STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION

MISSOURI STATE OPERATING PERMIT

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

Permit No.	MO-0128422
Owner:	Beton Development Company
Address:	21421 Truman Road, Independence, MO 64056
Continuing Authority:	Same as above
Address:	Same as above
Facility Name:	Barbour Concrete Company
Facility Address:	21421 Truman Road, Independence, MO 64056
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 FOR FACILITY DESCRIPTION

Process water is not authorized for discharge under this permit. Process water includes any water which contacts the industrial process, including water used to wash out concrete molds, water run through machinery, truck wash water with or without added detergents, municipal water which has been used in an industrial process, and others. This permit also does not authorize discharges of waste materials, such as concrete, into waters of the state. Washing waste concrete into waters of the state or in a location where it is likely to enter waters of the state, such as a drainage ditch, is prohibited by State Law and Regulations (644.051 RSMo, 10 CSR 20-6.010).

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

February 1, 2017
Effective Date

Harry D. Bozoian, Director, Department of Natural Resources

December 31, 2018
Expiration Date

David J. Lamb, Acting Director, Water Protection Program

FACILITY DESCRIPTION

Barbour Concrete manufactures custom precast concrete structures such as manholes and utility boxes. Materials used in production include cement, sand, and aggregate. Cement is stored in covered silos; sand and aggregate are stored in open top bins. Above ground storage tanks store curing agents and concrete additives under roof. Three petroleum ASTs are retained for fueling Barbour's equipment. All three are in secondary containment. Mixing of the concrete material, construction of steel reinforcing cages and casting of concrete structures is performed under a roof. A storage yard is used for finished products. The storage yard and other facility grounds are largely composed of compacted gravel and are subject to heavy truck traffic.

Process water is not authorized to be discharged at this facility. A pH neutralizer is added to the process water pit, and the treated water is recycled back into the industrial process. Industrial sludge/waste aggregate is not authorized to be land applied under this permit, and must be hauled by a contract hauler to a licensed receiving facility such as a landfill.

OUTFALL #001 – Stormwater; Pre-cast concrete structure manufacturer; SIC #3272
Receives stormwater from outdoor storage area, manufacturing buildings, petroleum ASTs, and truck transport areas

Legal Description:	NW¼, SW¼, Sec. 3, T49N, R31W, Jackson County
UTM Coordinates:	X = 385326, Y = 4327431
Receiving Stream:	Tributary to Spring Branch
First Classified Stream and ID:	8-20-13 MUDD V1.0 (C) 3960
USGS Basin & Sub-watershed No.:	Burr Oak Creek-Little Blue River (10300101-0207)
Est. flow in 10yr 24hr precipitation event:	0.83 MGD
Average Flow:	Dependent on precipitation

OUTFALL #002 – Stormwater; Pre-cast concrete structure manufacturer; SIC #3272
Receives stormwater from outdoor storage area and truck transport areas

Legal Description:	NW¼, SW¼, Sec. 3, T49N, R31W, Jackson County
UTM Coordinates:	X = 385306, Y = 4327407
Receiving Stream:	Tributary to Spring Branch
First Classified Stream and ID:	8-20-13 MUDD V1.0 (C) 3960
USGS Basin & Sub-watershed No.:	Burr Oak Creek-Little Blue River (10300101-0207)
Est. flow in 10yr 24hr precipitation event:	0.24 MGD
Average Flow:	Dependent on precipitation

OUTFALL #003 – Stormwater; Pre-cast concrete structure manufacturer; SIC #3272
Receives stormwater from outdoor storage area and truck transport areas

Legal Description:	NW¼, SW¼, Sec. 3, T49N, R31W, Jackson County
UTM Coordinates:	X = 385247, Y = 4327377
Receiving Stream:	Tributary to Spring Branch
First Classified Stream and ID:	8-20-13 MUDD V1.0 (C) 3960
USGS Basin & Sub-watershed No.:	Burr Oak Creek-Little Blue River (10300101-0207)
Est. flow in 10yr 24hr precipitation event:	0.18 MGD
Average Flow:	Dependent on precipitation

OUTFALL #004 – Stormwater; Pre-cast concrete structure manufacturer; SIC #3272
Receives stormwater from outdoor storage area and truck transport areas

Legal Description:	NW¼, SW¼, Sec. 3, T49N, R31W, Jackson County
UTM Coordinates:	X = 385138, Y = 4327501
Receiving Stream:	Tributary to Spring Branch
First Classified Stream and ID:	8-20-13 MUDD V1.0 (C) 3960
USGS Basin & Sub-watershed No.:	Burr Oak Creek-Little Blue River (10300101-0207)
Est. flow in 10yr 24hr precipitation event:	0.47 MGD
Average Flow:	Dependent on precipitation

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

OUTFALL #002, #003, #004 *Stormwater Only*	**TABLE A-1** **INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**					
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The interim effluent limitations shall become effective on **February 1, 2017** and remain in effect through **January 31, 2018**. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
EFFLUENT PARAMETERS	UNITS	INTERIM LIMITATIONS		BENCHMARKS	MONITORING REQUIREMENTS∞	
		DAILY MAXIMUM	MONTHLY AVERAGE		MEASUREMENT FREQUENCY◊	SAMPLE TYPE
PHYSICAL						
Flow	MGD	*		-	once/quarter	24 hr. est.
Precipitation	inches	*		-	once/quarter	measured
CONVENTIONAL						
Chemical Oxygen Demand	mg/L	*		-	once/quarter	grab
Oil & Grease	mg/L	*		-	once/quarter	grab
pH Ω	SU	*		-	once/quarter	grab
Settleable Solids	mL/L/hr	*		-	once/quarter	grab
Total Suspended Solids	mg/L	*		-	once/quarter	grab
METALS						
Aluminum, Total Recoverable	µg/L	*		-	once/quarter	grab
Iron, Total Recoverable	µg/L	**		4000	once/quarter	grab
Lead, Total Recoverable	µg/L	*		-	once/quarter	grab
OTHER						
Naphthalene	µg/L	*		-	once/quarter	grab
MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE APRIL 28, 2017. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

See notes on page 4

OUTFALL #002, #003, #004 *Stormwater Only*	**TABLE A-2** **FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on **February 1, 2018** and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

EFFLUENT PARAMETERS	UNITS	FINAL LIMITATIONS		BENCHMARKS	MONITORING REQUIREMENTS[∞]	
		DAILY MAXIMUM	MONTHLY AVERAGE		MEASUREMENT FREQUENCY[◊]	SAMPLE TYPE
PHYSICAL						
Flow	MGD	*		-	once/quarter	24 hr. est.
Precipitation	inches	*		-	once/quarter	measured
CONVENTIONAL						
Chemical Oxygen Demand	mg/L	*		-	once/quarter	grab
Oil & Grease	mg/L	15		-	once/quarter	grab
pH [Ω]	SU	6.5 to 9.0		-	once/quarter	grab
Settleable Solids	mL/L/hr	1.5		-	once/quarter	grab
Total Suspended Solids	mg/L	100		-	once/quarter	grab
METALS						
Aluminum, Total Recoverable	µg/L	*		-	once/quarter	grab
Iron, Total Recoverable	µg/L	**		4000	once/quarter	grab
Lead, Total Recoverable	µg/L	*		-	once/quarter	grab
OTHER						
Naphthalene	µg/L	*		-	once/quarter	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE APRIL 28, 2018.
THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

OUTFALL #001 *Stormwater Only*	**TABLE A-3** **FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on **February 1, 2017** and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

EFFLUENT PARAMETERS	UNITS	FINAL LIMITATIONS		BENCHMARKS	MONITORING REQUIREMENTS[∞]	
		DAILY MAXIMUM	MONTHLY AVERAGE		MEASUREMENT FREQUENCY[◊]	SAMPLE TYPE
PHYSICAL						
Flow	MGD	*		-	once/quarter	24 hr. est.
Precipitation	inches	*		-	once/quarter	measured
CONVENTIONAL						
Chemical Oxygen Demand	mg/L	*		-	once/quarter	grab
Oil & Grease	mg/L	15		-	once/quarter	grab
pH [Ω]	SU	6.5 to 9.0		-	once/quarter	grab
Settleable Solids	mL/L/hr	1.5		-	once/quarter	grab
Total Suspended Solids	mg/L	100		-	once/quarter	grab
METALS						
Aluminum, Total Recoverable	µg/L	*		-	once/quarter	grab
Iron, Total Recoverable	µg/L	**		4000	once/quarter	grab
Lead, Total Recoverable	µg/L	*		-	once/quarter	grab
OTHER						
Naphthalene	µg/L	*		-	once/quarter	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE APRIL 28, 2018.
THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

See notes on page 5

Notes:

* Monitoring requirement only.

** Monitoring requirement with associated benchmark. See Special Conditions #9 through #12

∞ All samples shall be collected from a discharge resulting from a precipitation event greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable precipitation event. If a discharge does not occur within the reporting period, report as no discharge. The total amount of precipitation should be noted from the event from which the samples were collected.

Ω The facility will report the minimum and maximum values. pH is not to be averaged.

◊ Quarterly sampling

MINIMUM QUARTERLY SAMPLING REQUIREMENTS			
QUARTER	MONTHS	EFFLUENT PARAMETERS	REPORT IS DUE
First	January, February, March	Sample at least once during any month of the quarter	April 28th
Second	April, May, June	Sample at least once during any month of the quarter	July 28th
Third	July, August, September	Sample at least once during any month of the quarter	October 28th
Fourth	October, November, December	Sample at least once during any month of the quarter	January 28th

B. STANDARD CONDITIONS

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

C. SPECIAL CONDITIONS

1. 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. 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;

C. SPECIAL CONDITIONS, CONTINUED

(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.

4. Changes in Discharges of Toxic Pollutant
In addition to the reporting requirements under §122.41(1), all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:
   (a) That an activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
      (1) One hundred micrograms per liter (100 µg/L);
      (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile;
      (3) Five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol;
      (4) One milligram per liter (1 mg/L) for antimony;
      (5) Five (5) times the maximum concentration value reported for the pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
      (6) The notification level established by the department in accordance with 40 CFR 122.44(f).
   (b) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
      (1) Five hundred micrograms per liter (500 µg/l);
      (2) One milligram per liter (1 mg/l) for antimony;
      (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with §122.21(g)(7).
      (4) The level established by the Director in accordance with §122.44(f).

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

6. Reporting of Non-Detects
   (a) An analysis conducted by the permittee or their contracted laboratory shall be conducted in such a way that the precision and accuracy of the analyzed result can be enumerated.
   (b) The permittee shall not report a sample result as "Non-Detect" without also reporting the detection limit of the test. Reporting as "Non-Detect" without also including the detection limit will be considered failure to report, which is a violation of this permit.
   (c) The permittee shall report the "Non-Detect" result using the less than sign and the minimum detection limit (e.g. <10).
   (d) Where the permit contains a Minimum Level (ML) and the permittee is granted authority in the permit to report zero in lieu of the < ML for a specified parameter (conventional, priority pollutants, metals, etc.), then zero (0) is to be reported for that parameter.
   (e) See Standard Conditions Part I, Section A, #4 regarding proper detection limits used for sample analysis.
   (f) When calculating monthly averages, one-half of the minimum detection limit (MDL) should be used instead of a zero. Where all data are below the MDL, the "<MDL" shall be reported as indicated in item (C).

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

8. Any pesticide discharge from any point source shall comply with the requirements of Federal Insecticide, Fungicide and Rodenticide Act, as amended (7 U.S.C. 136 *et. seq.*) and the use of such pesticides shall be in a manner consistent with its label.

9. The purpose of the Stormwater Pollution Prevention Plan (SWPPP) and the Best Management Practices (BMPs) listed herein is the prevention of pollution of waters of the state. A deficiency of a BMP means it was not effective preventing pollution [10 CSR 20-2.010(56)] of waters of the state, and corrective actions means the facility took steps to eliminate the deficiency.

10. The facility's SIC code(s) is found in 40 CFR 122.26(b)(14) and/or 10 CSR 20-6.200(2) hence shall implement a SWPPP which must be prepared and implemented upon permit issuance. The SWPPP must be kept on-site and should not be sent to the department unless specifically requested. The SWPPP must be reviewed and updated every five (5) years or as site conditions change (see Part III: Antidegradation Analysis and SWPPP sections in the fact sheet). The permittee shall select, install, use, operate, and maintain the Best Management Practices prescribed in the SWPPP in accordance with the concepts and methods described in: *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (EPA 833-B-09-002) published by the EPA in February 2009 (www.epa.gov/npdes/pubs/industrial_swppp_guide.pdf). The SWPPP must include:
   (a) A listing of specific contaminants and their control measures (or BMPs) and a narrative explaining how BMPs are implemented to control and minimize the amount of contaminants potentially entering stormwater. The BMPs should be designed to treat the stormwater up to the 10 year, 24 hour rain event.

C. SPECIAL CONDITIONS, CONTINUED

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

(c) The SWPPP must include a schedule for once per month site inspections and brief written reports. In addition to monthly inspections, the site must inspect all BMPs following a rain event measuring 0.1 inches or greater. The inspection reports must include precipitation information for the entire period since last inspection, as well as observations and evaluations of BMP effectiveness. Throughout coverage under this permit, the facility must perform ongoing SWPPP review and revision to incorporate any site condition changes.

i. Operational deficiencies must be corrected within seven (7) calendar days.

ii. Minor structural deficiencies must be corrected within fourteen (14) calendar days.

iii. Major structural deficiencies must be reported to the regional office within seven (7) days of discovery. The initial report shall consist of the deficiency noted, the proposed remedies, the interim or temporary remedies (including the general timing of the placement of the interim measures), and an estimate of the timeframe needed to wholly complete the repairs or construction. The permittee will work with the regional office to determine the best course of action, including but not limited to temporary structures to control stormwater runoff. The facility shall correct the major structural deficiency as soon as reasonably achievable.

iv. All actions taken to correct the deficiencies shall be included with the written report, including photographs.

v. Inspection reports must be kept on site with the SWPPP and maintained for a period of five (5) years. These must be made available to department and EPA personnel upon request.

(d) A provision for designating an individual to be responsible for environmental matters.

(e) A provision for providing training to all personnel involved in material handling and storage, and housekeeping of maintenance and cleaning areas. Proof of training shall be submitted on request of the department.

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

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

12. Permittee shall adhere to the following minimum Best Management Practices (BMPs):

(a) Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, or warehouse activities and thereby prevent the contamination of stormwater from these substances.

(b) Provide collection facilities and arrange for proper disposal of waste products including but not limited to petroleum waste products, and solvents.

(c) Store all paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) so that these materials are not exposed to stormwater or provide other prescribed BMPs such as plastic lids and/or portable spill pans to prevent the commingling of stormwater with container contents. Commingled water may not be discharged under this permit. Provide spill prevention control, and/or management sufficient to prevent any spills of these pollutants from entering waters of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater.

(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 to comply with general water quality criteria, effluent limits, or benchmarks. This could include the use of straw bales, silt fences, or sediment basins, if needed.

(f) Ensure adequate provisions are provided to prevent surface water intrusion into the storage basin, to divert stormwater runoff around the storage basin, and to protect embankments from erosion.

13. To protect the general criteria found at 10 CSR 20-7.031(4), before releasing water accumulated in secondary containment areas, it must be examined for hydrocarbon odor and presence of sheen. If the presence of odor or sheen is indicated, the water shall be

C. SPECIAL CONDITIONS, CONTINUED

treated using an appropriate method or disposed of in accordance with legally approved methods, such as being sent to a wastewater treatment facility. Following treatment, the water shall be tested for oil and grease, benzene, toluene, ethylbenzene, and xylene using 40 CFR part 136 methods. All pollutant levels must be below the most protective, applicable standards for the receiving stream, found in 10 CSR 20-7.031 Table A. Records of all testing and treatment of water accumulated in secondary containment shall be stored in the SWPPP to be available on demand to DNR and EPA personnel.

14. 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.

15. This permit does not authorize discharges of waste material, such as concrete, into waters of the state. Washing waste concrete into waters of the state or in a location where it is likely to enter waters of the state, such as a drainage ditch, is prohibited by state law and regulations (644.051 RSMo, 10 CSR 20-6.010).

D. SCHEDULE OF COMPLIANCE

Schedules of compliance are allowed under 40 CFR 122.47. The facility shall attain compliance with final effluent limitations established in this permit as soon as reasonably achievable:

1. Within 1 years of the effective date of this permit, the permittee shall attain compliance with the final effluent limits at outfall #002, #003, and #004 for oil and grease, pH, settleable solids, and total suspended solids.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
FACT SHEET
FOR THE PURPOSE OF RENEWAL
OF
MO-0128422
BARBOUR CONCRETE COMPANY

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 stormwater from certain point sources. All such discharges are unlawful without a permit (Section 301 of the "Clean Water Act"). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Missouri State Operating Permits (MSOPs) are issued by the Director of the Missouri Department of Natural Resources (Department) under an approved program, operating in accordance with federal and state laws (Federal "Clean Water Act" and "Missouri Clean Water Law" Section 644 as amended). MSOPs are issued for a period of five (5) years unless otherwise specified for less.

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

Part I. FACILITY INFORMATION

Facility Type:	Industrial
Facility SIC Code(s):	3272
Application Date:	05/02/2013, revised application received 04/01/2016
Expiration Date:	11/20/2013
Last Inspection:	03/06/2013, found to be Not in Compliance at time of inspection

FACILITY DESCRIPTION:
Barbour Concrete manufactures custom precast concrete structures such as manholes and utility boxes. It has four stormwater outfalls. Domestic wastewater is discharged to the sanitary sewer. Process wastewater is recycled back through the industrial process and ultimately disposed of in a no-discharge manner. Materials used in production include cement, sand, aggregate, and mold-release oil. Cement is stored in covered silos; sand and aggregate are stored in open top bins. Above ground storage tanks store curing agents and concrete additives under roof. Three petroleum ASTs are retained for fueling Barbour's equipment. All three are in secondary containment. Mixing of the concrete material, construction of steel reinforcing cages and casting of concrete structures is performed under a roof. A storage yard is used for finished products. The storage yard and other facility grounds are largely composed of compacted gravel and are subject to heavy truck traffic.

Changes have occurred at this facility or in the receiving water body that effect effluent limit derivation. Because the watershed of the receiving stream is now designated as a Metropolitan No-Discharge watershed, process water is not authorized to be discharged at this facility. A pH neutralizer is added to the process water and the treated water is recycled back into the industrial process. Industrial sludge is not authorized to be land applied under this permit, and must be hauled by a contract hauler to a licensed receiving facility such as a landfill.

Process water is not authorized for discharge under this permit. Process water includes any water which contacts the industrial process, including water used to wash out concrete molds, water run through machinery, truck wash water with or without added detergents, municipal water which has been used in an industrial process, and others. This permit also does not authorize discharges of waste materials, such as concrete, into waters of the state. Washing waste concrete into waters of the state or in a location where it is likely to enter waters of the state, such as a drainage ditch, is prohibited by State Law and Regulations (644.051 RSMo, 10 CSR 20-6.010).

PERMITTED FEATURES TABLE:

OUTFALL	AVERAGE FLOW (MGD)	EST. FLOW IN 10 YR 24 HR EVENT (MGD)	TREATMENT LEVEL	EFFLUENT TYPE
#001	Dependent on precipitation	0.83*	Primary, Sedimentation, BMPs	Industrial stormwater
#002	Dependent on precipitation	0.24*	BMPs	Industrial stormwater
#003	Dependent on precipitation	0.18*	BMPs	Industrial stormwater
#004	Dependent on precipitation	0.47*	BMPs	Industrial stormwater

*calculated using the rational equation, rainfall 5.5 inches/day, rational co-efficient 0.7
BMPs means Best Management Practices

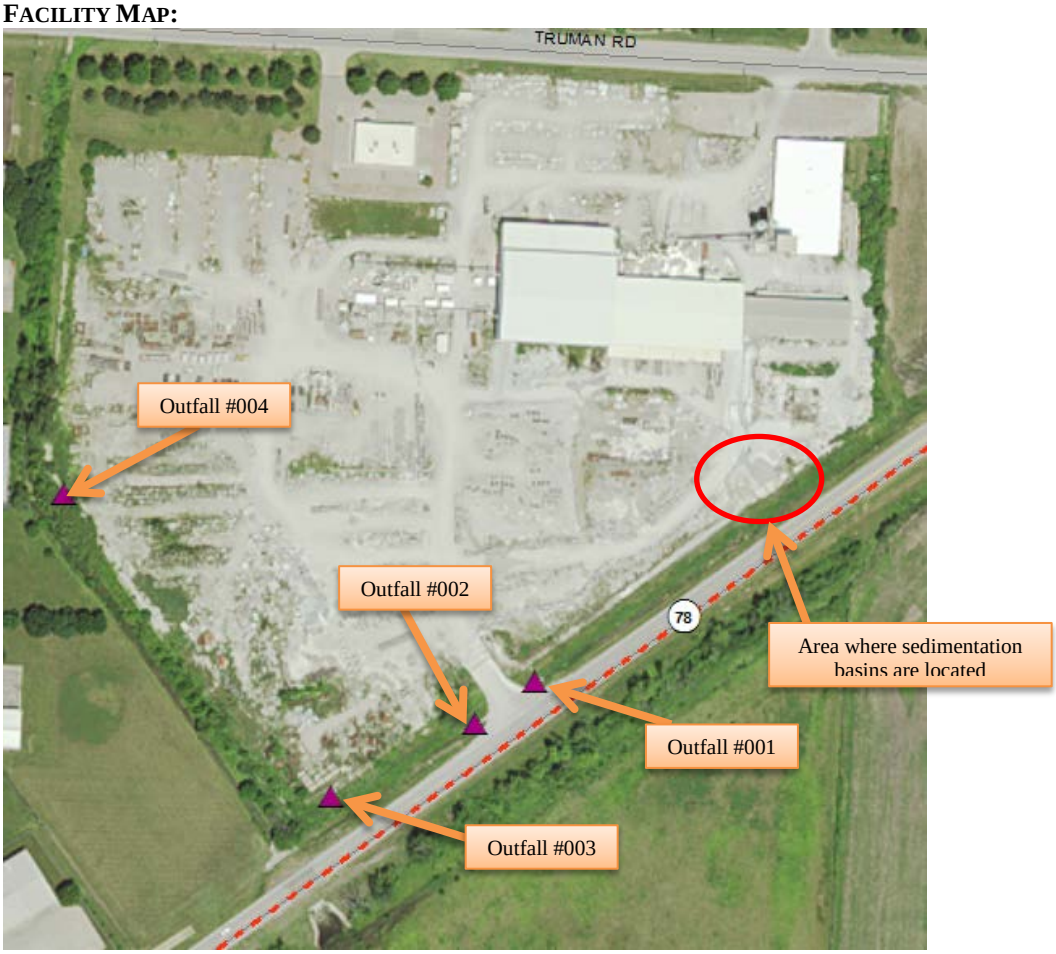
FACILITY PERFORMANCE HISTORY & COMMENTS:
The electronic discharge monitoring reports were reviewed for the last five years. Two exceedances of oil and grease are the only noted exceedances. The facility was found to be not in compliance during their last inspection that occurred 03/06/2013. The inspector cited the facility for failure to operate and manage stormwater in accordance with the applicable permit and conditions, including numerous record keeping issues; and failure to store used oil and substances in sealed, labeled containers. The facility passed the acute WET test required in the previous permit. This facility was referred to enforcement for violations related to sedimentation in the stormwater ditches around the facility on 03/17/2000, and after a settlement agreement, the compliance and enforcement section closed the enforcement case 04/27/2009.

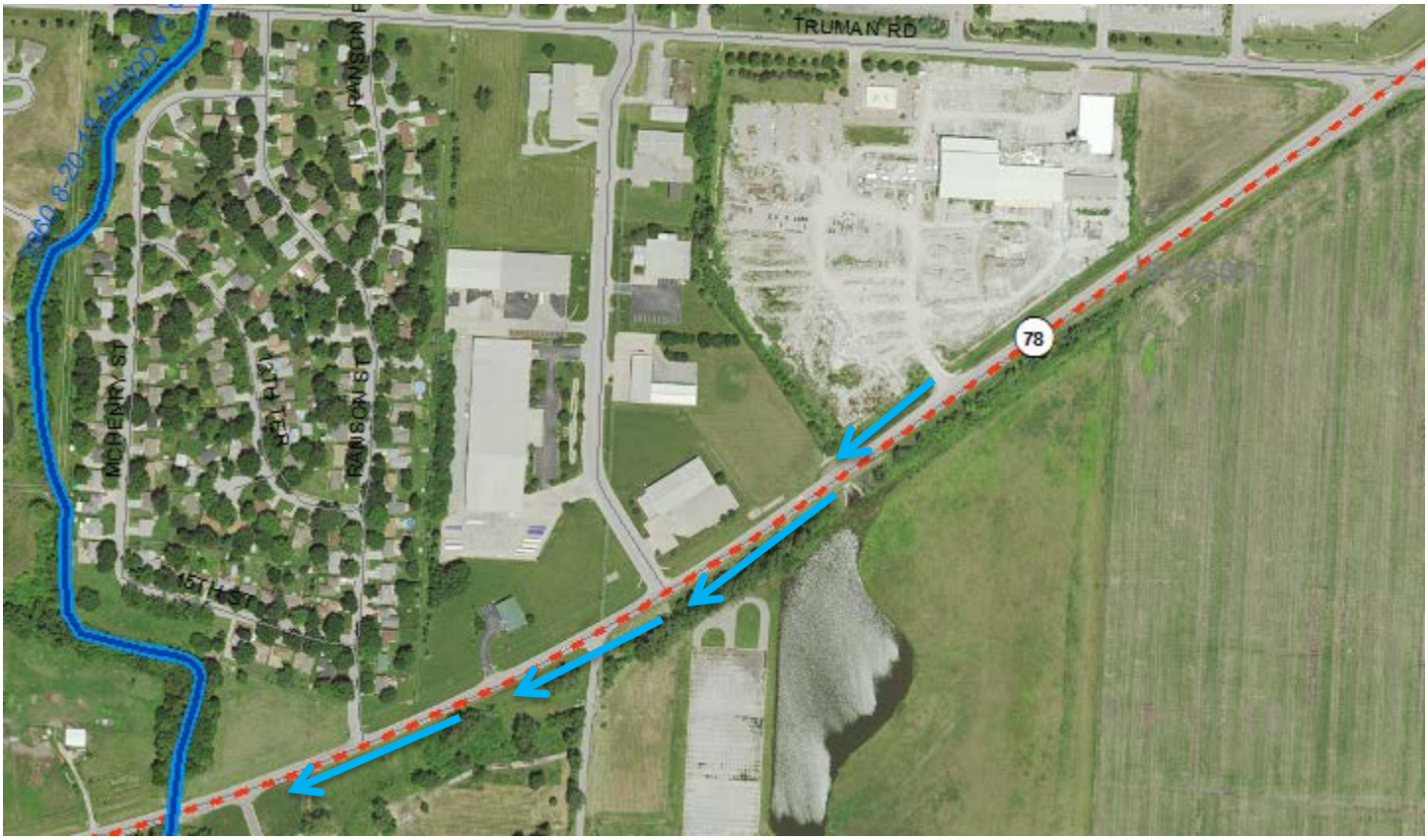
The permit writer conducted a site visit on 10/08/2015. Also in attendance were Logan Cole, industrial permit writer, and Patrick Peltz, KCRO compliance inspector. A compliance inspection was not conducted at the time of the site visit; however, the permit writers and Patrick observed a number of concerning issues which were addressed in a meeting subsequent to the site visit. Mr. Dan Barbour and Mr. Danny Yutzy accompanied DNR personnel during the site visit. At the time of the site visit, the facility was discharging process water and stormwater under their administratively continued prior permit, which allowed process water discharge. After the site visit, the permit writer found the facility is located in a Metropolitan No-Discharge watershed, and therefore this permit does not authorize the discharge of process water. During the tour of the facility, DNR personnel observed severe failure of BMPs at the site. Rusty, decrepit metal machinery and storage drums were exposed to stormwater throughout the concrete storage yard. Deep, piled, wet sediment was observed surrounding the production areas outdoors. The shipping and receiving area was wet, with a layer of sediment an inch or more deep in some areas. Plastic containers that Mr. Barbour described as “empty mold release oil” containers were stored outside in this area. An unattended running hose was discharging municipal water which mingled with process water and concrete dust, before discharging into the stormwater ditch leading to the outfall. Mr. Barbour noted this hose is used to wash pre-cast concrete molds. Near the area where the hose was located, soft concrete sediment, gravel, and silt several inches deep was exposed to stormwater. Deep, wet, concrete sediment and silt continued all the way to the fence line of the property, where the permit writer observed white sediment in the stormwater drainage ditch. Mr. Barbour stated that two sedimentation basins were located in this area; however, they were completely buried beneath the wet concrete and sediment and were not visible or functional. Mr. Barbour stated he was in the process of contracting with a company to scoop and haul all of the excess concrete out of the area so the sedimentation basins would be operational again. The permit writer received notification at a later date that the sedimentation basins were cleaned and functional again, verified by HDR engineering, a consulting company hired by Barbour Concrete to address process water and stormwater issues at the site.

The group then moved to the outfall #001 area, which is near the main truck entrance for the facility. Rusty steel concrete molds were stored near this area. A storm drain located across the truck entrance was completely filled with sediment. Mr. Barbour stated he was going to have it cleaned at the same time as the sediment basins. Mr. Barbour indicated the facility took its samples from a stagnant pool on the east side of the driveway that was completely dammed in by concrete sediment. He also stated the water flowed out of the drain and didn’t go anywhere. The permit writer noted there was sediment on the other side of the driveway as well, indicating a flow in the opposite direction, and Mr. Barbour said the City of Independence had built a berm blocking the flow of water in that direction due to numerous complaints from the neighbors that the sediment from the plant was causing flooding on their property. Then he pointed out a pipe just prior to the berm that runs under the highway and exits out the other side, where a farm field with an apparent pond was located. Logan stated he believed the water exited through the pipe to the other side of the road, but then continued to flow south-west toward the Tributary to Little Blue River rather than into the farm field. The permit writers then stated we believed sampling should also occur at this point, either in addition to or in place of the current outfall #001 sampling. Another possible outfall was identified by permit writers west of this area, and another on the west side of the property.

After the site tour, Mr. Barbour agreed to hire a consultant to address the stormwater and process water issues at his site. He stated he would clean out the sediment basins and maintain the BMPs properly onsite. In further contact with the permit writer, Mr. Barbour stated these issues were being addressed. Working with HDR engineering, the facility developed a system of process water reuse at the site to become compliant with the Metropolitan No-Discharge requirements of this permit, and re-submitted an application for renewal with the newly identified stormwater outfalls on 04/01/2016.

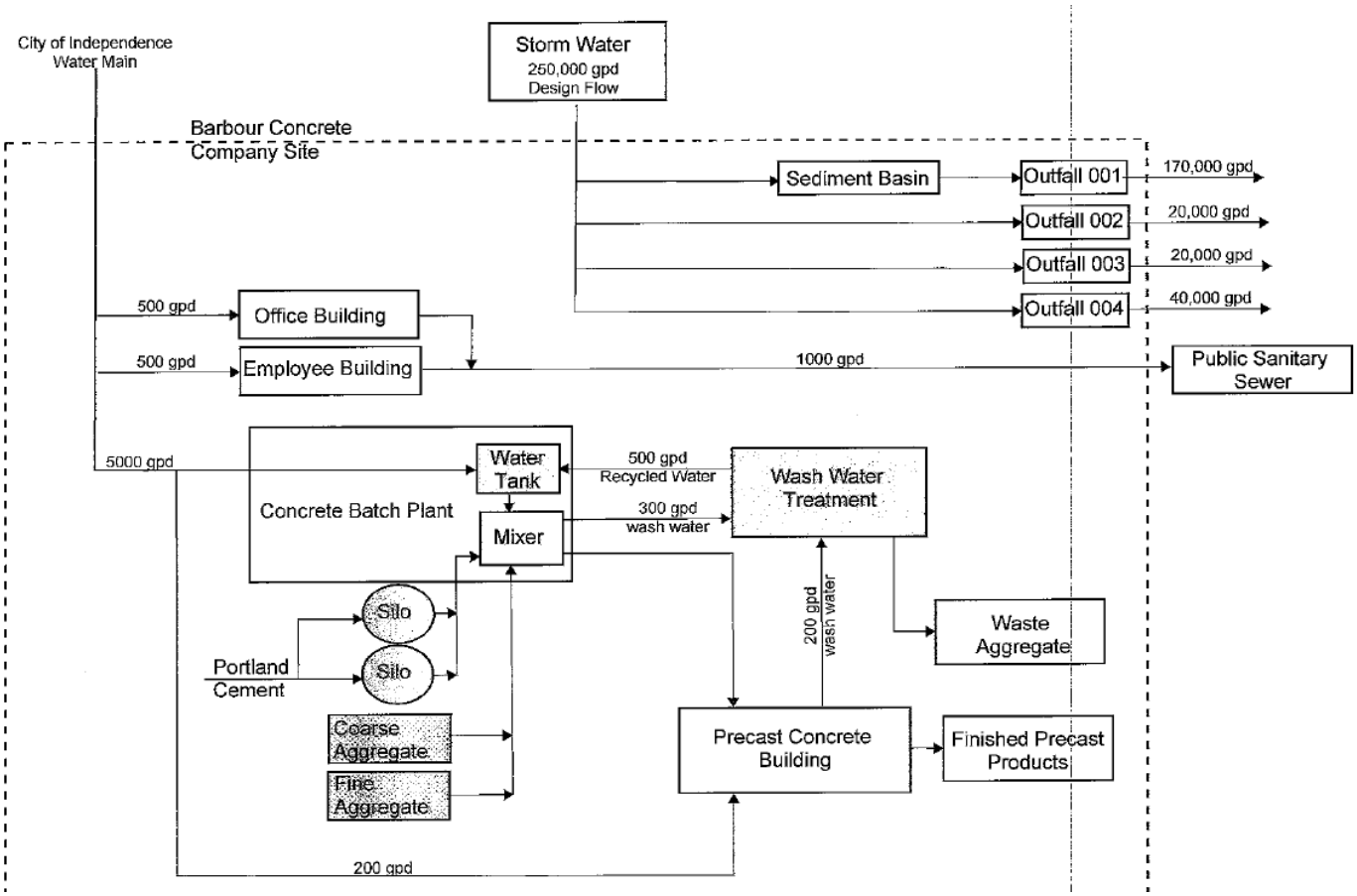
FACILITY MAP:





Water flow direction

WATER BALANCE DIAGRAM:



Part II. RECEIVING STREAM INFORMATION

RECEIVING WATER BODY'S WATER QUALITY:
The receiving stream Tributary to Little Blue River has no concurrent water quality data available. Neither the receiving stream nor the first classified water body are found on the 303(d) list. There is no TMDL applicable to this facility. The receiving stream and first classified streams are not losing streams. The Tributary to Blue River (C) (3960) is now classified whereas it was not classified in the previous permit, as EPA has approved the Department's new stream classifications. No other relevant water quality information was found.

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

TOTAL MAXIMUM DAILY LOAD (TMDL):
A TMDL is a calculation of the maximum amount of a given pollutant that a body of water can absorb before its water quality is affected; hence, the purpose of a TMDL is to determine the pollutant loading a specific waterbody can assimilate without exceeding water quality standards. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan or TMDL may be developed. The TMDL shall include the WLA calculation. http://dnr.mo.gov/env/wpp/tmdl/
✓ Not applicable; this facility is not associated with a TMDL.

APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:

✓ As per Missouri's Effluent Regulations [10 CSR 20-7.015(1)(B)], the waters of the state are divided into the following seven 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: ☐
Lake or Reservoir: ☐
Losing: ☐
Metropolitan No-Discharge: ☒
Special Stream: ☐
Subsurface Water: ☐
All Other Waters: ☐

RECEIVING STREAMS TABLE:

OUTFALL	WATERBODY NAME	CLASS	WBID	DESIGNATED USES*	DISTANCE TO SEGMENT (MILES)	12-DIGIT HUC
#001	Tributary to Little Blue River	n/a	n/a	GEN	0.45	10300101-0207 Burr Oak Creek-Little Blue River
	8-20-13 MUDD V1.0	C	3960	AQL, IRR, LWW, SCR, WBC-B, HHP		
#002	Tributary to Little Blue River	n/a	n/a	GEN	0.42	
	8-20-13 MUDD V1.0	C	3960	AQL, IRR, LWW, SCR, WBC-B, HHP		
#003	Tributary to Little Blue River	n/a	n/a	GEN	0.40	
	8-20-13 MUDD V1.0	C	3960	AQL, IRR, LWW, SCR, WBC-B, HHP		
#004	Tributary to Little Blue River	n/a	n/a	GEN	0.50	
	8-20-13 MUDD V1.0	C	3960	AQL, IRR, LWW, SCR, WBC-B, HHP		

n/a not applicable
WBID = Waterbody IDentification: Missouri Use Designation Dataset 8-20-13 MUDD V1.0 data can be found as an ArcGIS shapefile on MSDIS at ftp://msdis.missouri.edu/pub/Inland_Water_Resources/MO_2014_WQS_Stream_Classifications_and_Use_shp.zip
* As per 10 CSR 20-7.031 Missouri Water Quality Standards, the department defines the Clean Water Commission's water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and 1st classified receiving stream's beneficial water uses to be maintained are in the receiving stream table in accordance with [10 CSR 20-7.031(1)(C)].

Uses which may be found in the receiving streams table on the prior page:

10 CSR 20-7.031(1)(C)1.:
AQL = Protection of aquatic life (Current narrative use(s) are defined to ensure the protection and propagation of fish shellfish and wildlife, which is further subcategorized as: WWH = Warm Water Habitat; CLH = Cool Water Habitat; CDH = Cold Water Habitat; EAH = Ephemeral Aquatic Habitat; MAH = Modified Aquatic Habitat; LAH = Limited Aquatic Habitat. This permit uses AQL effluent limitations in 10 CSR 20-7.031 Table A for all habitat designations unless otherwise specified.)
10 CSR 20-7.031(1)(C)2.: Recreation in and on the water
WBC = Whole Body Contact recreation where the entire body is capable of being submerged;
WBC-A = Whole body contact recreation supporting swimming uses and has public access;
WBC-B = Whole body contact recreation supporting swimming;
SCR = Secondary Contact Recreation (like fishing, wading, and boating).
10 CSR 20-7.031(1)(C)3. to 7.:
HHP (formerly HHF) = Human Health Protection as it relates to the consumption of fish;
IRR = Irrigation for use on crops utilized for human or livestock consumption;
LWW = Livestock and wildlife watering (Current narrative use is defined as LWP = Livestock and Wildlife Protection);
DWS = Drinking Water Supply;
IND = Industrial water supply
10 CSR 20-7.031(1)(C)8-11.: Wetlands (10 CSR 20-7.031 Table A currently does not have corresponding habitat use criteria for these defined uses)
WSA = Storm- and flood-water storage and attenuation; WHP = Habitat for resident and migratory wildlife species;
WRC = Recreational, cultural, educational, scientific, and natural aesthetic values and uses; WHC = Hydrologic cycle maintenance.
10 CSR 20-7.031(6): GRW = Groundwater

MIXING CONSIDERATIONS:

Mixing zone: not allowed [10 CSR 20-7.031(5)(A)4.B.(I)(a)].
Zone of initial dilution: not allowed [10 CSR 20-7.031(5)(A)4.B.(I)(b)].

RECEIVING STREAM MONITORING REQUIREMENTS:

No receiving water monitoring requirements are recommended at this time.

Part III. Rationale and Derivation of Effluent Limitations & Permit Conditions

Alternative Evaluations for New Facilities:

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

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

Anti-Backsliding:

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

- ✓ Limitations in this operating permit for the reissuance conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Act, and 40 CFR Part 122.44.
- ✓ Material and substantial alterations or additions to the permitted facility occurred after permit issuance justify the application of a less stringent effluent limitation.
    - The permittee no longer discharges process wastewater. Monthly average limits previously associated to continuous discharges are no longer applicable to stormwater (see below). Discharge of process wastewater is now prohibited in the permit, which is more stringent than the authorization to discharge.
- ✓ The Department determined technical mistakes or mistaken interpretations of law were made in issuing the permit under section 402(a)(1)(b).
    - Monthly averages were not implemented for outfalls in this permit; the discharge consists of only stormwater which is not continuous pursuant to 40 CFR 122.45(d). Further, average monthly limitations are impracticable measures of non-continuous stormwater discharges because they vary widely in frequency, magnitude, and duration. This permit applies only acute short-term or daily maximum measures which represent stormwater discharges which are acute and sporadic in nature. Discharges of industrial stormwater rarely persist for long durations, making them impracticable to assess using measures with long term exposures or averaging periods. Last, the instream water quality target remains unchanged and the conditions of this permit are protective of both narrative and numeric water quality criteria.

Antidegradation Review:

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

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

For stormwater discharges with new, altered, or expanding discharges, the stormwater BMP chosen for the facility, through the antidegradation analysis performed by the facility, must be implemented and maintained at the facility. Failure to implement and maintain the chosen BMP alternative is a permit violation; see SWPPP.

- ✓ Applicable; the facility must review and maintain stormwater BMPs as appropriate. This renewal adds three stormwater outfalls requiring antidegradation analysis as described in special condition #10 of the permit above.

Benchmarks:

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

Because of the fleeting nature of stormwater discharges, the department, under the direction of EPA guidance, has determined monthly averages are capricious measures of stormwater discharges. The *Technical Support Document for Water Quality Based Toxics Control* (EPA/505/2-90-001; 1991) Section 3.1 indicates most procedures within the document apply only to water quality based approaches, not end-of-pipe technology-based controls. Hence, stormwater only outfalls will generally only contain a maximum daily limit (MDL), benchmark, or monitoring requirement determined by the site specific conditions including the receiving water's current quality. While inspections of the stormwater BMPs occur monthly, facilities with no compliance issues are usually expected to sample stormwater quarterly.

Numeric benchmark values are based on water quality standards or other stormwater permits including guidance forming the basis of Environmental Protection Agency's (EPA's) *Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity* (MSGP). Because precipitation events are sudden and momentary, benchmarks based on state or federal standards or recommendations use the Criteria Maximum Concentration (CMC) value, or acute standard. The CMC is the estimate of the highest concentration of a material in surface water to which an aquatic community can be exposed briefly without resulting in an unacceptable effect. The CMC for aquatic life is intended to be protective of the vast majority of the aquatic communities in the United States.

- ✓ Applicable; this facility has stormwater-only outfalls with benchmark constraints. The benchmarks listed are consistently achieved in stormwater discharges by a variety of other industries with SWPPPs and is deemed protective of instream water quality and aquatic life.

BIOSOLIDS & SEWAGE SLUDGE:

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

- ✓ Not applicable; 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.

EFFLUENT LIMITATION GUIDELINE:

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

- ✓ The facility does not have an associated ELG.

GROUNDWATER MONITORING:

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

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

INDUSTRIAL SLUDGE:

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

- ✓ Permittee is not authorized to land apply industrial sludge. Sludge is removed by contract hauler.

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 causing or have the reasonable potential to cause (or contribute to) an in-stream excursion above narrative or numeric water quality standards. If the permit writer determines 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 [40 CFR Part 122.44(d)(1)(iii)].

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

SCHEDULE OF COMPLIANCE (SOC):

A schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements (actions, effluent limits, operations, or milestone events) leading to compliance with the Missouri Clean Water Law, its implementing regulations, and/or the terms and conditions of an operating permit. SOCs are allowed under 40 CFR 122.47 providing certain conditions are met.

- ✓ Applicable; this permit contains a one year schedule of compliance for oil and grease, pH, settleable solids, and total suspended solids. One year will allow the permittee to adjust BMPs as needed to meet new effluent limits on newly identified outfalls.

SPILL REPORTING:
Per 10 CSR 24-3.010, any emergency involving a hazardous substance must be reported to the department's 24 hour Environmental Emergency Response hotline at (573) 634-2436 at the earliest practicable moment after discovery. The department may require the submittal of a written report detailing measures taken to clean up a spill. These reporting requirements apply whether or not the spill results in chemicals or materials leaving the permitted property or reaching waters of the state. This requirement is in addition to the noncompliance reporting requirement found in Standard Conditions Part I. http://dnr.mo.gov/env/esp/spillbill.htm

STORMWATER PERMITTING:
A standard mass-balance equation cannot be calculated for stormwater from this facility because the stormwater flow and flow in the receiving stream cannot be determined for conditions on any given day. The amount of stormwater discharged from the facility will vary based on previous rainfall, soil saturation, humidity, detention time, BMPs, surface permeability, etc. Flow in the receiving stream will vary based on climatic conditions, size of watershed, amount of surfaces with reduced permeability (houses, parking lots, and the like) in the watershed, hydrogeology, topography, etc. Decreased permeability increases the flash of the stream.

It is likely sufficient rainfall to cause a discharge for four continuous days from a facility will also cause some significant amount of flow in the receiving stream. Chronic WQSs are based on a four-day exposure (except ammonia, which is based on a thirty day exposure). In the event a discharge does occur from this facility for four continuous days, some amount of flow will occur in the receiving stream. This flow will dilute stormwater discharges from a facility. For these reasons, most industrial stormwater facilities have limited potential to cause a violation of chronic water quality standards in the receiving stream.

Sufficient rainfall to cause a discharge for one hour or more from a facility would not necessarily cause significant flow in a receiving stream. Acute WQSs are based on a one hour of exposure, and must be protected at all times in unclassified streams, and within mixing zones of class P streams [10 CSR 20-7.031(4) and (5)(4)4.B.]. Therefore, industrial stormwater facilities with toxic contaminants do have the potential to cause a violation of acute WQSs if those toxic contaminants occur in sufficient amounts.

It is due to the items stated above staff are unable to perform statistical Reasonable Potential Analysis (RPA). However, staff will use their best professional judgment in determining if a facility has a potential to violate Missouri's Water Quality Standards.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP):
In accordance with 40 CFR 122.44(k), Best Management Practices (BMPs) must be used to control or abate the discharge of pollutants when: 1) Authorized under section 304(e) of the Clean Water Act (CWA) for the control of toxic pollutants and hazardous substances from ancillary industrial activities; 2) Authorized under section 402(p) of the CWA for the control of stormwater discharges; 3) Numeric effluent limitations are infeasible; or 4) the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA. In accordance with the EPA's *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (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 waters of the state from a permitted facility. BMPs may take the form of a process, activity, or physical structure. Additionally in accordance with the Stormwater Management, a SWPPP is a series of steps and activities to 1) identify sources of pollution or contamination, and 2) select and carry out actions which prevent or control the pollution of storm water discharges.

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

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

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

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

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

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

VARIANCE:

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; the operating permit is not drafted under premise of a petition for variance.

WASTELOAD ALLOCATIONS (WLA) FOR LIMITS:

As per [10 CSR 20-2.010(78)], the WLA is the amount of pollutant each discharger is allowed to discharge into the receiving stream without endangering water quality. Two general types of effluent limitations, technology-based effluent limits (TBELs) and water quality based effluent limits (WQBELs) are reviewed. If one limit does provide adequate protection for the receiving waters, then the other must be used.

✓ Not applicable; wasteload allocations were not calculated.

WLA MODELING:

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

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

WATER QUALITY STANDARDS:

Per 10 CSR 20-7.031(4), 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 the 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 testing for this facility. This permit has changed to a stormwater only permit. WET tests are generally not applied to stormwater discharges due to the variable nature of stormwater. Additionally, the waste stream at this facility is well characterized and contains few toxic materials.

Part IV. Effluent Limits Determination

Outfall #001 – #004—Stormwater Discharges

Effluent limitations derived and established in the below effluent limitations table are based on current operations of the facility. Effluent means both process water and stormwater. Any flow through the outfall is considered a discharge and must be sampled and reported as provided below. Future permit action due to facility modification may contain new operating permit terms and conditions that supersede the terms and conditions, including effluent limitations, of this operating permit.

Effluent Limitations Table:

PARAMETERS Outfalls #001	Unit	Basis	Daily Maximum Limit	Bench-mark	Previous permit limits	Minimum Sampling Frequency	Minimum Reporting Frequency	Sample Type
Physical								
Flow	MGD	1	*	-	Same	Once/Quarter	Once/Quarter	24 hr. est
Precipitation	inches	6	*	-	Same	Once/Quarter	Once/Quarter	24 hr. tot
Conventional								
COD	mg/L	6	*	-	New	Once/Quarter	Once/Quarter	Grab
Oil & Grease	mg/L	1, 3	15	-	15/10	Once/Quarter	Once/Quarter	Grab
pH ǂ	SU	1, 3	6.5 to 9.0	-	Same	Once/Quarter	Once/Quarter	Grab
Settleable Solids	mL/L/hr	6	1.5	-	1.5/1.0	Once/Quarter	Once/Quarter	Grab
TSS	mg/L	6	100	-	100/50	Once/Quarter	Once/Quarter	Grab
Metals								
Aluminum, Total Recov.	µg/L	6	*	-	New	Once/Quarter	Once/Quarter	Grab
Iron, total Recover.	µg/L	6	**	4000	New	Once/Quarter	Once/Quarter	Grab
Lead, Total Recover.	µg/L	6	*	-	New	Once/Quarter	Once/Quarter	Grab
Other								
Naphthalene	µg/L	6	*	-	New	Once/Quarter	Once/Quarter	Grab

PARAMETERS Outfalls #002-#004	Unit	Basis	Daily Maximum Limit	Bench-mark	Previous permit limits	Minimum Sampling Frequency	Minimum Reporting Frequency	Sample Type
Physical								
Flow	MGD	1	*	-	New	Once/Quarter	Once/Quarter	24 hr. est
Precipitation	inches	6	*	-	New	Once/Quarter	Once/Quarter	24 hr. tot
Conventional								
COD	mg/L	6	*	-	New	Once/Quarter	Once/Quarter	Grab
Oil & Grease	mg/L	1, 3	15	-	New	Once/Quarter	Once/Quarter	Grab
pH ǂ	SU	1, 3	6.5 to 9.0	-	New	Once/Quarter	Once/Quarter	Grab
Settleable Solids	mL/L/hr	6	1.5	-	New	Once/Quarter	Once/Quarter	Grab
TSS	mg/L	6	100	-	New	Once/Quarter	Once/Quarter	Grab
Metals								
Aluminum, Total Recov.	µg/L	6	*	-	New	Once/Quarter	Once/Quarter	Grab
Iron, total Recover.	µg/L	6	**	4000	New	Once/Quarter	Once/Quarter	Grab
Lead, Total Recover.	µg/L	6	*	-	New	Once/Quarter	Once/Quarter	Grab
Other								
Naphthalene	µg/L	6	*	-	New	Once/Quarter	Once/Quarter	Grab

See notes on page 11

Notes:
* - Monitoring requirement only
** - Monitoring with associated benchmark
ǂ The facility will report the minimum and maximum pH values; pH is not to be averaged
NEW = Parameter not established in previous operating permit

Basis for Limitations Codes:
1. State or Federal Regulation/Law
2. Water Quality Standard (includes RPA)
3. Water Quality Based Effluent Limits
4. Antidegradation Review/Policy
5. Water Quality Model
6. Best Professional Judgment
7. TMDL or Permit in lieu of TMDL
8. Benchmark based on MSGP
9. Benchmark based on Missouri Water Quality Standards

DERIVATION AND DISCUSSION OF LIMITS:

PHYSICAL:

Flow

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

Precipitation

Monitoring only requirement; measuring the amount of precipitation [(10 CSR 20-6.200(2)(C)1.E(VI)] during an event is necessary to ensure adequate stormwater management exists at the site. Knowing the amount of potential stormwater runoff can provide the permittee a better understanding of specific control measure that should be employed to ensure protection of water quality. The facility will provide the 24 hour accumulation value of precipitation from the day of sampling the other parameters. It is not necessary to report all days of precipitation during the quarter because of the readily available on-line data.

CONVENTIONAL:

Chemical Oxygen Demand (COD)

Monitoring only. There is no water quality standard for COD; however, increased oxygen demand may impact instream water quality. COD is also a valuable indicator parameter. COD monitoring allows the permittee to identify increases in COD that may indicate materials/chemicals coming into contact with stormwater that cause an increase in oxygen demand. Increases in COD may indicate a need for maintenance or improvement of BMPs.

Oil & Grease

Daily maximum of 15 mg/L. The previous permit required a 15 mg/L daily maximum limit with a monthly average limit of 10 mg/L for outfall #001. There were two exceedances of this limit in the previous permit cycle, therefore the limit is retained to protect aquatic life and the general criteria in the receiving stream. Oil and grease is a conventional pollutant. Oil and grease is a comprehensive test which measures for gasoline, diesel, crude oil, creosote, kerosene, heating oils, heavy fuel oils, lubricating oils, waxes, and some asphalt and pitch. The test can also detect some volatile organics such as benzene, toluene, ethylbenzene, or toluene, but these constituents are often lost during testing due to their boiling points. It is recommended to perform separate testing for these constituents if they are a known pollutant of concern at the site, i.e. aquatic life toxicity or human health is a concern. Results do not allow for separation of specific pollutants within the test, they are reported, totaled, as “Oil and grease”. Per 10 CSR 20-7.031 Table A: *Criteria for Designated Uses*; 10 mg/L is the standard for protection of aquatic life for this parameter. 10 mg/L is also the level at which sheen is estimated to form on receiving waters. Oils and greases of different densities will possibly form sheen or unsightly bottom deposits at levels which vary from 10 mg/L. To protect the general criteria, it is the responsibility of the permittee to visually observe the discharge and receiving waters for sheen or bottom deposits. A one year schedule of compliance is provided to meet this limit at outfalls #002-#004.

pH

6.5 to 9.0 SU. The Water Quality Standard at 10 CSR 20-7.031(5)(E) states water contaminants shall not cause pH to be outside the range of 6.5 to 9.0 standard pH units. A one year schedule of compliance is provided to meet this limit at outfalls #002-#004.

Settleable Solids (SS)

Daily maximum limit of 1.5 mL/L/hr. The previous permit required a daily maximum limit of 1.5 mL/L/hr, with a monthly average limit of 1.0 mL/L/hr for outfall #001. There is no water quality standard for SS; however, sediment discharges can negatively impact aquatic life habitat, and are a known pollutant of concern at this site. Increased settleable solids are known to interfere with multiple stages of the life cycle in many benthic organisms. For example, they can smother eggs and young or clog the crevasses that benthic organisms use for habitat. Settleable solids are also a valuable indicator parameter. Solids monitoring allows the permittee to identify increases in sediment and solids that may indicate uncontrolled materials leaving the site. Similar facilities have permit limits of 1.5 mL/L/hour daily maximum and the limit is considered typical and achievable. A one year schedule of compliance is provided to meet this limit at outfalls #002-#004.

Total Suspended Solids (TSS)
Daily maximum limit of 100 mg/L, continued from the previous permit for outfall #001. The previous permit also required 50 mg/L as a monthly average limit. There is no water quality standard for TSS; however, sediment discharges can negatively impact aquatic life habitat. TSS is also a valuable indicator parameter. TSS monitoring allows the permittee to identify increases in TSS that may indicate uncontrolled materials leaving the site. Increased suspended solids in runoff can lead to decreased available oxygen for aquatic life and an increase of surface water temperatures in a receiving stream. Suspended solids can also be carriers of toxins, which can adsorb to the suspended particles; therefore, total suspended solids are a valuable indicator parameter for other pollution. 100 mg/L is achievable through proper operational and maintenance of BMPs and falls within the range of values implemented in other permits having similar industrial activities, the MSGP, and Missouri General Permit MOG49, which applies to industrial facilities with the same SIC code. A one year schedule of compliance is provided to meet this limit at outfalls #002-#004.

METALS:
General warm-water habitat criteria apply (WWH) designated as AQL in 10 CSR 20-7.031 Table A. Additional use criterion (HHP, DWS, GRW, IRR, or LWW) may also be used as applicable to determine the most protective effluent limit for the stream class and uses.

When ambient site specific hardness data is not available, standard water hardness of 193 mg/L for stormwater is used in the conversion below. Additionally, when there are no site specific translator studies, partitioning between the dissolved and absorbed phases is assumed minimal (Section 5.7.3, EPA/505/2-90-001). Freshwater criteria conversion factors for dissolved metals were used as the metals translator as recommended in guidance (Section 1.3, 1.5.3, and Table 1, EPA 823-B-96-007). If concurrent site-specific data for total recoverable metals, dissolved metals, hardness, and total suspended solids are provided to the department, the department may integrate those findings into derivation of the water quality limits. N/A means not applicable.

Aluminum, Total Recoverable
Monitoring only. This is a new parameter in this permit. On a site visit to the facility, the permit writer observed a large amount of metals exposed to stormwater in the outdoor storage area. This parameter is added using best professional judgment to apply pollutants of concern from industry #5015, automobile salvage yards, to this facility.

Iron, Total Recoverable
Monitoring, with a technology based 4000 µg/L daily maximum benchmark. Iron is a pollutant of concern found on the EPA's MSGP for the concrete industry, and is thus added to this permit. The chronic standard for protection of aquatic life per 10 CSR 20-7.031 Table A is 1,000 µg/L. Due to the sporadic nature of stormwater discharges, the Department, under the direction of EPA guidance, has determined chronic standards are capricious when applied to stormwater discharges. Chronic effluent limitations are based on the organism's ability to survive within the designated concentration for four days. Stormwater is rarely discharged continuously for four days. Conversely, acute water quality standards are applicable, but are non-existent for iron. It is in the best professional judgment of the permit writer that a discharge from this outfall at 4000 µg/L per storm event is unlikely to cause an exceedance of the chronic water quality standard of 1000 µg/L over four days. A benchmark will allow assessment and adjustment of BMPs at this site.

Lead, Total Recoverable
Monitoring only. This is a new parameter in this permit. On a site visit to the facility, the permit writer observed scrap metal and machinery exposed to stormwater in the outdoor storage area. This parameter is added using best professional judgment to apply pollutants of concern from industry #5015, salvage yards, to this facility.

OTHER:

Naphthalene
Monitoring only. This is a new parameter in this permit and is added per the permit writer's best professional judgment. The permit writer observed used mold-release oil containers in areas exposed to stormwater during a site visit. The facility provided the SDS for the mold-release oil used at the facility. The SDS disclosed naphthalene as the primary ingredient of the oil used for mold release. Additionally, this site is subject to heavy truck traffic, and this pollutant is associated with stormwater which has been in contact with motor oil or diesel fuel.

Part V. Sampling and Reporting Requirements:

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

Electronic Discharge Monitoring Reporting:

Due to new federal regulations, all facilities must begin submitting their discharge monitoring reports electronically, called the eDMR system (certain exemptions are allowed; see National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule in 80 FR 64063; effective 12/21/2015). To begin the process with the department, please visit http://dnr.mo.gov/pubs/pub2474.pdf. This process will save time, lessen paperwork, and reduce operating costs for both facilities and the water protection program. Additional information may also be found at http://dnr.mo.gov/env/wpp/edmr.htm.

Sampling Frequency Justification:

Sampling and reporting frequency was generally retained from previous permit. 40 CFR 122.45(d)(1) indicates all continuous discharges shall be permitted with daily maximum and monthly average limits. Sampling frequency for stormwater-only outfalls is typically quarterly even though BMP inspection occurs monthly. The facility may sample more frequently if additional data is required to determine if best management operations and technology are performing as expected.

Sampling Type Justification:

Sampling type was continued from the previous permit. The sampling types are representative of the discharges, and are protective of water quality. Discharges with altering effluent should have composite sampling; discharges with uniform effluent can have grab samples. Grab samples are usually appropriate for stormwater. Parameters which must have grab sampling are: pH, ammonia, *E. coli*, total residual chlorine, free available chlorine, hexavalent chromium, dissolved oxygen, total phosphorus, and volatile organic samples.

Sufficiently Sensitive Analytical Methods:

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

Part VI. Administrative Requirements

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

Permit Synchronization:

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

- ✓ *This permit will become synchronized by expiring the end of the 4th quarter, 2018.*

PUBLIC NOTICE:
The Department shall give public notice that a draft permit has been prepared and its issuance is pending. http://dnr.mo.gov/env/wpp/permits/pn/index.html Additionally, public notice will be issued if a public hearing is to be held because of a significant degree of interest in 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 from11/23/2016 to 12/23/2016. No responses were received. The permit was altered after public notice to reflect correct naming of the receiving streams. This change did not alter limits or conditions of the permit and is therefore considered a minor change.

DATE OF FACT SHEET: 09/28/2016

COMPLETED BY:

AMBERLY SCHULZ, ENVIRONMENTAL SPECIALIST
MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
OPERATING PERMITS SECTION - INDUSTRIAL UNIT
(573) 751-8049
Amberly.schulz@dnr.mo.gov

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

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

Part I – General Conditions
Section A – Sampling, Monitoring, and Recording

1. **Sampling Requirements.**
   a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
   b. All samples shall be taken at the outfall(s) or Missouri Department of Natural Resources (Department) approved sampling location(s), and unless specified, before the effluent joins or is diluted by any other body of water or substance.

2. **Monitoring Requirements**.
   a. Records of monitoring information shall include:
      i. The date, exact place, and time of sampling or measurements;
      ii. The individual(s) who performed the sampling or measurements;
      iii. The date(s) analyses were performed;
      iv. The individual(s) who performed the analyses;
      v. The analytical techniques or methods used; and
      vi. The results of such analyses.
   b. If the permittee monitors any pollutant more frequently than required by the permit at the location specified in the permit using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring shall be included in the calculation and reported to the Department with the discharge monitoring report data (DMR) submitted to the Department pursuant to Section B, paragraph 7.

3. **Sample and Monitoring Calculations.** Calculations for all sample and monitoring results which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in the permit.

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

5. **Record Retention.** Except for records of monitoring information required by the permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five (5) years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

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

Section B – Reporting Requirements

1. **Planned Changes.**
   a. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility when:
      i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
      ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42;
      iii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;
      iv. Any facility expansions, production increases, or process modifications which will result in a new or substantially different discharge or sludge characteristics must be reported to the Department 60 days before the facility or process modification begins. Notification may be accomplished by application for a new permit. If the discharge does not violate effluent limitations specified in the permit, the facility is to submit a notice to the Department of the changed discharge at least 30 days before such changes. The Department may require a construction permit and/or permit modification as a result of the proposed changes at the facility.

2. **Non-compliance Reporting.**
   a. The permittee shall report any noncompliance which may endanger health or the environment. Relevant information shall be provided orally or via the current electronic method approved by the Department, within 24 hours from the time the permittee becomes aware of the circumstances, and shall be reported to the appropriate Regional Office during normal business hours or the Environmental Emergency Response hotline at 573-634-2436 outside of normal business hours. A written submission shall also be provided within five (5) business days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

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 28th day of the month following the end of the reporting period.

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.
   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 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

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.

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 15355 C11408

MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION CONTROL BRANCH
FORM A – APPLICATION FOR CONSTRUCTION OR OPERATING PERMIT UNDER MISSOURI CLEAN WATER LAW

FOR AGENCY USE ONLY	
CHECK NUMBER	
DATE RECEIVED 5/2/13	FEE SUBMITTED 0 8B

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

1. This application is for:

- ☐ An operating permit and antidegradation review public notice
- ☐ A construction permit following an appropriate operating permit and antidegradation review public notice
- ☐ A construction permit and concurrent operating permit and antidegradation review public notice
- ☐ A construction permit (submitted before Aug. 30, 2008 or antidegradation review is not required)
- ☐ An operating permit for a new or unpermitted facility — Construction Permit # _____
- ☒ An operating permit renewal: permit # MO-0128422 — Expiration Date 11/20/13
- ☐ An operating permit modification: permit # MO-_____ — Reason: _____

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

2. FACILITY

NAME		TELEPHONE WITH AREA CODE	
Barbour Concrete Company		816-796-3344	
		FAX 816-796-3518	
ADDRESS (PHYSICAL)	CITY	STATE	ZIP CODE
21421 E Truman Road	Independence	MO	64056

3. OWNER

NAME	E-MAIL ADDRESS	TELEPHONE WITH AREA CODE	
Beton Development LLC		816-796-3344	
		FAX 816-796-3518	
ADDRESS (MAILING)	CITY	STATE	ZIP CODE
21421 E Truman Road	Independence	MO	64056

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

4. CONTINUING AUTHORITY

NAME		TELEPHONE WITH AREA CODE	
Barbour Concrete Company		816-796-3344	
		FAX 816-796-3518	
ADDRESS (MAILING)	CITY	STATE	ZIP CODE
21421 E Truman Rd	Independence	MO	64056

5. OPERATOR

NAME	CERTIFICATE NUMBER	TELEPHONE WITH AREA CODE	
Same as 2+4 above			
		FAX	
ADDRESS (MAILING)	CITY	STATE	ZIP CODE

6. FACILITY CONTACT

NAME	TITLE	TELEPHONE WITH AREA CODE
Danny Yutzy	Material Manager	816-796-3344
		FAX 816-796-3518

7. ADDITIONAL FACILITY INFORMATION

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

001 ____¼ SW ¼ Sec 3 T 49N R 31W Jackson County
UTM Coordinates Easting (X): _____ Northing (Y): _____
For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)

002 ____¼ ____¼ Sec ____ T ____ R ____ ____ County
UTM Coordinates Easting (X): _____ Northing (Y): _____

003 ____¼ ____¼ Sec ____ T ____ R ____ ____ County
UTM Coordinates Easting (X): _____ Northing (Y): _____

004 ____¼ ____¼ Sec ____ T ____ R ____ ____ County
UTM Coordinates Easting (X): _____ Northing (Y): _____

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

001 – SIC 1422 and NAICS _____ 002 – SIC _____ and NAICS _____
003 – SIC _____ and NAICS _____ 004 – SIC _____ and NAICS _____

RECEIVED
MAY 2 2013
WATER PROTECTION PROGRAM

8. ADDITIONAL FORMS AND MAPS NECESSARY TO COMPLETE THIS APPLICATION
(Complete all forms that are applicable.)

A. Is your facility a manufacturing, commercial, mining or silviculture waste treatment facility? YES ☒ NO ☐
If yes, complete Form C (unless storm water only, then complete U.S. Environmental Protection Agency Form 2F per Item C below).

B. Is your facility considered a "Primary Industry" under EPA guidelines: YES ☐ NO ☒
If yes, complete Forms C and D.

C. Is application for storm water discharges only? YES ☐ NO ☒
If yes, complete EPA Form 2F.

D. Attach a map showing all outfalls and the receiving stream at 1" = 2,000' scale.

E. Is wastewater land applied? If yes, complete Form I. YES ☐ NO ☒

F. Is sludge, biosolids, ash or residuals generated, treated, stored or land applied? YES ☐ NO ☒
If yes, complete Form R.

9. DOWNSTREAM LANDOWNER(S) Attach additional sheets as necessary. See Instructions.
(PLEASE SHOW LOCATION ON MAP. SEE 8.D ABOVE).

NAME			
Joseph K. Knoche (as of 8/2007)			
ADDRESS	CITY	STATE	ZIP CODE
620 Rankin Road	Independence	MO	64055

10. I certify that I am familiar with the information contained in the application, that to the best of my knowledge and belief such information is true, complete and accurate, and if granted this permit, I agree to abide by the Missouri Clean Water Law and all rules, regulations, orders and decisions, subject to any legitimate appeal available to applicant under the Missouri Clean Water Law to the Missouri Clean Water Commission.

NAME AND OFFICIAL TITLE (TYPE OR PRINT)	TELEPHONE WITH AREA CODE
Amy Burnett, VP	816.796.3344
SIGNATURE	DATE SIGNED
ABurnett	4/19/13

MO 780-1479 (01-09)

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

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

HAVE YOU INCLUDED:

- ☐ Appropriate Fees?
- ☒ Map at 1" = 2000' scale?
- ☒ Signature?
- ☒ Form C, if applicable?
- ☐ Form D, if applicable?
- ☐ Form 2F, if applicable?
- ☐ Form I (Irrigation), if applicable?
- ☐ Form R (Sludge), if applicable?

MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH

FORM C – APPLICATION FOR DISCHARGE PERMIT – MANUFACTURING, COMMERCIAL, MINING, SILVICULTURE OPERATIONS, PROCESS & STORM WATER

FOR AGENCY USE ONLY	
CHECK NO.	
DATE RECEIVED	FEE SUBMITTED

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

1.00 NAME OF FACILITY
Barbour Concrete Company

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER
MO-0128422

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

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

A. FIRST 1422 B. SECOND _____

C. THIRD _____ D. FOURTH _____

2.10 FOR EACH OUTFALL GIVE THE LEGAL DESCRIPTION.

001 OUTFALL NUMBER (LIST) NW 1/4 SW 1/4 SEC 3 T 49N R 31W Jackson COUNTY

2.20 FOR EACH OUTFALL LIST THE NAME OF THE RECEIVING WATER

OUTFALL NUMBER (LIST)	RECEIVING WATER
001	unnamed tributary to Little Blue River

2.30 BRIEFLY DESCRIBE THE NATURE OF YOUR BUSINESS

Barbour Concrete Co manufactures precast concrete structures such as manholes and utility boxes. Materials used in production include cement, sand and aggregate. Cement is stored in covered silos. Sand and aggregate are stored in open top bins. Mixing of concrete material, construction of steel reinforcing cages and casting of concrete structures is performed under a roof. Intermittent concrete coring is performed in a covered shed on the south side of the main manufacturing building. A storage yard is used for finished products and new appurtenances.

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent and treatment units labeled to correspond to the more detailed descriptions in item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, public sewers and outfalls. If a water balance cannot by determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

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

Continue on additional sheets if necessary.

1. OUTFALL NO.	2. OPERATION(S) CONTRIBUTING FLOW		3. TREATMENT	
(LIST)	A. OPERATION (LIST)	B. AVERAGE FLOW (INCLUDE UNITS) (MAXIMUM FLOW)	A. DESCRIPTION	B. LIST CODES FROM TABLE A
001	Storm water	0.25 mgd	Catchbasin	1U
001	Precast wash	200 gallons/week	Catchbasin	1U
001	Concrete Coring	Ø - currently inactive	Catchbasin	1U

2.40 CONTINUED

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

☐ **YES** *(COMPLETE THE FOLLOWING TABLE)* ☒ **NO** *(GO TO SECTION 2.50)*

1. OUTFALL NUMBER *(list)*	2. OPERATION(S) CONTRIBUTING FLOW *(list)*	3. FREQUENCY		4. FLOW				C. DURATION *(in days)*
				A. FLOW RATE *(in mgd)*		B. TOTAL VOLUME (specify with units)		
		A. DAYS PER WEEK *(specify average)*	B. MONTHS PER YEAR *(specify average)*	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	4. LONG TERM DAILY	3. MAXIMUM AVERAGE	

2.50 MAXIMUM PRODUCTION

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

☐ **YES** *(COMPLETE B.)* ☒ **NO** *(GO TO SECTION 2.60)*

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

☐ **YES** *(COMPLETE c.)* ☐ **NO** *(GO TO SECTION 2.60)* N/A

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

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

2.60 IMPROVEMENTS

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

☐ **YES** *(COMPLETE THE FOLLOWING TABLE)* ☒ **NO** *(GO TO 3.00)*

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

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

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

3.00 INTAKE AND EFFLUENT CHARACTERISTICS

A. & B. SEE INSTRUCTIONS BEFORE PROCEEDING – COMPLETE ONE TABLE FOR EACH OUTFALL – ANNOTATE THE OUTFALL NUMBER IN THE SPACE PROVIDED.
NOTE: TABLE 1 IS INCLUDED ON SEPARATE SHEETS NUMBERED FROM PAGE 6 TO PAGE 7.

C. USE THE SPACE BELOW TO LIST ANY OF THE POLLUTANTS LISTED IN PART B OF THE INSTRUCTIONS, WHICH YOU KNOW OR HAVE REASON TO BELIEVE IS DISCHARGED OR MAY BE DISCHARGED FROM ANY OUTFALL. FOR EVERY POLLUTANT YOU LIST, BRIEFLY DESCRIBE THE REASONS YOU BELIEVE IT TO BE PRESENT AND REPORT ANY ANALYTICAL DATA IN YOUR POSSESSION.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE
none			

3.10 BIOLOGICAL TOXICITY TESTING DATA

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

☐ YES (IDENTIFY THE TEST(S) AND DESCRIBE THEIR PURPOSES BELOW.) ☑ NO (GO TO 3.20)

3.20 CONTRACT ANALYSIS INFORMATION

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

☒ YES *(LIST THE NAME, ADDRESS AND TELEPHONE NUMBER OF AND POLLUTANTS ANALYZED BY EACH SUCH LABORATORY OR FIRM BELOW.)* ☐ NO *(GO TO 3.30)*

A. NAME	B. ADDRESS	C. TELEPHONE *(area code and number)*	D. POLLUTANTS ANALYZED *(list)*
Keystone Laboratories	1140 W. Cambridge Circle Drive Kansas City, KS. 66103	913-321-7856	pH, oil + grease, settleable solids

3.30 CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

NAME AND OFFICIAL TITLE (TYPE OR PRINT)	TELEPHONE NUMBER WITH AREA CODE
Amy Burnett, VP	816-796-3344
SIGNATURE (SEE INSTRUCTIONS)	DATE SIGNED
ABurnett	4/19/13

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

FORM
TABLE 1 FOR 3.00 I

INTAKE AND EFFLUENT CHARACTERISTICS (See attached NPDES Monitoring Reports)

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

1. POLLUTANT	2. EFFLUENT							3. UNITS *(specify if blank)*	
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE *(if available)*		C. LONG TERM AVRG. VALUE *(if available)*		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			
A. Biochemical Oxygen Demand (BOD)	—	—	—	—	—	—	—	—	—
B. Chemical Oxygen Demand (COD)	—	—	—	—	—	—	—	—	—
C. Total organic Carbon (TOC)	—	—	—	—	—	—	—	—	—
D. Total Suspended Solids (TSS)	ND(2.0)	—	ND(2.0)	—	ND(2.0)	—	2in2012	mg/l	—
E. Ammonia *(as N)*									
F. Flow	VALUE		VALUE		VALUE 0.25 mgd				
G. Temperature *(winter)*	VALUE		VALUE		VALUE			°C	
H. Temperature *(summer)*	VALUE		VALUE		VALUE			°C	
I. pH	MINIMUM 7.4	MAXIMUM 7.6	MINIMUM 7.4	MAXIMUM 7.6			2in2012	STANDARD UNITS	

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

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

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT							4. UNITS	
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			
G. Nitrogen Total Organic (as N)		X									
H. Oil and Grease	X		ND(5.0)	—	ND(5.0)	—	ND(5.0)	—	2in'12	mg/l	—
I. Phosphorus (as P) Total (7723-14-0)		X									
J. Sulfate (as SO^4) (14808-79-8)		X									
K. Sulfide (as S)		X									
L. Sulfite (as SO^3) (14265-45-3)		X									
M. Surfactants		X									
N. Aluminum Total (7429-90-5)		X									
O. Barium Total (7440-39-3)		X									
P. Boron Total (7440-42-8)		X									
Q. Cobalt Total (7440-48-4)		X									
R. Iron Total (7439-89-6)		X									
S. Magnesium Total (7439-95-4)		X									
T. Molybdenum Total (7439-98-7)		X									
U. Manganese Total (7439-96-5)		X									
V. Tin Total (7440-31-5)		X									
W. Titanium Total (7440-32-6)		X									

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

MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY

NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

INSTRUCTIONS:

1. Mail to: Kansas City Regional Office, 500 NE Colbern Road, Lee's Summit, MO 64086-4710
2. Report must be signed by owner and by analyst. Report should be typed or neatly printed.
3. Part A of the permit specifies the parameters to be monitored, frequency of monitoring and frequency of reporting results. If quarterly reports are required, they are due on April 28, July 28, October 28, and January 28, each report covering the preceding 3-month period not including the reporting month. See the permit for reporting dates if other than quarterly.
4. Report results of all analyses, even if performed more frequently than required by Part A of the permit.
5. File a report even if discharge is intermittent and no discharge occurred during the monitoring period. Complete the identification section, write "ND" in the appropriate columns for the dates the facility was checked, and sign the report. NOTE: If a discharge occurs any time during the monitoring period, it must be reported.
6. Under "Sample Type" indicate whether sample analyzed was: (a) grab sample; (b) 24-hour composite sample; or (c) modified composite sample. NOTE: See permit for type of sample required for each parameter.
7. Under "Sample Type" for Flow indicate whether figures shown are based on (a) instantaneous measurements or (b) actual 24-hour measured flow. Figure recorded is to represent the total 24-hour flow for the date shown or a reasonable estimate.
8. Indicate whether samples were collected by owner or by personnel of the lab performing the analyses.

NOTE: This reporting form is a universal reporting form for non-municipal sewage treatment plants, industries, and other point-source discharges.

Industries and individuals who have their own report forms designed for their specific needs are encouraged to substitute their forms. A suitable substitute must meet the following specifications.

(a) Form must be 8½" x 11".
(b) Report must show all of the information indicated on this standard form.

FACILITY NAME	PERMIT NUMBER	COUNTY	OWNER	TYPE OF FACILITY
Barbour Concrete Co	MO-0128422	Jackson	Beton Development	Manufacturing

REQUIRED FREQUENCY OF MONITORING

THIS REPORT COVERS PERIOD Oct 2012 THROUGH Dec 2012

DATES SAMPLED		No Runoff Period										SAMPLE TYPE (SEE NOTES 6 AND 7)		(RECORD, AS APPROPRIATE, SUCH INFORMATION AS METHOD OF PRESERVATION, METHODS OF SAMPLE COLLECTION, ABNORMAL AGE OF SAMPLE, EXPLANATION OF UNUSUAL RESULTS, ETC.)
TIME OF DAY SAMPLED														
SAMPLES COLLECTED BY														
DATES OF ANALYSES														
PARAMETERS	PERMITTED FINAL LIMITS	RECORD ACTUAL RESULTS OF ANALYSIS — DO NOT AVERAGE											ANALYTICAL METHOD (BE SPECIFIC)	REMARKS AND COMMENTS Location 1
FLOW GPD														
BOD mg/l														
SUS. SOLIDS mg/l														
pH UNITS														
FECAL COLI. /100 ml.														

ANALYSES PERFORMED BY

SIGNATURE OF ANALYST

REPORT APPROVED BY OWNER [signature], Beton DW.

DATE 1-25-13

MO 780-1117 (10-91)

WQP 109 Rev 10/91

MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY

NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

INSTRUCTIONS:

1. Mail to: Kansas City Regional Office, 500 NE Colbern Road, Lee's Summit, MO 64086-4710
2. Report must be signed by owner and by analyst. Report should be typed or neatly printed.
3. Part A of the permit specifies the parameters to be monitored, frequency of monitoring and frequency of reporting results. If quarterly reports are required, they are due on April 28, July 28, October 28, and January 28, each report covering the preceding 3-month period not including the reporting month. See the permit for reporting dates if other than quarterly.
4. Report results of all analyses, even if performed more frequently than required by Part A of the permit.
5. File a report even if discharge is intermittent and no discharge occurred during the monitoring period. Complete the identification section, write "ND" in the appropriate columns for the dates the facility was checked, and sign the report. NOTE: If a discharge occurs any time during the monitoring period, it must be reported.
6. Under "Sample Type" indicate whether sample analyzed was: (a) grab sample; (b) 24-hour composite sample; or (c) modified composite sample. NOTE: See permit for type of sample required for each parameter.
7. Under "Sample Type" for Flow indicate whether figures shown are based on (a) instantaneous measurements or (b) actual 24-hour measured flow. Figure recorded is to represent the total 24-hour flow for the date shown or a reasonable estimate.
8. Indicate whether samples were collected by owner or by personnel of the lab performing the analyses.

NOTE: This reporting form is a universal reporting form for non-municipal sewage treatment plants, industries, and other point-source discharges.

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(b) Report must show all of the information indicated on this standard form.

FACILITY NAME	PERMIT NUMBER	COUNTY	OWNER	TYPE OF FACILITY
Barbour Concrete Co	MO-0128122	Jackson	Beton Development	Manufacturing

REQUIRED FREQUENCY OF MONITORING

THIS REPORT COVERS PERIOD July 20 12 THROUGH Sept 20 12

No Runoff obtained

PARAMETERS		PERMITTED FINAL LIMITS	RECORD ACTUAL RESULTS OF ANALYSIS — DO NOT AVERAGE	SAMPLE TYPE (SEE NOTES 6 AND 7)	ANALYTICAL METHOD (BE SPECIFIC)	REMARKS AND COMMENTS (RECORD, AS APPROPRIATE, SUCH INFORMATION AS METHOD OF PRESERVATION, METHODS OF SAMPLE COLLECTION, ABNORMAL AGE OF SAMPLE, EXPLANATION OF UNUSUAL RESULTS, ETC.)
DATES SAMPLED						
TIME OF DAY SAMPLED						
SAMPLES COLLECTED BY						
DATES OF ANALYSES						
FLOW	GPD					Location 1
BOD	mg/l					
SUS. SOLIDS	mg/l					
pH	UNITS					
FECAL COLI.	/100 ml.					

ANALYSES PERFORMED BY

SIGNATURE OF ANALYST

REPORT APPROVED BY OWNER

DATE 10-28-2012

MO 780-1117 (10 91)

WQP 109 Rev. 10/91

MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY

NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

INSTRUCTIONS:

1. Mail to: Kansas City Regional Office, 500 NE Colbern Road, Lee's Summit, MO 64086-4710
2. Report must be signed by owner and by analyst. Report should be typed or neatly printed.
3. Part A of the permit specifies the parameters to be monitored, frequency of monitoring and frequency of reporting results. If quarterly reports are required, they are due on April 28, July 28, October 28, and January 28, each report covering the preceding 3-month period not including the reporting month. See the permit for reporting dates if other than quarterly.
4. Report results of all analyses, even if performed more frequently than required by Part A of the permit.
5. File a report even if discharge is intermittent and no discharge occurred during the monitoring period. Complete the identification section, write "ND" in the appropriate columns for the dates the facility was checked, and sign the report. NOTE: If a discharge occurs any time during the monitoring period, it must be reported.
6. Under "Sample Type" indicate whether sample analyzed was: (a) grab sample; (b) 24-hour composite sample; or (c) modified composite sample. NOTE: See permit for type of sample required for each parameter.
7. Under "Sample Type" for Flow indicate whether figures shown are based on (a) instantaneous measurements or (b) actual 24-hour measured flow. Figure recorded is to represent the total 24-hour flow for the date shown or a reasonable estimate.
8. Indicate whether samples were collected by owner or by personnel of the lab performing the analyses.

NOTE: This reporting form is a universal reporting form for non-municipal sewage treatment plants, industries, and other point-source discharges.

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(a) Form must be 8½" x 11".
(b) Report must show all of the information indicated on this standard form.

FACILITY NAME	PERMIT NUMBER	COUNTY	OWNER	TYPE OF FACILITY
Barbour Concrete Co	MO-0128472	Jackson	Barbour Development	Manufacturing

REQUIRED FREQUENCY OF MONITORING

THIS REPORT COVERS PERIOD 4-1 20 12 THROUGH 6-30 20 12

DATES SAMPLED 6-11

TIME OF DAY SAMPLED 8:15 Am

SAMPLES COLLECTED BY Dan Autry

DATES OF ANALYSES See Attached

PARAMETERS		PERMITTED FINAL LIMITS	RECORD ACTUAL RESULTS OF ANALYSIS — DO NOT AVERAGE	SAMPLE TYPE (SEE NOTES 6 AND 7)	ANALYTICAL METHOD (BE SPECIFIC)	REMARKS AND COMMENTS
FLOW	MGD				See Attached	Location 1
Oil + Grease	mg/l	<5				
SUS. SOLIDS	mg/l	<2				
pH	UNITS	7.4				
FECAL COLI.	/100 ml.					
Total Settable Solids		<0.1				

(RECORD, AS APPROPRIATE, SUCH INFORMATION AS METHOD OF PRESERVATION, METHODS OF SAMPLE COLLECTION, ABNORMAL AGE OF SAMPLE, EXPLANATION OF UNUSUAL RESULTS, ETC.)

ANALYSES PERFORMED BY

SIGNATURE OF ANALYST

REPORT APPROVED BY OWNER [signature]

DATE 7-14-12

MO 780-1117 (10-91)

WQP 109 Rev. 10/91

MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY

NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

INSTRUCTIONS:

1. Mail to: Kansas City Regional Office, 500 NE Colbern Road, Lee's Summit, MO 64086-4710
2. Report must be signed by owner and by analyst. Report should be typed or neatly printed.
3. Part A of the permit specifies the parameters to be monitored, frequency of monitoring and frequency of reporting results. If quarterly reports are required, they are due on April 28, July 28, October 28, and January 28, each report covering the preceding 3-month period not including the reporting month. See the permit for reporting dates if other than quarterly.
4. Report results of all analyses, even if performed more frequently than required by Part A of the permit.
5. File a report even if discharge is intermittent and no discharge occurred during the monitoring period. Complete the identification section, write "ND" in the appropriate columns for the dates the facility was checked, and sign the report. NOTE: If a discharge occurs any time during the monitoring period, it must be reported.
6. Under "Sample Type" indicate whether sample analyzed was: (a) grab sample; (b) 24-hour composite sample; or (c) modified composite sample. NOTE: See permit for type of sample required for each parameter.
7. Under "Sample Type" for Flow indicate whether figures shown are based on (a) instantaneous measurements or (b) actual 24-hour measured flow. Figure recorded is to represent the total 24-hour flow for the date shown or a reasonable estimate.
8. Indicate whether samples were collected by owner or by personnel of the lab performing the analyses.

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(a) Form must be 8½" x 11".

(b) Report must show all of the information indicated on this standard form.

FACILITY NAME	PERMIT NUMBER	COUNTY	OWNER	TYPE OF FACILITY
Barbour Concrete Co	MO-0128422	Jackson	Beton Development	Manufacturing

REQUIRED FREQUENCY OF MONITORING

THIS REPORT COVERS PERIOD Jan 1 2012 THROUGH March 31 2012

DATES SAMPLED 3-20-12

TIME OF DAY SAMPLED 1:55 PM

SAMPLES COLLECTED BY Dan Yutzy

DATES OF ANALYSES See report

(RECORD, AS APPROPRIATE, SUCH INFORMATION AS METHOD OF PRESERVATION, METHODS OF SAMPLE COLLECTION, ABNORMAL AGE OF SAMPLE, EXPLANATION OF UNUSUAL RESULTS, ETC.)

PARAMETERS	PERMITTED FINAL LIMITS	RECORD ACTUAL RESULTS OF ANALYSIS — DO NOT AVERAGE	SAMPLE TYPE (SEE NOTES 6 AND 7)	ANALYTICAL METHOD (BE SPECIFIC)	REMARKS AND COMMENTS
FLOW MGD				See Attached	Location 1
Oil + Grease mg/l	<5				
SUS. SOLIDS mg/l	<2				
pH UNITS	7.6				
~~FECAL COLI. /100 ml.~~					
Total Settable Solids	<0.1				

ANALYSES PERFORMED BY

SIGNATURE OF ANALYST

REPORT APPROVED BY OWNER [signature]

DATE 7-14-12

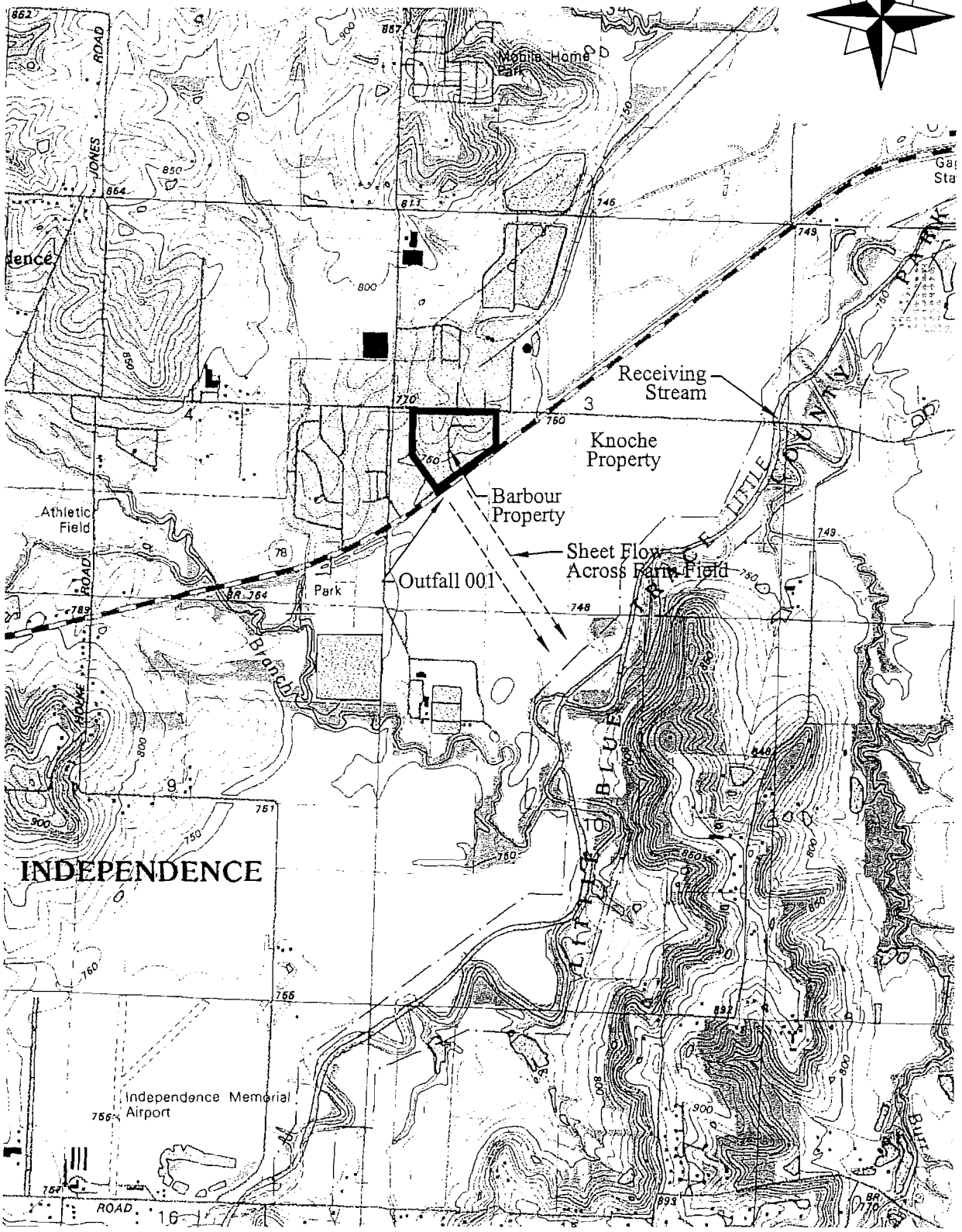
MO 780-1111 (10-91)

WQP 109 Rev 10/91

Midwest Environmental CONSULTANTS

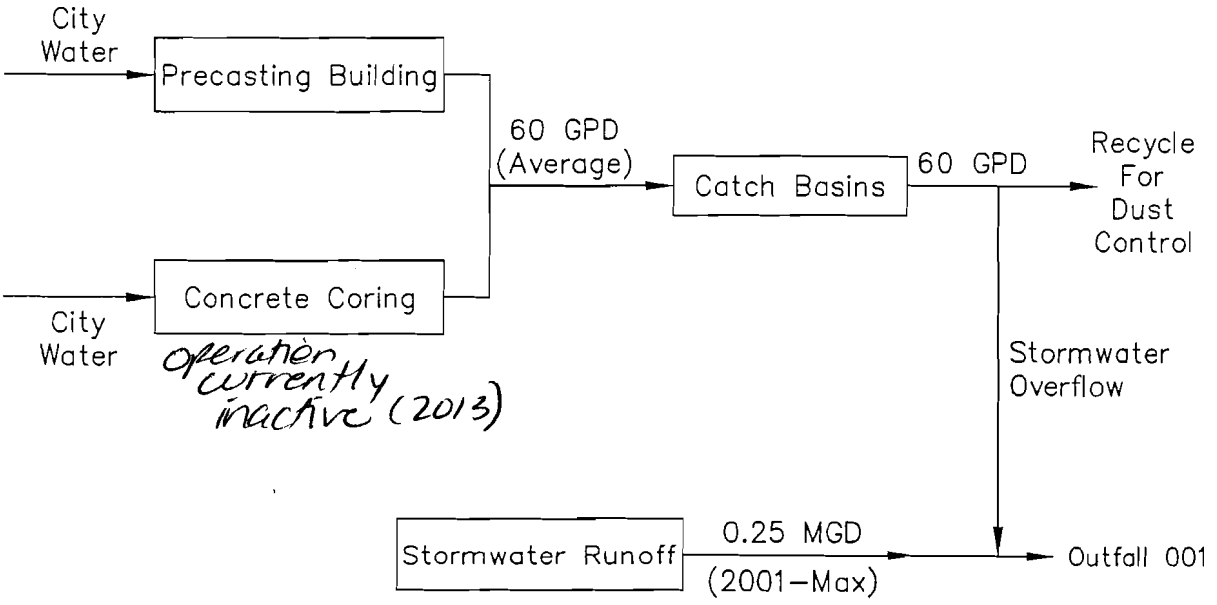
Barbour Concrete Company
Site Specific NPDES Permit Application
Site Vicinity Map

FIGURE 1 Scale: 1" = 2000'
T49N, R31W, Sec. 3
Blue Springs, MO USGS Quadrangle



Barbour Concrete Company
Site Specific NPDES Permit Application
Line Drawing Illustrating Water Flow Through Facility

FIGURE 2 Not To Scale



Midwest Environmental CONSULTANTS

Barbour Concrete Company
Site Specific NPDES Permit Application
Site Map

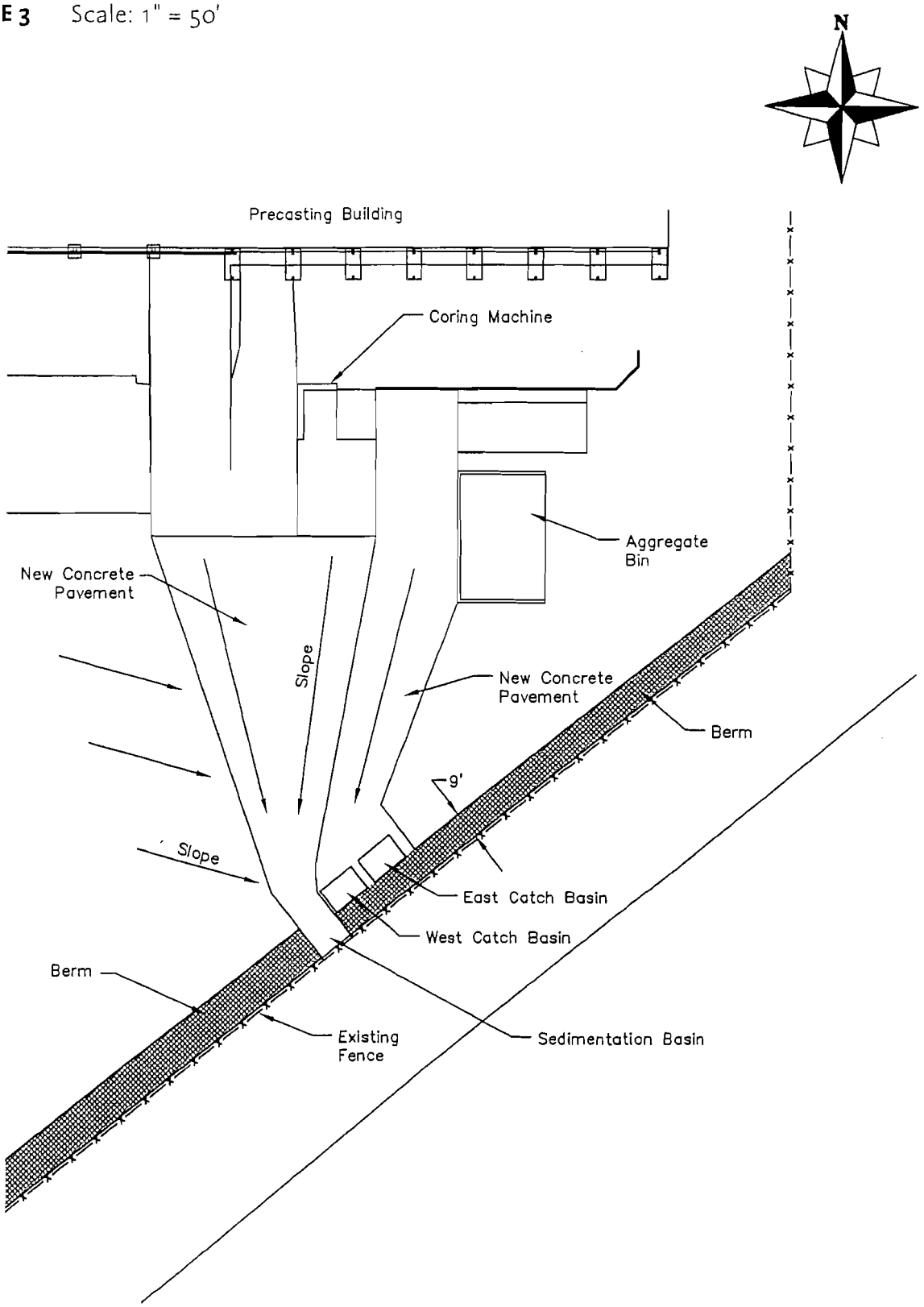



FIGURE 3 Scale: 1" = 50'