

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-0002666

Owner: Audubon Materials, LLC  
Address: 2200 Courtney Road  
Sugar Creek, MO 64050

Continuing Authority: Same as above  
Address: Same as above

Facility Name: Sugar Creek Cement Plant  
Facility Address: 2200 Courtney Road  
Sugar Creek, MO 64050

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**

See page 2

This permit authorizes only 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.

September 1, 2014  
Effective Date

Sara Parker Pauley, Director, Department of Natural Resources

March 31, 2019  
Expiration Date

John Madras, Director, Water Protection Program

**FACILITY DESCRIPTION (continued):**

Outfall #006 – Portland Cement Manufacturing – SIC 3241

Stormwater runoff that discharges from outfall #006 is generated in several areas including the former kiln area of the River Facility, a loess bluff to the east of the River Facility, miscellaneous areas to the west of the River Facility that drain to the various ditches and culverts, and portions of the railroad that is not part of Audubon's property.

Design Flow: 0.125 MGD

Actual Flow: Dependent on precipitation.

Legal Description: NW ¼, NW ¼, Sec 23, T50N, R32W, Jackson County

UTM Coordinates: X = 377396, Y = 4333774

Receiving Stream: Missouri River (P)

First Classified Stream and ID: Missouri River (P) (0356) 303(d)

USGS Basin & Sub-watershed No.: 10300101-0305

Outfall #007 – Portland Cement Manufacturing – SIC 3241

Sediment pond which receives stormwater, compressor condensate, and cooling water blowdown. Outfall #007 is located on the discharge outlet of the detention pond which discharges to a tributary to Mill Creek.

Design Flow: 36.2 MGD

Legal Description: SE ¼, SW ¼, Sec 13, T50N, R32W, Jackson County

UTM Coordinates: X = 379599, Y = 4334032

Receiving Stream: Unnamed Tributary to Mill Creek (U)

First Classified Stream and ID: Missouri River (P) (0356) 303(d)

USGS Basin & Sub-watershed No.: 10300101-0306

Outfall #0012 – Portland Cement Manufacturing – SIC 3241

Stormwater outfall, also previously part of the old plant (River Facility). Flow to this outfall flows through a series of areas that act similar to wetlands and naturally remove the sediment that may be carried in the stormwater runoff.

Design Flow: 0.069 MGD

Actual Flow: Dependent on precipitation.

Legal Description: SW ¼, SW ¼, Sec 14, T50N, R32W, Jackson County

UTM Coordinates: X = 377632, Y = 4334007

Receiving Stream: Missouri River (P)

First Classified Stream and ID: Missouri River (P) (0356) 303(d)

USGS Basin & Sub-watershed No.: 10300101-0305

Outfall #0014 – Portland Cement Manufacturing – SIC 3241

Mine dewatering outfall. Groundwater is pumped from the underground mine to the Missouri River at Outfall #014. The pumping system consists of a concrete sump at ground level used to collect water pumped from the underground mine and a pumping system to pump the water from the sump to the Missouri River.

Design Flow: 0.864 MGD

Legal Description: SW ¼, SW ¼, Sec 24, T50N, R32W, Jackson County

UTM Coordinates: X = 377314, Y = 4333933

Receiving Stream: Missouri River (P)

First Classified Stream and ID: Missouri River (P) (0356) 303(d)

USGS Basin & Sub-watershed No.: 10300101-0305

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					Page 3 of 7	
					PERMIT NUMBER MO-0002666	
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 <b>September 1, 2014</b> , 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 #006 (Note 1)</u>						
Flow	MGD	*			once/quarter**	24 hr. estimate
Total Suspended Solids	mg/L	50			once/quarter**	grab
pH	SU	***			once/quarter**	grab
Settleable Solids	mL/L/hr	1.5			once/quarter**	grab
Oil & Grease	mg/L	15			once/quarter**	grab
MONITORING REPORTS SHALL BE SUBMITTED <b>QUARTERLY</b> ; THE FIRST REPORT IS DUE <b>JANUARY 28, 2015</b> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

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		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #007 (Note 1)</u>						
Flow	MGD	*		*	once/quarter**	24 hr. estimate
Total Suspended Solids	mg/L	50		50	once/quarter**	grab
pH	SU	***		***	once/quarter**	grab
Settleable Solids	mL/L/hr	1.5		1.0	once/quarter**	grab
Oil & Grease	mg/L	15		10	once/quarter**	grab
MONITORING REPORTS SHALL BE SUBMITTED <b>QUARTERLY</b> ; THE FIRST REPORT IS DUE <b>JANUARY 28, 2015</b> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

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		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #012 (Note 1)</u>						
Flow	MGD	*			once/quarter**	24 hr. estimate
Total Suspended Solids	mg/L	50			once/quarter**	grab
pH	SU	***			once/quarter**	grab
Settleable Solids	mL/L/hr	1.5			once/quarter**	grab
Oil & Grease	mg/L	15			once/quarter**	grab
Precipitation	Inches	*			once/quarter**	grab
MONITORING REPORTS SHALL BE SUBMITTED <b>QUARTERLY</b> ; THE FIRST REPORT IS DUE <b>JANUARY 28, 2015</b> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

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		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #014 (Note 1)</u>						
Flow	MGD	*		*	once/quarter**	24 hr. total
Total Suspended Solids	mg/L	50		50	once/quarter**	grab
pH	SU	***		***	once/quarter**	grab
Total Chloride	mg/L	21,214		18,234	once/quarter**	grab
Total Sulfate	mg/L	*		*	once/quarter**	grab
Oil & Grease	mg/L	15		10	once/quarter**	grab
MONITORING REPORTS SHALL BE SUBMITTED <b>QUARTERLY</b> ; THE FIRST REPORT IS DUE <b>JANUARY 28, 2015</b> . 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 1</u> STANDARD CONDITIONS DATED <u>AUGUST 1, 2014</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS cont.

- \* Monitoring requirement only.
- \*\* See table below for quarterly sampling.
- \*\*\* 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.

**C. SPECIAL CONDITIONS (continued)**

<b>Minimum Sampling Requirements</b>			
<b>Quarter</b>	<b>Months</b>	<b>Effluent Parameters</b>	<b>Report is Due</b>
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: Any untreated overflow from facility's designed, constructed, and operated to treat the volume of runoff from materials storage piles which is associated with a 10-year, 24-hour rainfall event shall not be subject to the pH and TSS limitations stipulated (40 CFR 411.37(b)).

**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. Water Quality Standards
  - (a) To the extent required by law, 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)**

5. 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.

6. Report as no-discharge when a discharge does not occur during the report period.

7. It is a violation of the Missouri Clean Water Law to fail to pay fees associated with this permit (644.055 RSMo).

8. The permittee shall develop and implement a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must be prepared 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 SWPPP must be reviewed and updated, if needed, every five (5) 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 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. 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 #10.
  - b. The SWPPP must include a schedule for once per month site inspections and brief written reports. The inspections must include observation and evaluation of BMP effectiveness. Deficiencies must be corrected within seven (7) days and the actions taken to correct the deficiencies shall be included with the written report, including photographs. Any corrective measure that necessitates major construction may also need a construction permit. 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 DNR personnel upon request.
  - c. A provision for designating an individual to be responsible for environmental matters.
  - d. 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.
9. An individual shall be designated by the permittee as responsible for environmental matters. Staff of the permitted facility shall inspect, on workdays, any structures that function to prevent pollution of storm water or to remove pollutants from storm water and of the facility in general to ensure that any Best Management Practices are continually implemented and effective.
10. 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 trash from entry into waters of the state.
  - e. Provide sediment and erosion control sufficient to prevent or control sediment loss off of the property. This could include the use of straw bales, silt fences, or sediment basins, if needed, to comply with effluent limits.

**C. SPECIAL CONDITIONS (continued)**

11. The purpose of the SWPPP and the BMPs listed herein is the prevention of pollution of waters of the state. A deficiency of a BMP means it was not effective in preventing pollution [10 CSR 20-2.010(56)] of waters of the state, and corrective actions means the facility took steps to eliminate the deficiency.
12. 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
13. Before releasing water that has accumulated in secondary containment areas it must be examined for hydrocarbon odor and presence of a sheen. If the presence of hydrocarbons is indicated, this water must be tested for Total Petroleum Hydrocarbons (TPH). The suggested analytical method for testing TPH is non-Halogenated Organic by Gas Chromatography method 8015 (also known as OA1 and OA2). However, if the permittee so desires to use other approved testing methods (i.e. EPA 1664), they may do so. If the concentration for TPH exceeds 10mg/L, the water shall be taken to a WWTP for treatment.

**Missouri Department of Natural Resources**  
**FACT SHEET**  
**FOR THE PURPOSE OF RENEWAL**  
**OF**  
**MO-0002666**  
**AUDUBON MATERIALS, LLC – SUGAR CREEK 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 an Industrial Facility.

**Part I – Facility Information**

Facility Type: IND  
Facility SIC Code(s): 3241

**Facility Description:**

The original cement manufacturing facility (River Facility) and the mine property were purchased by Audubon Materials LLC in 2012. Limestone is the main raw material employed in cement manufacturing, and it is mined on site. The manufacturing process consists of grinding limestone and other imported raw materials including bottom ash, boiler slag, clay, foundry sand, silica, sandstone, and/or iron mill scale into a raw mix. The raw mix is fed into the pyro-processing system preheat tower and kiln to produce clinker. Coal, petroleum (pet) coke, natural gas, and/or other alternative fuels are used to fire the pyro-processing system. Alternative fuels may include landfill gas, cellulose, fabric, rubber, paper, cardboard, soybeans, and corn. Clinker, limestone, and gypsum are ground into the finished product, Portland cement. The cement manufacturing process requires the storage of raw materials, fuels, and finished product. The facility consists of the following operational and storage areas:

**River Facility (Plant 1)**

The pyro-processing system located at the River Facility was taken offline in late 2002, and has subsequently been decommissioned. Current operations conducted at the River facility include:

- Gypsum rock delivery, unloading and storage;
- Clinker receiving and storage;
- Finish milling; and
- Cement storage and shipping.

**Cement Plant (Plant 2)**

Operations conducted at Cement Plant include the following:

- Fuel and raw material delivery, unloading, and storage;
- Raw material grinding and raw mix storage;
- Fuel grinding and storage;
- Pyro-processing;
- Clinker cooling, transportation and storage;
- Finish milling;
- Cement storage and shipping; and
- Underground mining.

**Outfall #006** – This is a stormwater outfall. Stormwater runoff from the River Facility discharges to two location: outfall #006 and outfall #012. The River Facility is located approximately one mile west of the cement production area of the main facility, and ceased production operation in late 2002. Current activities at the facility consist of delivery, unloading, and storage of cement and clinker. Stormwater runoff from the River Facility is directed to outfall #006 by sheet flow and a series of drainage ditches and culvert pipes. Stormwater runoff that discharges from outfall #006 is generated in several areas including the former kiln area of the River Facility, a loess bluff to the east of the River Facility, miscellaneous areas to the west of the River Facility that drain to the various ditches and culverts, and portions of the railroad that is not part of Audubon’s property. Outfall #006 which was previously part of the old plant discharges to the Missouri River.

**Outfall #007** – This outfall is a sediment pond which receives stormwater, compressor condensate, and non-contact cooling water. The cement production area stormwater runoff is directed to perimeter ditches either by sheet flow or through culverts that conveys stormwater collected by several drop inlet catch basins within the production area. The perimeter drainage ditches convey the majority of stormwater collected in the production area to a vegetated swale that joins with a quarry area drainage ditch, and ultimately drains to the facility’s primary site detention pond to the northeast of the production area. Outfall #007 is located on the discharge outlet of the detention pond. The pond discharges to a tributary to Mill Creek.

**Outfall #012** – This is a stormwater outfall. Stormwater runoff from the River Facility discharges to two location: outfall #006 and outfall #012. The River Facility is located approximately one mile west of the cement production area of the main facility, and ceased production operation in late 2002. Current activities at the facility consist of delivery, unloading, and storage of cement and clinker. Flow to outfall #012 flows through a series of areas that act similar to wetlands and naturally remove the sediment that may be carried in the stormwater runoff. Outfall #012 which was previously part of the old plant discharges to the Missouri River.

**Outfall #014** – Mine dewatering. Groundwater is pumped from the mine dewatering system from the quarry located above the mine directly to the Missouri River at outfall #014. The discharged groundwater contains naturally occurring chlorides. The pumping system consists of a concrete sump to collect water pumped from the mine and a pumping system to pump the water up out of the quarry and over to the Missouri River bluff to the Missouri River floodplain. The pipeline consists of approximately 6,500 feet of a 6-inch diameter pressurized line. Existing data indicates the mine dewatering system pumps an average of 50 gallons per minute (gpm) per day and pumps at a flow rate of 150 gpm when the pump operates.

On April 15, 2014, the facility submitted the results of a Cormix study conducted by Bartlett and West. According to 10 CSR 7.031(5)4.B.(III)(b) specific mixing zone studies can justify more dilution than the default one-tenth of the mixing zone. The results of the study were used to calculate the chloride limit for this permit.

**February 9, 2010 Permit Modification: Addition of Outfall #014**

Outfall #014—Mine infiltration dewatering flow has historically been discharged through the existing Outfall #007, along with non-contact cooling water and stormwater runoff via a sedimentation basin. This discharge has gone the appropriate Antidegradation review and has been approved as minimally degrading for chlorides in the Missouri River. The facility has proposed the following modification as written in the request for permit modification.

“Mine infiltration water will be pumped to a collection pond on the surface of the mine quarry adjacent to the main production shaft. Water from the mine water pond will be pumped to the Missouri River through a 6-inch diameter, schedule DR17, high density polyethylene (HDPE) pipe located on the base of the quarry. The pressure line will be routed through a portal to the old cement plant. The line will exit the ground at the pipe rack (which connects to the old plant to the barge facility) and will cross over the BNSF railroad tracks and Cement City Drive on the pipe rack. The pipe will discharge into the Missouri River from the south side of the barge dock cofferdam. The mine water will flow either onto riprap located downstream of the barge facility, or directly into the river, depending on the elevation of the river.”

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

No.

Application Date: 4/15/12

Expiration Date: 6/26/12

Last Inspection: 4/01/10

In Compliance;

Non-Compliance

**OUTFALL(S) TABLE:**

OUTFALL	DESIGN FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE	DISTANCE TO CLASSIFIED SEGMENT (MI)
#006	0.19	BMP	Stormwater	0.1
#007	56	BMP/IND	Non-contact cooling water/Stormwater	0.3
#012	0.11	BMP	Stormwater	0.1
#014	0.33	IND/Primary	Mine Dewatering	0.0

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

This facility discharges to a 2006 303(d) listed stream. The U.S. Environmental Protection Agency, or EPA, approved the TMDL document for the Missouri River, WBIDs 0226, 0356, 0701 and 1604, across 25 counties; Atchison to St. Louis counties for Chlordane and Polychlorinated biphenyls, or PCBs. <http://dnr.mo.gov/env/wpp/tmdl/0226-0356-0701-1604-missouri-r-record.htm>

**Cement Manufacturing** has a Federal Effluent Limits Guidelines for TSS and pH per 40 CFR 411.37 which states that:

*(a) Subject to the provisions of paragraph (b) of this section, the following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best conventional pollutant control technology.*

<i>Effluent characteristic</i>	<i>Effluent limitations</i>
<i>TSS</i>	<i>Not to exceed 50 mg/l.</i>
<i>pH</i>	<i>Within the range 6.0 to 9.0.</i>

*(b) Any untreated overflow from facilities designed, constructed and operated to treat the volume of runoff from materials storage piles which results from a 10-year, 24-hour rainfall event shall not be subject to the pH and TSS limitations stipulated in paragraph (a) of this section.*

Below is the facility’s expanded effluent testing (Form C) conducted by Pace Analytical Services, Inc. The facility stated that no toxic pollutants or hazardous substances are expected to be present in the discharge wastewater.

Parameter	Outfall #006	Outfall #007	Outfall #012	Outfall #014
<b>Total Suspended Solids</b>	1,120 mg/L	130 mg/L	982 mg/L	49 mg/L
<b>pH</b>	7.6 - 8.3	7.42 - 8.4	7.42 - 11.0	7.9 - 8.2
<b>Oil &amp; Grease</b>	29.9 mg/L	8 mg/L	2.5 mg/L	8 mg/L

**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 20-9.020(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 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 1<sup>st</sup> 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:**

WATERBODY NAME	CLASS	WBID	DESIGNATED USES*	12-DIGIT HUC**
Unnamed Tributary to Mill Creek	U	n/a	General Criteria	10300101-0305
Missouri River	P	356	IRR, LWV, AQL, SCR, DWS, IND, 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).
- \*\* - Hydrological Unit Code
- \*\*\* - UAA has not been conducted

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

RECEIVING STREAM (U, C, P)	LOW-FLOW VALUES (CFS)	
	7Q10	30Q10
Unnamed Tributary to Mill Creek (P)	0	0
Missouri River (P)	18585	19785

Low flow values calculated using USGS Gage 06893000 Missouri River at Kansas City 06/02/1995 – 06/02/2014. Missing data from 1994 prevented calculating the value using later historical records.

**MIXING CONSIDERATIONS TABLE:**

MIXING ZONE (CFS) [10 CSR 20-7.031(4)(A)4.B.(III)(a)]		ZONE OF INITIAL DILUTION (CFS) <sup>¥</sup> [10 CSR 20-7.031(4)(A)4.B.(III)(b)]		
7Q10	30Q10	1Q10	7Q10	30Q10
4646	4946	440	465	495

<sup>¥</sup>On April 15, 2014, the facility submitted the results of a Cormix study conducted by Bartlett and West. According to 10 CSR 7.031(5)4.B.(III)(b) specific mixing zone studies can justify more dilution than the default one-tenth of the mixing zone. The results of the study were used to calculate the chloride limit for this permit.

**MIXING CONSIDERATIONS THERMAL:**

Missouri’s Water Quality Standards [10 CSR 20-7.031(4)(A)1.], specifically state that mixing considerations for toxics do not apply to thermal mixing considerations and that thermal mixing considerations are located in [10 CSR 20-7.031(4)(D)6.], which states thermal mixing considerations are limited to 25% of the cross-sectional area or volume of a river, unless a biological survey performed in response to 316(a) of the Clean Water Act indicate no significant adverse effect on aquatic life. For the purpose of mixing considerations, the Department typically uses the 25% of the daily flow vs. cross-sectional area.

**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.

- Information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance. The facility submitted results of a Cormix model that indicated higher limits for chloride are allowable per 10 CSR 7.031(5)4.B.(III)(b).

**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.

**BIOSOLIDS & SEWAGE SLUDGE:**

Biosolids are solid materials resulting from domestic wastewater treatment that meet federal and state criteria for beneficial uses (i.e. fertilizer). 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. Additional information regarding biosolids and sludge is located at the following web address: <http://dnr.mo.gov/env/wpp/pub/index.html>, items WQ422 through WQ449.

Not applicable; This condition is not applicable to the permittee for this 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.

Not Applicable; The permittee/facility is not currently under Water Protection Program enforcement action.

**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)].

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 chloride. Based on default assumptions this facility has the potential to exceed water quality standards. However, chloride limits were established using Cormix results.

**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 (BOD<sub>5</sub>) and Total Suspended Solids (TSS) for Publicly Owned Treatment Works (POTWs)/municipals.

Not Applicable; Influent monitoring is not being required to determine percent removal.

**SANITARY SEWER OVERFLOWS (SSO) AND INFLOW AND INFILTRATION (I&I):**

Sanitary Sewer Overflows (SSOs) are defined as an untreated or partially treated sewage release are considered bypassing under state regulation [10 CSR 20-2.010(11)] and should not be confused with the federal definition of bypass. SSO's have a variety of causes including blockages, line breaks, and sewer defects that allow excess storm water and ground water to (1) enter and overload the collection system, and (2) overload the treatment facility. Additionally, SSO's can be also be caused by lapses in sewer system operation and maintenance, inadequate sewer design and construction, power failures, and vandalism. SSOs also include overflows out of manholes and onto city streets, sidewalks, and other terrestrial locations.

Additionally, Missouri RSMo §644.026.1 mandates that the Department require proper maintenance and operation of treatment facilities and sewer systems and proper disposal of residual waste from all such facilities.

- 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.

Not Applicable; This permit does not contain an SOC.

**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).

Number of Samples “n”:

Additionally, in accordance with the TSD for water quality-based permitting, effluent quality is determined by the underlying distribution of daily values, which is determined by the Long Term Average (LTA) associated with a particular Wasteload Allocation (WLA) and by the Coefficient of Variation (CV) of the effluent concentrations. Increasing or decreasing the monitoring frequency does not affect this underlying distribution or treatment performance, which should be, at a minimum, be targeted to comply with the values dictated by the WLA. Therefore, it is recommended that the actual planned frequency of monitoring normally be used to determine the value of “n” for calculating the AML. However, in situations where monitoring frequency is once per month or less, a higher value for “n” must be assumed for AML derivation purposes. Thus, the statistical procedure being employed using an assumed number of samples is “n = 4” at a minimum. For Total Ammonia as Nitrogen, “n = 30” is used.

**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.

**WHOLE EFFLUENT TOXICITY (WET) TEST:**

A WET test is a quantifiable method of determining if a discharge from a facility may be causing toxicity to aquatic life by itself, in combination with or through synergistic responses when mixed with receiving stream water.

Not Applicable; At this time, the permittee is not required to conduct WET test for this facility.

**40 CFR 122.41(M) - BYPASSES:**

The federal Clean Water Act (CWA), Section 402 prohibits wastewater dischargers from “bypassing” untreated or partially treated sewage (wastewater) beyond the headworks. A bypass is defined as an intentional diversion of waste streams from any portion of a treatment facility, [40 CFR 122.41(m)(1)(i)]. Additionally, Missouri regulation 10 CSR 20-2.010(11) defines a bypass as the diversion of wastewater from any portion of wastewater treatment facility or sewer system to waters of the state. Only under exceptional and specified limitations do the federal regulations allow for a facility to bypass some or all of the flow from its treatment process. Bypasses are prohibited by the CWA unless a permittee can meet all of the criteria listed in 40 CFR 122.41(m)(4)(i)(A), (B), & (C). Any bypasses from this facility are subject to the reporting required in 40 CFR 122.41(l)(6) and per Missouri’s Standard Conditions I, Section B, part 2.b. Additionally, Anticipated Bypasses include bypasses from peak flow basins or similar devices designed for peak wet weather flows.

- Not Applicable; This facility does not bypass.

**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; This facility discharges to a 2006 303(d) listed stream. The U.S. Environmental Protection Agency, or EPA, approved the TMDL document for the Missouri River, WBIDs 0226, 0356, 0701 and 1604, across 25 counties; Atchison to St. Louis counties for Chlordane and Polychlorinated biphenyls, or PCBs. <http://dnr.mo.gov/env/wpp/tmdl/0226-0356-0701-1604-missouri-r-record.htm>

**Part V – Effluent Limits Determination**

**EFFLUENT LIMITATIONS TABLE: OUTFALLS #006 & #007**

PARAMETER	UNIT	DAILY MAXIMUM	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	MGD	*	*	NO	*
TOTAL SUSPENDED SOLIDS	MG/L	50	50	NO	50/50
PH	SU	6.5-9.0	6.5-9.0	NO	6.5-9.0
SETTLABLE SOLIDS	ML/L/HR	1.5	1.0	NO	1.5/1.0
OIL & GREASE	MG/L	15	10	NO	15/10

\* - Monitoring requirement only.

**OUTFALLS #006 & #007 – DERIVATION AND DISCUSSION OF LIMITS:**

- **Flow.** Retained from previous permit. 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.
- **Total Suspended Solids (TSS).** Retained from previous permit. Effluent limitations of 50 mg/L maximum daily limit and 50 mg/L monthly average have been retained from previous state operating permit. [Cement Manufacturing; 40 CFR 411.37(a)]
- **pH.** Retained from previous permit. Water contaminants shall not cause the pH to be outside the range of 6.5-9.0 standard pH units {10 CSR 20-7.031(4)(E)}.
- **Oil & Grease.** Retained from previous permit. Effluent limitations of 10 mg/L monthly average and 15 mg/L daily maximum for this conventional pollutant have been retained from previous state operating permit for protection of aquatic life.
- **Settleable Solids.** Retained from previous permit. Effluent limitations of 1.5 mg/L daily maximum and 1.0 mg/L monthly average have been retained from previous state operating permit.
- **Precipitation.** Parameter removed from these outfalls. One precipitation monitoring is sufficient for the facility.

**EFFLUENT LIMITATIONS TABLE: OUTFALL #012**

PARAMETER	UNIT	DAILY MAXIMUM	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	MGD	*	*	NO	*
TOTAL SUSPENDED SOLIDS	MG/L	50	50	YES	100/50
PH	SU	6.5-9.0	6.5-9.0	NO	6.5-9.0
SETTLABLE SOLIDS	ML/L/HR	1.5	1.0	NO	1.5/1.0
OIL & GREASE	MG/L	15	10	NO	15/10
PRECIPITATION	INCHES	*	*	NO	*

\* - Monitoring requirement only.

**OUTFALL #012 – DERIVATION AND DISCUSSION OF LIMITS:**

- **Flow.** Retained from previous permit. 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.
- **Total Suspended Solids (TSS).** The previous state operating permit effluent limitations for outfall 012 were 100 mg/L daily maximum and 50 mg/L monthly average. However, TSS limits will be adjusted to not exceed 50 mg/L to comply with the federal effluent limits guidelines for TSS under cement manufacturing [40 CFR 411.37(a)].
- **pH.** Retained from previous permit. Water contaminants shall not cause the pH to be outside the range of 6.5-9.0 standard pH units { 10 CSR 20-7.031(4)(E).
- **Oil & Grease.** Retained from previous permit. Effluent limitations of 10 mg/L monthly average and 15 mg/L daily maximum for this conventional pollutant have been retained from previous state operating permit for protection of aquatic life.
- **Settleable Solids.** Retained from previous permit. Effluent limitations of 1.5 mg/L daily maximum and 1.0 mg/L monthly average have been retained from previous state operating permit.
- **Precipitation.** Retained from previous permit. Monitoring requirement only.

**EFFLUENT LIMITATIONS TABLE: OUTFALL #014**

PARAMETER	UNIT	DAILY MAXIMUM	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	MGD	*	*	NO	*
TOTAL SUSPENDED SOLIDS	MG/L	50	50	YNo	50/50
PH	SU	6.5-9.0	6.5-9.0	NO	6.5-9.0
TOTAL CHLORIDE	MG/L	21,214	18,294	YES	9,321/4,601
TOTAL SULFATES	MG/L	*	*	NEW	****
OIL & GREASE	MG/L	15	10	NO	15/10

\* - Monitoring requirement only.

\*\*\*\* - Parameter not previously established.

**OUTFALL #014 – DERIVATION AND DISCUSSION OF LIMITS (SEE APPENDIX: WATER QUALITY AND ANTIDegradation REVIEW):**

- **Flow.** Retained from previous permit. 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.
- **Total Suspended Solids (TSS).** Retained from previous permit.
- **pH.** Retained from previous permit. Water contaminants shall not cause the pH to be outside the range of 6.5-9.0 standard pH units per 10 CSR 20-7.031(4)(E).

- **Chloride.** On April 15, 2014, the facility submitted the results of a Cormix study conducted by Bartlett and West. According to 10 CSR 7.031(5)4.B.(III)(b) specific mixing zone studies can justify more dilution than the default one-tenth of the mixing zone. The results of the study were used to calculate the chloride limit for this permit. Based on a worst case scenario discharge of 15,000 mg/L of chloride, the model found the chloride concentration at the downstream edge of the mixing zone was 181 mg/L. The dilution ratio of 15,000/181 was used to calculate the WLA.

Chronic WQS = 230 mg/L

Acute WQS = 860 mg/L

Chronic WLA =  $230 * 15,000 / 181 = 19,060$  mg/L

Acute WLA =  $860 * 15,000 / 181 = 71,271$  mg/L

$LTA_c = 19,060 (0.857) = 16,334$  mg/L

[CV = 0.135, 99<sup>th</sup> Percentile]

$LTA_a = 71,271 (0.738) = 52,598$  mg/L

[CV = 0.135, 99<sup>th</sup> Percentile]

Use most protective number of  $LTA_c$  or  $LTA_a$ .

$MDL = 16,334 (1.36) = 22,214$  mg/L

[CV = 0.135, 99<sup>th</sup> Percentile]

$AML = 16,334(1.12) = 18,294$  mg/L

[CV = 0.135, 95<sup>th</sup> Percentile, n = 4]

- **Sulfate.** Monitoring requirement only. Chloride criteria determination is dependent on the sulfate concentration upstream of the discharge and on the hardness of water.
- **Oil & Grease.** Retained from previous permit. Effluent limitations of 10 mg/L monthly average and 15 mg/L daily maximum for this conventional pollutant have been retained from previous state operating permit for protection of aquatic life.
- **Precipitation.** Parameter removed from this outfall. One precipitation monitoring is sufficient for the facility.

## **Part VI – Finding of Affordability**

Pursuant to Section 644.145, RSMo, the Department is required to determine whether a permit or decision is affordable and makes a finding of affordability for certain permitting and enforcement decisions. This requirement applies to discharges from combined or separate sanitary sewer systems or publically-owned treatment works.

Not Applicable;

The Department is not required to determine findings of affordability because the facility is not a **combined or separate sanitary sewer system for a publically-owned treatment works**.

## **Part VII – 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 Missouri Department of Natural Resources is transitioning from the traditional methods with which Missouri's water resources have been managed to a Watershed Based Management (WBM) approach. The WBM approach will manage watersheds on the eight-digit Hydrological Unit Code (HUC8) scale. As permitting and permit synchronization is a key aspect of successful implementation of a Watershed Management Plan (WMP), the same HUC8 groups that will move through the WBM cycle will have their permit expirations and issuances synchronized in the same fiscal year. The typical five-year term of the permit issuances aligns with the proposed five-year WBM cycle and the two processes will be intimately tied together.

### **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.

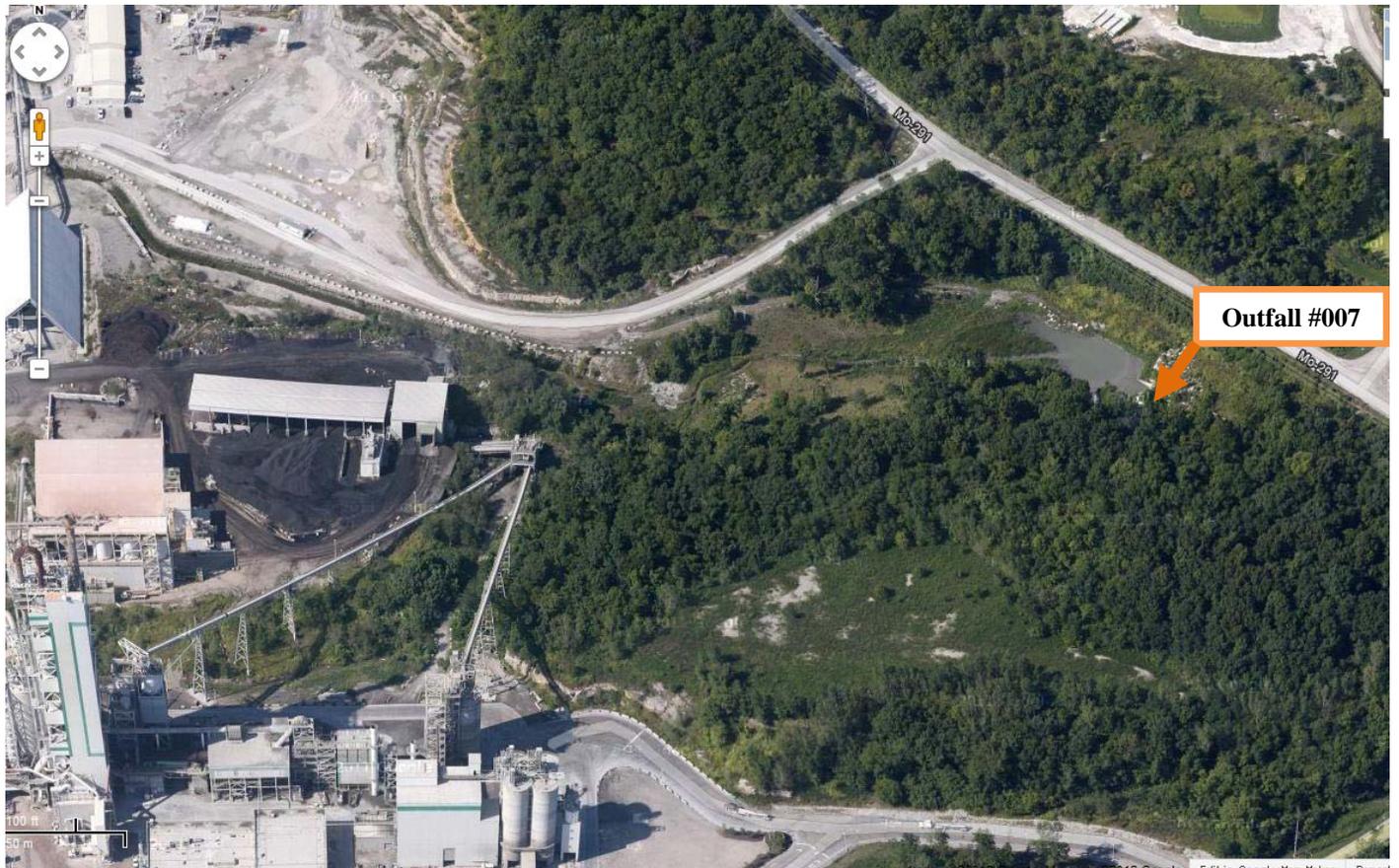
- The Public Notice period for this operating permit was from 06/20/2014 to 07/21/2014. No responses were received.

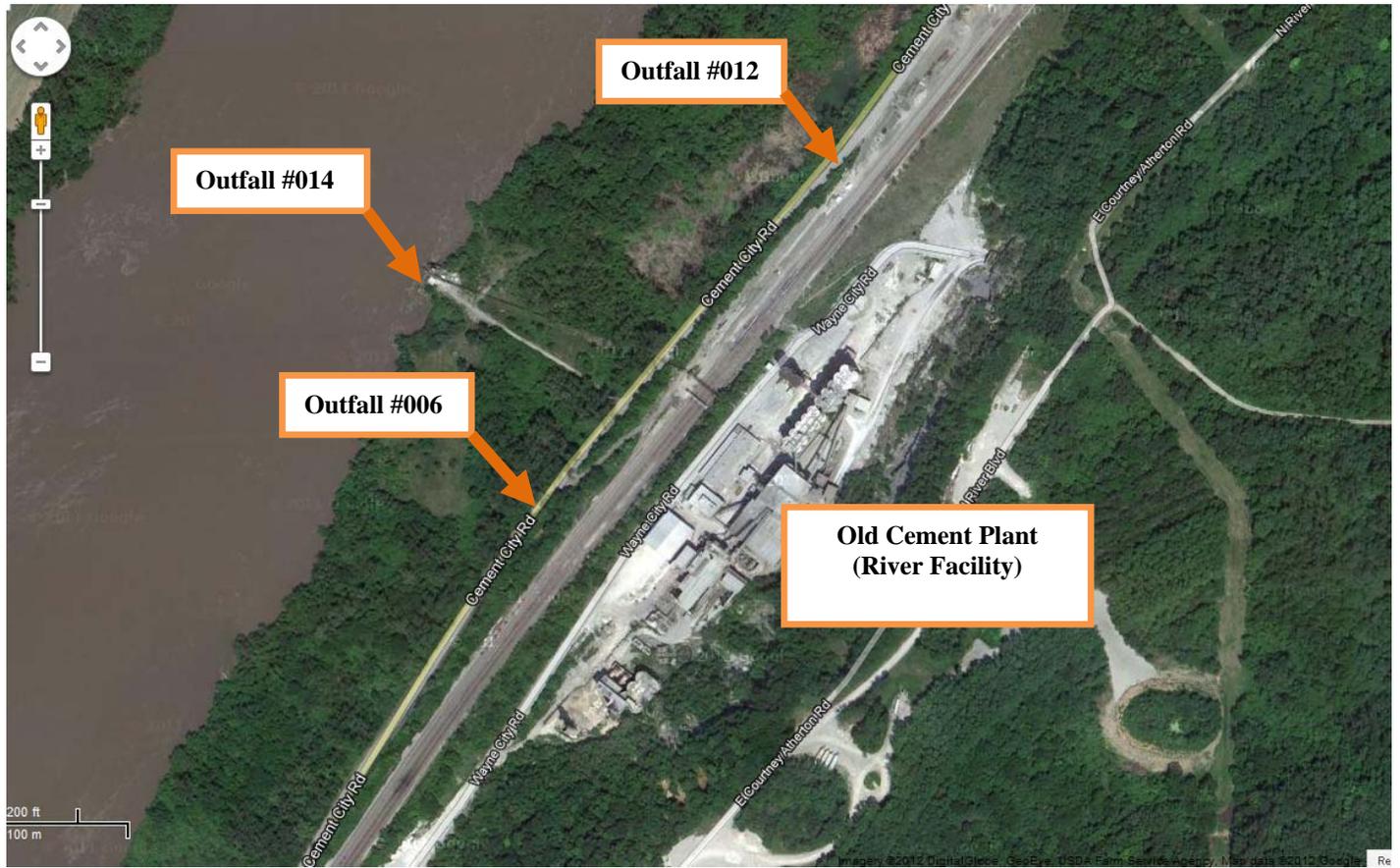
**DATE OF FACT SHEET: AUGUST 18, 2014**

### **COMPLETED BY:**

**AMANDA SAPPINGTON, ENVIRONMENTAL SPECIALIST IV**  
**NPDES PERMITS UNIT**  
**WATER PROTECTION PROGRAM**  
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**Part VIII – Appendix 1: Facility And Outfall Views**







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(a)(1);
    - 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 permittees 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.



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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.

AP 13718



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH  
(SEE MAP FOR APPROPRIATE REGIONAL OFFICE)  
APPLICATION FOR TRANSFER OF OPERATING PERMIT

FOR AGENCY USE ONLY	
CHECK NO.	013161 LV
DATE RECEIVED	11/5/12
FEE SUBMITTED	875.00

*[Handwritten initials]*

**NOTE** PLEASE READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM.  
1.00 - 4.00 TO BE COMPLETED BY CURRENT PERMITTEE (PRESENT OWNER/SELLER). THE FOLLOWING ITEMS PRESENTLY APPLY TO THIS FACILITY: (SEE INSTRUCTIONS FOR APPROPRIATE FEE TO BE SUBMITTED WITH APPLICATION.)

**1.00 FACILITY**

NAME Lafarge North America, Inc. - Sugar Creek Plant		TELEPHONE NUMBER (816) 257-5178	
ADDRESS 2200 Courtney Road	CITY Sugar Creek	STATE MO	ZIP 64050

**2.00 CURRENT OWNER**

NAME Lafarge North America, Inc.		PHONE (816) 257-5178	
		E-MAIL	
ADDRESS 2200 Courtney Road	CITY Sugar Creek	STATE MO	ZIP 64050

**3.00 CONTINUING AUTHORITY:** (If same as owner, write same.)

NAME Same		TELEPHONE NUMBER	
ADDRESS	CITY	STATE	ZIP

**4.00 SIGNATURE**

I CERTIFY THAT I AM FAMILIAR WITH THE INFORMATION GIVEN ABOVE, THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF SUCH INFORMATION IS TRUE, COMPLETE AND ACCURATE, AND UNTIL TRANSFER APPROVAL, I AGREE TO CONTINUE TO ABIDE BY THE MISSOURI CLEAN WATER LAW AND ALL RULES, REGULATIONS, ORDERS AND DECISIONS, SUBJECT TO ANY LEGITIMATE APPEAL AVAILABLE UNDER THE MISSOURI CLEAN WATER LAW, OF THE MISSOURI CLEAN WATER COMMISSION.

NAME AND OFFICIAL TITLE (TYPE OR PRINT) Bill Miller, <del>Secretary</del> <i>President</i>	PHONE NO. (AREA CODE & NO.) (703) 480-3613
SIGNATURE <i>[Handwritten Signature]</i>	DATE SIGNED 11/2/12

RECEIVED

NOV 13 2012

WATER PROTECTION PROGRAM

RECEIVED

NOV 05 2012

KANSAS CITY REGIONAL OFFICE

THE FOLLOWING ITEMS (5.00-10-00) WILL APPLY AFTER COMPLETION OF TRANSFER (SALE) AND ARE TO BE COMPLETED BY THE APPLICANT FOR TRANSFER OF OPERATING PERMIT (BUYER) OR AUTHORIZED AGENT.

**5.00 FACILITY**

NAME Audubon Materials LLC - Sugar Creek Plant		NPDES NUMBER MO- 0002666	TELEPHONE NUMBER (816) 257-5178	
ADDRESS 2200 Courtney Road	CITY Sugar Creek		STATE MO	ZIP 64050

**6.00 FUTURE OWNER**

NAME Audubon Materials LLC		TELEPHONE NUMBER 816-257-5178		
ADDRESS 2200 Courtney Road	CITY Sugar Creek		STATE MO	ZIP 64050

**7.00 CONTINUING AUTHORITY: (if same as owner, write same)**

NAME Same		TELEPHONE NUMBER		
ADDRESS	CITY	STATE	ZIP	

**8.00 FACILITY CONTACT**

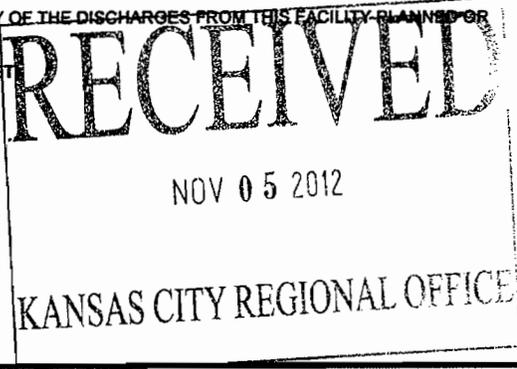
NAME Steve Kidwell		TELEPHONE NUMBER 816-257-3607		
TITLE Environmental Manager				

**9.00 ADDITIONAL INFORMATION**

ANTICIPATED EFFECTIVE DATE OF TRANSFER IN OWNERSHIP  
11/30/2012

ARE ANY CHANGES IN PRODUCTION, RAW MATERIALS OR IN THE QUANTITY OR QUALITY OF THE DISCHARGES FROM THIS FACILITY PLANNED OR ANTICIPATED?

YES     NO IF YES EXPLAIN (IF ADDITIONAL SPACE IS REQUIRED, ATTACH SHEET)



**10.00 SIGNATURE**

I CERTIFY THAT I AM FAMILIAR WITH THE INFORMATION GIVEN ABOVE, THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF SUCH INFORMATION IS TRUE, COMPLETE AND ACCURATE, AND UPON TRANSFER APPROVAL, I AGREE TO ABIDE BY THE MISSOURI CLEAN WATER LAW AND ALL RULES, REGULATIONS, ORDERS AND DECISIONS, SUBJECT TO ANY LEGITIMATE APPEAL AVAILABLE UNDER THE MISSOURI CLEAN WATER LAW, OF THE MISSOURI CLEAN WATER COMMISSION.

NAME AND OFFICIAL TITLE (TYPE OR PRINT) James Graess, Secretary    William R. Devlin (VICE PRESIDENT)		PHONE NO. (AREA CODE & NO.) 214-432-2000
SIGNATURE 		DATE SIGNED 11-2-2012

**PERMIT TRANSFER AGREEMENT  
(AUDUBON MATERIALS LLC)**

This PERMIT TRANSFER AGREEMENT ("Permit Transfer Agreement"), entered into as of October 31, 2012, by and between Lafarge North America Inc., a Maryland corporation ("Transferor") and Audubon Materials LLC, a Delaware limited liability company and wholly-owned subsidiary of Eagle Materials Inc., ("Transferee").

**WITNESSETH**

**WHEREAS**, in accordance with the terms and conditions of the Asset Purchase Agreement dated as of September 26, 2012 by and among Eagle Materials Inc., a Delaware corporation, Transferee, Lafarge Building Materials, Inc., an Alabama corporation, Transferor, Quicksilver 2005, LLC, a Delaware limited liability company, and Lafarge Midwest, Inc., a Delaware corporation, Transferor has agreed to transfer to Transferee and Transferee has agreed to accept from Transferor the following sites (the "Sites"), each of which is covered by a specific permit (the "Permits") issued by the agency identified below (the "Issuing Agency") and held by Transferor;

<b>Facility Name</b>	<b>Facility Address</b>	<b>Issuing Agency</b>	<b>Permit No.</b>
Wichita Cement Terminal (West Robbins)	130 W. MacArthur Wichita, Kansas Sedgwick County	State of Kansas Division of Health and Environment, Bureau of Water	I-AR94-PR07
Sugar Creek Cement Plant	2200 Courtney Road Sugar Creek, Missouri Jackson County	State of Missouri Department of Natural Resources, Clean Water Commission	MO-0002666
Sugar Creek Cement Plant (Sugar Creek Plant)	4201 North River Boulevard Sugar Creek, Missouri Jackson County	State of Missouri Department of Natural Resources, Air Pollution Control Program	OP2000099 Permit Amend. 0897-019 Permit Amend. 082004-016B
Sugar Creek Terminal	4200 Cement City Road Sugar Creek, Missouri Jackson County	State of Missouri Department of Natural Resources, Air Pollution Control Program	042004-010
Omaha Terminal	1160 Ida Plaza Omaha, Nebraska	City of Omaha Air Quality Control	O150SM

**WHEREAS**, subject to the satisfaction of the conditions set forth therein, the closing under the Asset Purchase Agreement (the "Closing") will occur on or after November 30, 2012;

**WHEREAS**, under the terms of the Asset Purchase Agreement, as of the Closing, Transferee will become the owner of the Sites and assume responsibility for the Permits; and

**WHEREAS**, as a condition to the transfer of the Permits, the parties are required to execute a written agreement containing a specific date of transfer of permit responsibility,

**RECEIVED**  
NOV 05 2012  
KANSAS CITY REGIONAL OFFICE

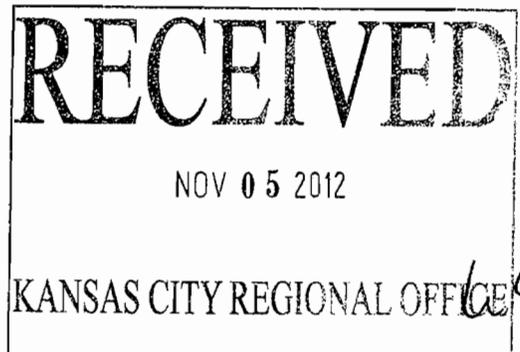
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coverage, and liability between the current and new permittee and maintain a copy of the agreement with the permit;

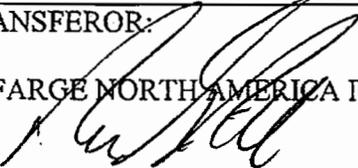
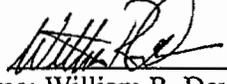
**NOW, THEREFORE**, in consideration of the foregoing and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Transferor and Transferee hereby agree as follows:

1. **EFFECTIVE DATE OF PERMIT TRANSFERS.** Transferor and Transferee agree that as of the Closing, the Permits are transferred from Transferor to Transferee.
2. **EFFECTIVE DATE OF PERMIT RESPONSIBILITY TRANSFER.** Transferor and Transferee further agree that, effective at Closing, responsibility for the Permits shall be transferred to Transferee. Transferor acknowledges to the Issuing Agencies that the Transferor will be liable for violations attributable up to the Closing and Transferee acknowledges to the Issuing Agencies that Transferee will be liable for violations attributable to the period after the Closing; provided, however, that nothing in this Permit Transfer Agreement is intended to modify, expand, or limit the rights and obligations of Transferor and Transferee to each other with respect to the Permits under the terms of the Asset Purchase Agreement. The Transferor and Transferee intend that the terms of this Permit Transfer Agreement are to be consistent with the provisions of the Asset Purchase Agreement, provided that in the event of any conflict or other inconsistency between this Permit Transfer Agreement and the Asset Purchase Agreement, as between Transferor and Transferee, the terms of the Asset Purchase Agreement shall prevail.
3. **COUNTERPARTS.** The parties agree that this Permit Transfer Agreement may be executed in two or more counterparts, each of which shall be deemed an original (whether such counterpart is originally executed or an electronic copy of an original), and all of which taken together shall constitute one instrument binding on all the parties, notwithstanding that all the parties are not signatories to the original or the same counterpart.
4. **GOVERNING LAW.** This Permit Transfer Agreement shall be governed by and construed in accordance with the laws of the State of Delaware, without regard to the principles of conflicts of law that would require the application of the laws of another jurisdiction.

*[Signature Page Follows]*



IN WITNESS WHEREOF, the parties have caused this Permit Transfer Agreement to be duly executed as of the date first above written.

TRANSFEROR: LAFARGE NORTH AMERICA INC. By: <u></u> Name: William G. Miller Title: VP and Associate General Counsel	TRANSFeree: KANSAS CITY AGGREGATE LLC By: <u></u> Name: William R. Devlin Title: Vice President
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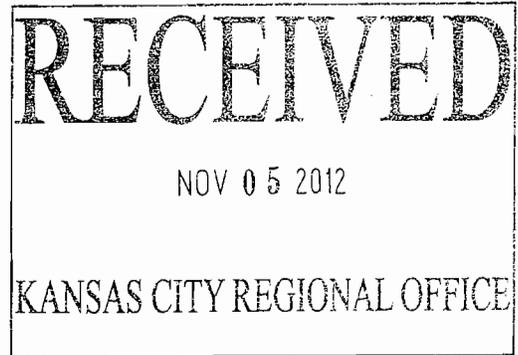
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NOV 05 2012  
KANSAS CITY REGIONAL OFFICE



November 2, 2012

VIA FEDEX

Kansas City Regional Office  
Missouri Department of Natural Resources  
500 NE Colbern Road  
Lee's Summit, MO 64086-4710



RE: Eagle Materials Inc. and Lafarge North America, Inc.  
Transfer of NPDES Permits - Sugar Creek Cement Plant and Sugar Creek Mine  
Stabilization Project  
Permit Numbers: MO0002666 and MO0135887

Dear Sir/Madam:

Eagle Materials Inc. is hereby requesting transfer of the Missouri NPDES Permits at the Lafarge North America, Inc. ("Lafarge") Sugar Creek Cement Plant. There are two permits, one for the cement plant and another for the mine stabilization project. Lafarge North America, Inc. currently holds the permits at the plant. Lafarge has entered into an agreement providing for the sale and transfer of certain of its assets, including the above-referenced facilities, to Eagle Materials Inc. or one of its subsidiaries. Eagle Materials Inc. ("Eagle") is a public company based in Dallas, Texas whose common stock is traded on the New York Stock Exchange under the symbol "EXP." In connection with the sale, we request that you transfer Lafarge's permit to Eagle's subsidiary, Audubon Materials LLC as of the closing date of November 30, 2012.

The facility name will become Audubon Materials LLC at the transfer closing date. The required transfer fees for both permits are also enclosed.

Please note that while this sale will affect the ownership of the permitted facility, Eagle does not expect it to have an effect on day-to-day operations under the Agreement.

The transfer of the permit is contingent on the closing of the transaction. We will keep the agency advised of any changes in, or more definitive information concerning, the proposed transfer date. If the transaction does not close, this request to transfer the permit shall be deemed withdrawn and any consent to the transfer will be of no force or effect whatsoever. Eagle and Lafarge will provide you written confirmation that the closing has occurred and will also notify you should the closing date of the sale change.

MDNR  
November 2, 2012  
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Thank you for your time and consideration of this matter. If you have any questions about the transfer, please contact me at 214-432-2015.

Sincerely,

A handwritten signature in black ink, consisting of a large, stylized 'F' followed by a cursive 'G' and a horizontal line extending to the right.

Franklin Green  
Vice President - Engineering

Enclosures

cc:

