received a letter from the Northeast Regional Office about non-compliance because of a 08/27/2009 site inspection. Many individual monitoring requirements unreported, too numerous to list. Outfall 005 has no defined outfall structure and the facility has reported no discharge over the last five years. One violation of TSS limits for Outfall #006 on 9/30/2007. Two violations of TRC limits for Outfall #001 on 12/2005 and 1/31/2006.

Comments:

The noncontact cooling water and non-contact cooling water treatment plant reference in outfall 001 has been removed by request of the permittee. Holcim plans to close the plant, and the cement grinding process has been eliminated. Holcim's prior plans were for a final grinding campaign to process the remaining clinkers on site. These piles of clinker are now planned for sale as road amendments.

Part II – Operator Certification Requirements

As per [10 CSR 20-6.010(8) Terms and Conditions of a Permit], permittees shall operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions and regulations. Operators or supervisors of operations at regulated wastewater treatment facilities shall be certified in accordance with [10 CSR 20-9.020(2)] and any other applicable state law or regulation. As per [10 CSR 20-9.010(2)(A)], requirements for operation by certified personnel shall apply to all wastewater treatment systems, if applicable, as listed below:

Not Applicable ; This facility is not required to have a certified operator.

Part III – Receiving Stream Information**APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:**

As per Missouri's Effluent Regulations [10 CSR 20-7.015], the waters of the state are divided into the below listed seven (7) categories. Each category lists effluent limitations for specific parameters, which are presented in each outfall's Effluent Limitation Table and further discussed in the Derivation & Discussion of Limits section.

Missouri or Mississippi River [10 CSR 20-7.015(2)]:
All Other Waters [10 CSR 20-7.015(8)]:

10 CSR 20-7.031 Missouri Water Quality Standards, the Department defines the Clean Water Commission water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and/or 1st classified receiving stream's beneficial water uses to be maintained are located in the Receiving Stream Table located below in accordance with [10 CSR 20-7.031(3)].

RECEIVING STREAM(S) TABLE: OUTFALL #001, 003, 006, 005, 007

WATERBODY NAME	CLASS	WBID	DESIGNATED USES*	8-DIGIT HUC	EDU**
Unclassified watebody of Mississippi River	U	-	General Criteria	07110004	Central Plains/ Cuivre River
Mississippi River	P	00001	LWW,AQL,WBC-A***, SCR, DWS, IND		

RECEIVING STREAM(S) TABLE:

WATERBODY NAME	CLASS	WBID	DESIGNATED USES*	8-DIGIT HUC	EDU**
Tributary to Calumet Creek	U	-	General Criteria	07110004	Central Plains/ Cuivre River
Calumet Creek	C	P	LWW, AQL, WBC-B***		

* - Irrigation (IRR), Livestock & Wildlife Watering (LWW), Protection of Warm Water Aquatic Life and Human Health-Fish Consumption (AQL), Cool Water Fishery (CLF), Cold Water Fishery (CDF), Whole Body Contact Recreation (WBC), Secondary Contact Recreation (SCR), Drinking Water Supply (DWS), Industrial (IND), Groundwater (GRW).

** - Ecological Drainage Unit

*** - UAA has not been conducted.

RECEIVING STREAM(S) LOW-FLOW VALUES TABLE:

RECEIVING STREAM (U, C, P)	LOW-FLOW VALUES (CFS)		
	1Q10	7Q10	30Q10
Unclassified Tributary to Calumet Creek	0.0	0.0	0.0
Unclassified Waterbodies to Mississippi River	0.0	0.0	0.0

MIXING CONSIDERATIONS TABLE:

MIXING ZONE (CFS) [10 CSR 20-7.031(4)(A)...]		ZONE OF INITIAL DILUTION (CFS) [10 CSR 20-7.031(4)(A)...]	
7Q10	30Q10	1Q10	7Q10
0.0	0.0	0.0	0.0

Mixing Zone: Not Allowed [10 CSR 20-7.031(4)(A)4.B.(I)(a)].

Zone of Initial Dilution: Not Allowed [10 CSR 20-7.031(4)(A)4.B.(I)(b)].

RECEIVING STREAM MONITORING REQUIREMENTS:**Mississippi River Intake**

PARAMETER(S)	SAMPLING FREQUENCY	SAMPLE TYPE	LOCATION
Total Suspended Solids	Once/quarter	Grab	Process water intake

Part IV – 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.

ANTI-BACKSLIDING:

A provision in the Federal Regulations [CWA §303(d)(4); CWA §402(c); 40 CFR Part 122.44(I)] that requires a reissued permit to be as stringent as the previous permit with some exceptions.

- Limitations in this operating permit for the reissuance of this permit conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Act, and 40 CFR Part 122.44.

ANTIDegradation:

In accordance with Missouri's Water Quality Standard [10 CSR 20-7.031(2)], the Department is to document by means of Antidegradation Review that the use of a water body's available assimilative capacity is justified. Degradation is justified by documenting the socio-economic importance of a discharging activity after determining the necessity of the discharge.

- Renewal no degradation proposed and no further review necessary.

AREA-WIDE WASTE TREATMENT MANAGEMENT & CONTINUING AUTHORITY:

As per [10 CSR 20-6.010(3)(B)], ... An applicant may utilize a lower preference continuing authority by submitting, as part of the application, a statement waiving preferential status from each existing higher preference authority, providing the waiver does not conflict with any area-wide management plan approved under section 208 of the Federal Clean Water Act or any other regional sewage service and treatment plan approved for higher preference authority by the Department.

BIO-SOLIDS, SLUDGE, & SEWAGE SLUDGE:

Bio-solids are solid materials resulting from wastewater treatment that meet federal and state criteria for beneficial uses (i.e. fertilizer). Sludge is any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility or any other such waste having similar characteristics and effect. Sewage sludge is solids, semi-solids, 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 a

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.

Applicable ;

This condition is applicable to the permittee for this specific facility.

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.

Applicable ;

The permittee/facility is currently under enforcement action due to:

Presently, according to our Water Quality Information System, facility must submit sludge monitoring report as part of their compliance schedule. Future action on an unpermitted sewage treatment plant is pending and is being handled through the permitting process.

PRETREATMENT PROGRAM:

The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a Publicly Owned Treatment Works [40 CFR Part 403.3(q)].

Pretreatment programs are required at any POTW (or combination of POTW operated by the same authority) and/or municipality with a total design flow greater than 5.0 MGD and receiving industrial wastes that interfere with or pass through the treatment works or are otherwise subject to the pretreatment standards. Pretreatment programs can also be required at POTWs/municipals with a design flow less than 5.0 MGD if needed to prevent interference with operations or pass through.

Several special conditions pertaining to the permittee's pretreatment program may be included in the permit, and are as follows:

- Implementation and enforcement of the program,
- Annual pretreatment report submittal,
- Submittal of list of industrial users,
- Technical evaluation of need to establish local limitations, and
- Submittal of the results of the evaluation

Not Applicable ;

The permittee, at this time, is not required to have a Pretreatment Program or does not have an approved pretreatment program.

REASONABLE POTENTIAL ANALYSIS (RPA):

Federal regulation [40 CFR Part 122.44(d)(1)(i)] requires effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause or contribute to an in-stream excursion above narrative or numeric water quality standard.

In accordance with [40 CFR Part 122.44(d)(iii)] if the permit writer determines that any give pollutant has the reasonable potential to cause, or contribute to an in-stream excursion above the WQS, the permit must contain effluent limits for that pollutant.

Not Applicable ;

A RPA was not conducted for this facility. Review of the discharge monitoring reporting data from (DMR) indicated no reason to conduct an RPA. Outfall #001 had two exceedences of total residual chlorine (TRC). Outfall 001 now has a lower effluent limitation for TSS. The remaining outfalls have no exceedences for those pollutants that possess water quality criteria. Outfall 002 had no exceedences. Outfall #003 had no exceedences or no discharge. Outfall #005 and #007 indicated no discharge. Outfall #006 has one exceedence of TSS. Outfall 008 is a new outfall in this revision.

REMOVAL EFFICIENCY:

Removal efficiency is a method by which the Federal Regulations define Secondary Treatment and Equivalent to Secondary Treatment, which applies to Biochemical Oxygen Demand 5-day (BOD₅) and Total Suspended Solids (TSS) for Publicly Owned Treatment Works (POTWs)/municipals. Please see the United States Environmental Protection Agency's (EPA) website for interpretation of percent removal requirements for National Pollutant Discharge Elimination System Permit Application Requirements for Publicly Owned Treatment Works and Other Treatment Works Treating Domestic Sewage @ www.epa.gov/fedrgstr/EPA-WATER/1999/August/Day-04/w18866.htm.

Not Applicable ;

Influent monitoring is not being required to determine percent removal.

Sanitary Sewer Overflows (SSOs), Bypasses, Inflow & Infiltration (I&I) – Prevention/Reduction:

Sanitary Sewer Systems (SSSs) are municipal wastewater collection systems that convey domestic, commercial, and industrial wastewater, and limited amounts of infiltrated groundwater and storm water (i.e. I&I), to a POTW. SSSs are not designed to collect large amounts of storm water runoff from precipitation events.

Untreated or partially treated discharges from SSSs are commonly referred to as SSOs. SSOs have a variety of causes including blockages, line breaks, sewer defects that allow excess storm water and ground water to overload the system, lapses in sewer system operation and maintenance, inadequate sewer design and construction, power failures, and vandalism. A SSOs is defined as an untreated or partially treated sewage release from a SSS. SSOs can occur at any point in an SSS, during dry weather or wet weather. SSOs include overflows that reach waters of the state. SSOs also include overflows out of manholes and onto city streets, sidewalks, and other terrestrial locations. SSSs can back up into buildings, including private residences. When sewage backups are caused by problems in the publicly-owned portion of an SSS, they are considered SSOs.

Not Applicable ;

This facility is not required to develop or implement a program for maintenance and repair of the collection system; however, it is a violation of Missouri State Environmental Laws and Regulations to allow untreated wastewater to discharge to waters of the state.

SCHEDULE OF COMPLIANCE (SOC):

A schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements (actions, 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.

Applicable ;

The time given for effluent limitations of this permit listed under Interim Effluent Limitation and Final Effluent Limitations were established in accordance with [10 CSR 20-7.031(10)].

STORM WATER POLLUTION PREVENTION PLAN (SWPPP):

In accordance with 40 CFR 122.44(k) *Best Management Practices (BMPs)* 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 storm water 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*, (Document number EPA 833-B-09-002) [published by the United States Environmental Protection Agency (USEPA) in February 2009], BMPs are measures or practices used to reduce the amount of pollution entering (regarding this operating permit) waters of the state. BMPs may take the form of a process, activity, or physical structure.

Additionally in accordance with the Storm Water 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.

Applicable ;

A SWPPP shall be developed and implemented for each site and shall incorporate required practices identified by the Department with jurisdiction, incorporate erosion control practices specific to site conditions, and provide for maintenance and adherence to the plan.

VARIANCE:

As per the Missouri Clean Water Law § 644.061.4, variances shall be granted for such period of time and under such terms and conditions as shall be specified by the commission in its order. The variance may be extended by affirmative action of the commission. In no event shall the variance be granted for a period of time greater than is reasonably necessary for complying with the Missouri Clean Water Law §§644.006 to 644.141 or any standard, rule or regulation promulgated pursuant to Missouri Clean Water Law §§644.006 to 644.141.

Not Applicable ;

This operating permit is not drafted under premises of a petition for variance.

WASTELOAD ALLOCATIONS (WLA) FOR LIMITS:

As per [10 CSR 20-2.010(78)], the amount of pollutant each discharger is allowed by the Department to release into a given stream after the Department has determined total amount of pollutant that may be discharged into that stream without endangering its water quality.

Applicable ;

Wasteload allocations were calculated where applicable using water quality criteria or water quality model results and the dilution equation below:

$$C = \frac{(C_s \times Q_s) + (C_e \times Q_e)}{(Q_e + Q_s)} \quad (\text{EPA/505/2-90-001, Section 4.5.5})$$

Where C = downstream concentration
 Cs = upstream concentration
 Qs = upstream flow
 Ce = effluent concentration
 Qe = effluent flow

Chronic wasteload allocations were determined using applicable chronic water quality criteria (CCC: criteria continuous concentration) and stream volume of flow at the edge of the mixing zone (MZ). Acute wasteload allocations were determined using applicable water quality criteria (CMC: criteria maximum concentration) and stream volume of flow at the edge of the zone of initial dilution (ZID).

Water quality based maximum daily and average monthly effluent limitations were calculated using methods and procedures outlined in USEPA's "Technical Support Document For Water Quality-based Toxics Control" (EPA/505/2-90-001).

WLA MODELING:

There are two general types of effluent limitations, technology-based effluent limits (TBELs) and water quality based effluent limits (WQBELs). If TBELs do not provide adequate protection for the receiving waters, then WQBEL must be used.

Not Applicable ;

A WLA study was either not submitted or determined not applicable by Department staff.

WATER QUALITY STANDARDS:

Per [10 CSR 20-7.031(3)], General Criteria shall be applicable to all waters of the state at all times including mixing zones.

Additionally, [40 CFR 122.44(d)(1)] directs the Department to establish in each NPDES permit to include conditions to achieve water quality established under Section 303 of the Clean Water Act, including State narrative criteria for water quality.

303(d) LIST & TOTAL MAXIMUM DAILY LOAD (TMDL):

Section 303(d) of the federal Clean Water Act requires that each state identify waters that are 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 waters that are impaired but not addressed by normal water pollution control programs.

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. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan will be developed that shall include the TMDL calculation

Applicable .

The Mississippi River is listed on the (2002) Missouri 303 (d) listing for chlordane and PCBs in fish tissue.

– This facility is not considered a source of the above listed pollutant(s) or considered to contribute to the impairment of Mississippi River.

Part V – Effluent Limits Determination

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 supercedes the terms and conditions, including effluent limitations, of this operating permit.

Outfall #001 – stormwater, equipment wash water

EFFLUENT LIMITATIONS TABLE:

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	GPD	1	*		*	No	
PRECIPITATION	INCHES		*		*	No	
TSS	MG/L		*		*	No	
pH	SU	1	**		**	YES	6.0-9.0
OIL & GREASE	MG/L	3	15		10	No	
CHEMICAL OXYGEN DEMAND	MG/L		*		*	No	
TOTAL PETROLEUM HYDROCARBONS	MG/L	8	10		10	NEW	
SETTLABLE SOLIDS	MG/L	8	1.5		1.0	NEW	
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

Outfall #002 – stormwater

EFFLUENT LIMITATIONS TABLE:

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	GPD	1	*		*	No	
PRECIPITATION	INCHES		*		*	No	
TSS	MG/L	8	50		50	No	
pH	SU	1	**		**	YES	6.0-9.0
TOTAL TOXIC ORGANICS	MG/L		*		&	No	
OIL & GREASE	MG/L	3	15		10	NEW	
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

Outfall #003 and #008 – Two Extended Aeration Treatment Plants – Final Limitations

EFFLUENT LIMITATIONS TABLE:

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	GPD	1	*		*	No	
BOD ₅	MG/L	1		45	30	No	
TSS	MG/L	1		45	30	No	
pH	SU	1	**		**	YES	6.0-9.0
AMMONIA AS N (MAY 1 – OCT 31)	MG/L	3	3.7		1.4	NEW	
AMMONIA AS N (NOV 1 – APR 30)	MG/L	3	7.5		2.9	NEW	
TEMPERATURE	°C		*		*	NEW	
OIL & GREASE	MG/L	3	15		10	No	
FECAL COLIFORM	***	1	1000		400	NEW	
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

Outfall #005, 007 – stormwater**EFFLUENT LIMITATIONS TABLE:**

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	GPD	1	*		*	NO	
PRECIPITATION	INCHES		*		*	NO	
TSS	MG/L	8	50		50	NO	
pH	SU		**		**	YES	6.0-9.0
OIL & GREASE	MG/L	3	15		10	NO	
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

Outfall #006 – stormwater and discharge from Outfall #001 and 003**EFFLUENT LIMITATIONS TABLE:**

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	GPD	1	*		*	NO	
TSS (INTAKE)	MG/L		*		*	NO	
TSS (DISCHARGE)	MG/L		*		*	NO	
TSS (NET)	MG/L	8	50		50	NO	
pH	SU	1	**		**	YES	6.0-9.0
OIL & GREASE	MG/L	3	15		10	NO	
TOTAL TOXIC ORGANICS	MG/L		*		*	NO	
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

* - Monitoring requirement only.

** - The discharge must comply with the 6-5 - 9.0 pH S.U. found within the water quality standards at 10 CSR 20-7.031.

*** - # of colonies/100mL; the Monthly Average for Fecal Coliform is a geometric mean.

**** - Parameter not previously established in previous state operating permit.

Basis for Limitations Codes:

- | | |
|--|------------------------------------|
| 1. State or Federal Regulation/Law | 7. Antidegradation Policy |
| 2. Water Quality Standard (includes RPA) | 8. Water Quality Model |
| 3. Water Quality Based Effluent Limits | 9. Best Professional Judgment |
| 4. Lagoon Policy | 10. TMDL or Permit in lieu of TMDL |
| 5. Ammonia Policy | 11. WET Test Policy |
| 6. Dissolved Oxygen Policy | 12. Antidegradation Review |

OUTFALL #001 – DERIVATION AND DISCUSSION OF LIMITS:

- **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. Storm water 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.
- **Total Suspended Solids (TSS).** Monitoring only. Effluent limitations from the previous state operating permit have been reassessed and verified that they are still protective of the receiving stream's Water Quality. Therefore, effluent limitations have been retained from previous state operating permit
- **pH.** Effluent limitations have been modified from previous state operating permit. The discharge must comply with the 6-5 - 9.0 pH S.U. found within the water quality standards at 10 CSR 20-7.031.
- **Oil & Grease.** Conventional pollutant, effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum.
- **Settleable Solids.** It is staff's best professional judgment that 1.5 mL/L/hour a Daily Maximum and 1.0 Monthly Average effluent limit shall be protective and shall not violate General and/or Specific Criteria of Missouri's Water Quality Standards.

- **Chemical Oxygen Demand (COD).** Monitoring only. As per [10 CSR 80-3.010(11)(C)4.B.], COD shall be analyzed each time a sample is obtained. Effluent limitations have been retained from previous state operating permit.
- **Total Petroleum Hydrocarbons.** It is staff's best professional judgment that 10.0 mg/L as Daily Maximum and 10.0 mg/L as a Monthly Average effluent limit shall be protective and shall not violate General and/or Specific Criteria of Missouri's Water Quality Standards.
- **Minimum Sampling and Reporting Frequency Requirements.** Sampling and reporting frequency requirements have been retained from previous state operating permit. The facility has been in compliance permit with this Outfall; therefore, the once per month sampling is appropriate for the design flow.

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
FLOW	ONCE/MONTH	ONCE/QUARTER
PRECIPITATION	ONCE/DAY	ONCE/QUARTER
TSS	ONCE/MONTH	ONCE/QUARTER
PH	ONCE/MONTH	ONCE/QUARTER
TEMPERATURE	ONCE/MONTH	ONCE/QUARTER
CHEMICAL OXYGEN DEMAND	ONCE/MONTH	ONCE/QUARTER
TOTAL PETROLEUM HYDROCARBONS	ONCE/MONTH	ONCE/QUARTER
SETTLEABLE SOLIDS	ONCE/MONTH	ONCE/QUARTER
OIL & GREASE	ONCE/MONTH	ONCE/QUARTER

OUTFALL #002 – DERIVATION AND DISCUSSION OF LIMITS

- **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. Storm water 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.
- **Total Suspended Solids (TSS).** It is staff's best professional judgment that 50.0 mg/L as a Daily Maximum and 50.0 as a Monthly Average effluent limit shall be protective and shall not violate General and/or Specific Criteria of Missouri's Water Quality Standards.

Note: This following allowance was in the previous operating permit: *"If flow is due to a 10-year, 24-hour rainfall event (5.0 inches in Pike County), pH and Total Suspended Solids limits are waived. All other limits are in effect at all times."* The permit writer's rationale and negotiation for inclusion of this allowance in the permit was not described. *Because of the closure of the cement plant, no allowance for a 10-year, 24-hour rainfall event is needed.*

- **pH.** Effluent limitations have been modified from previous state operating permit. The discharge must comply with the 6-5 - 9.0 pH S.U. found within the water quality standards at 10 CSR 20-7.031.
- **Oil & Grease.** Conventional pollutant, effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum.
- **Toxic, Total Organics.** Monitoring only. For the purpose of identifying potential toxic organic chemicals that could affect aquatic life and for which effluent limitation may need to be applied. As in previous permit, we will continue to monitor.
- **Minimum Sampling and Reporting Frequency Requirements.** Sampling and reporting frequency requirements have been retained from previous state operating permit. Both facilities are not newly constructed; therefore, the once per quarter sampling is appropriate for the design flow.

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
FLOW	ONCE/QUARTER	ONCE/QUARTER
PRECIPITATION	ONCE/DAY	ONCE/QUARTER
TSS	ONCE/QUARTER	ONCE/QUARTER
PH	ONCE/QUARTER	ONCE/QUARTER
TOTAL TOXIC ORGANICS	ONCE/QUARTER	ONCE/QUARTER
OIL & GREASE	ONCE/QUARTER	ONCE/QUARTER

OUTFALL #003 AND #008 – DERIVATION AND DISCUSSION OF LIMITS

- **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.
- **Biochemical Oxygen Demand (BOD₅).** 45 mg/L as a Weekly Average and 30 mg/L as a Monthly Average. Please see the **APPLICABLE DESIGNATION OF WATERS OF THE STATE** sub-section of the **Receiving Stream Information**.
- **Temperature.** Monitoring requirement due to the toxicity of Ammonia varies by temperature,
- **Total Ammonia Nitrogen.** Early Life Stages Present Total Ammonia Nitrogen criteria apply [10 CSR 20-7.031(4)(B)7.C. & Table B3] default pH 7.8 SU Background total ammonia nitrogen = 0.01 mg/L (Default). No mixing considerations allowed; therefore, WLA = appropriate criterion.

Season	Temp (°C)	pH (SU)	Total Ammonia Nitrogen CCC (mg/L)	Total Ammonia Nitrogen CMC (mg/L)
Summer	26	7.8	1.5	12.1
Winter	6	7.8	3.1	12.1

Q_e = design flow which is 0.003 CFS for Outfall #008 and 0.08 CFS for Outfall #003

Summer: May 1 – October 31

Chronic WLA: $C_e = ((Q_e + 0.0)1.5 - (0.0 * 0.01))/Q_e$
 $C_e = 1.5 \text{ mg/L}$

Acute WLA: $C_e = ((Q_e + 0.0)12.1 - (0.0 * 0.01))/Q_e$
 $C_e = 12.1 \text{ mg/L}$

$LTA_c = 1.5 \text{ mg/L} (0.780) = \mathbf{1.2 \text{ mg/L}}$

[CV = 0.6, 99th Percentile, 30 day avg.]

$LTA_a = 12.1 \text{ mg/L} (0.321) = 3.9 \text{ mg/L}$

[CV = 0.6, 99th Percentile]

Use most protective number of LTA_c or LTA_a.

MDL = 1.2 mg/L (3.11) = 3.7 mg/L

[CV = 0.6, 99th Percentile]

AML = 1.2 mg/L (1.19) = 1.4 mg/L

[CV = 0.6, 95th Percentile, n = 30]

Winter: November 1 – April 30

Chronic WLA: $C_e = ((Q_e + 0.0)3.1 - (0.0 * 0.01))/Q_e$
 $C_e = 3.1 \text{ mg/L}$

Acute WLA: $C_e = ((Q_e + 0.0)12.1 - (0.0 * 0.01))/Q_e$
 $C_e = 12.1 \text{ mg/L}$

$LTA_c = 3.1 \text{ mg/L} (0.780) = \mathbf{2.4 \text{ mg/L}}$

[CV = 0.6, 99th Percentile, 30 day avg.]

$LTA_a = 12.1 \text{ mg/L} (0.321) = 3.9 \text{ mg/L}$

[CV = 0.6, 99th Percentile]

Use most protective number of LTA_c or LTA_a.

MDL = 2.4 mg/L (3.11) = 7.5 mg/L

[CV = 0.6, 99th Percentile]

AML = 2.4 mg/L (1.19) = 2.8 mg/L

[CV = 0.6, 95th Percentile, n = 30]

- **Fecal Coliform.** Discharge shall not contain more than a monthly geometric mean of 400 colonies/100 mL and a daily maximum of 1000 colonies/100 mL during the recreational season (April 1 – October 31), please see the **APPLICABLE DESIGNATION OF WATERS OF THE STATE** sub-section of the **Receiving Stream Information**. Future renewals of the facility operating permit will contain effluent limitations for E. coli, which will replace fecal coliform as the applicable bacteria criteria in Missouri's water quality standards.

- **Escherichia coli (E. coli)**. This facility will be required to have *E. coli* effluent limitations when Missouri adopts the implementation of the *E. coli* standards, as per [10 CSR 20-7.031(4)(C)]. On March 3, 2010, the Clean Water approved the effluent regulations for *E. coli*. Discharge shall not contain more than a monthly geometric mean of 206 colonies/100 mL and during the recreational season (April 1 – October 31), please see the **APPLICABLE DESIGNATION OF WATERS OF THE STATE** sub-section of the **Receiving Stream Information**.
- **Oil & Grease**. Conventional pollutant, effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum.
- **Minimum Sampling and Reporting Frequency Requirements**. Sampling and reporting frequency requirements have been retained from previous state operating permit. Both facilities are not newly constructed; therefore, the once per quarter sampling is appropriate for the design flow.

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
FLOW	ONCE/QUARTER	ONCE/QUARTER
BOD ₅	ONCE/QUARTER	ONCE/QUARTER
TSS	ONCE/QUARTER	ONCE/QUARTER
PH	ONCE/QUARTER	ONCE/QUARTER
TEMPERATURE	ONCE/QUARTER	ONCE/QUARTER
AMMONIA AS N (MAY 1 – OCT 31)	ONCE/QUARTER	ONCE/QUARTER
AMMONIA AS N (NOV 1 – APR 30)	ONCE/QUARTER	ONCE/QUARTER
FECAL COLIFORM/E. COL	ONCE/QUARTER	ONCE/QUARTER
OIL & GREASE	ONCE/QUARTER	ONCE/QUARTER

OUTFALL #006 – DERIVATION AND DISCUSSION OF LIMITS

- **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. Storm water 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.
- **Net Total Suspended Solids (TSS)**. The TSS discharge must be no more than 50.0 mg/L after subtracting the TSS concentration from the Mississippi River intake. It is staff's best professional judgment that 50.0 mg/L as a Daily Maximum and 50.0 mg/L as a Monthly Average effluent limit shall be protective and shall not violate General and/or Specific Criteria of Missouri's Water Quality Standards. This allowance is justified in 10 CSR 20-7.015 (2) (C).
- **pH**. Effluent limitations have been modified from previous state operating permit. The discharge must comply with the 6-5 - 9.0 pH S.U. found within the water quality standards at 10 CSR 20-7.031.
- **Oil & Grease**. Conventional pollutant, effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum.
- **Toxic, Total Organics**. Monitoring only. For the purpose of identifying potential toxic organic chemicals that could affect beneficial uses of the receiving waters and for which effluent limitation may need to be applied. As in previous permit, we will continue to monitor.
- **Minimum Sampling and Reporting Frequency Requirements**. Most sampling and reporting frequency requirements have been retained from previous state operating permit; however, because of a few recent TSS violations and the need to correlate the previous permit's sampling frequency for the TSS Mississippi River intake with the discharge sampling frequency, sampling for TSS has increased.

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
FLOW	ONCE/YEAR	ONCE/YEAR
PRECIPITATION	ONCE/DAY	ONCE/YEAR
TSS (NET)	ONCE/YEAR	ONCE/YEAR
PH	ONCE/YEAR	ONCE/YEAR
TOTAL TOXIC ORGANICS	ONCE/YEAR	ONCE/YEAR
OIL & GREASE	ONCE/YEAR	ONCE/YEAR

OUTFALL #005, 007 – DERIVATION AND DISCUSSION OF LIMITS

- **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. Storm water 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.
- **Total Suspended Solids (TSS).** It is staff's best professional judgment that 50.0 mg/L as a Daily Maximum and 50.0 as a Monthly Average effluent limit shall be protective and shall not violate General and/or Specific Criteria of Missouri's Water Quality Standards.

Note: This following allowance was in the previous operating permit: *"If flow is due to a 10-year, 24-hour rainfall event (5.0 inches in Pike County), pH and Total Suspended Solids limits are waived. All other limits are in effect at all times."* . The permit writer's rationale and negotiation for inclusion of this allowance in the permit was not described. *Because of the closure of the cement plant, no allowance for a 10-year, 24-hour rainfall event is needed.*

- **pH.** Effluent limitations have been modified from previous state operating permit. The discharge must comply with the 6-5 - 9.0 pH S.U. found within the water quality standards at 10 CSR 20-7.031.
- **Oil & Grease.** Conventional pollutant, effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum.
- **Minimum Sampling and Reporting Frequency Requirements.** The sampling and reporting frequency requirements have been retained from previous state operating permit. Facility reported no flow during this time period; thus, no change in sampling frequency is required.

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
FLOW	ONCE/QUARTER	ONCE/YEAR
PRECIPITATION	ONCE/DAY	ONCE/YEAR
TSS	ONCE/QUARTER	ONCE/YEAR
PH	ONCE/QUARTER	ONCE/YEAR
OIL & GREASE	ONCE/QUARTER	ONCE/YEAR

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.

PUBLIC NOTICE:

The Department shall give public notice that a draft permit has been prepared and its issuance is pending. Additionally, public notice will be issued if a public hearing is to be held because of a significant degree of interest in and 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 5-28-2010 to 6-27-2010. No responses received or responses to the Public Notice of this operating permit do not warrant the modification of effluent limits and/or the terms and conditions of this permit.

DATE OF FACT SHEET: APRIL 24, 2010

COMPLETED BY:

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