

STATE OF MISSOURI  
**DEPARTMENT OF NATURAL RESOURCES**

MISSOURI CLEAN WATER COMMISSION



**MISSOURI STATE OPERATING PERMIT**

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

Permit No. MO-0120294

Owner: Beazer East, Inc.  
Address: 1910 Cochran Road, Suite 200, Pittsburgh, PA 15220

Continuing Authority: same as above  
Address: same as above

Facility Name: Former Koppers Facility  
Facility Address: 6740 Stadium Drive, Kansas City, MO 64129

Legal Description: SW<sup>1</sup>/<sub>4</sub>, SE<sup>1</sup>/<sub>4</sub> Sec. 13, T49N, R33W, Jackson County  
UTM Coordinates: Outfall #004 X = 369885, Y = 4324733  
Outfall #005 X = 369882, Y = 4324662

Receiving Stream: Tributary to Blue River (U)  
First Classified Stream and ID: Blue River (P), WBID # 0418, 303(d) List (2004-2006; bacteria)  
USGS Basin & Sub-watershed No.: Outlet Blue River 10300101-0106

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

**FACILITY DESCRIPTION**

Outfall #004 and #005 - Former wood treating facility - SIC #2491  
No certified operator required.  
Stormwater discharge only.  
Design flow dependent upon stormwater runoff.

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, 2015  
Effective Date

Sara Parker Pauley, Director, Department of Natural Resources

March 31, 2019  
Expiration Date

John Madras, Director, Water Protection Program

EFFLUENT PARAMETER(S)	UNITS	EFFLUENT LIMITATIONS		MONITORING REQUIREMENTS	
		DAILY MAXIMUM	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow	gal/min	*	Not Required for This Facility's Discharges	once/quarter	estimate
Precipitation	inches	*		once/quarter	total <sup>o</sup>
pH	SU	**		once/quarter	grab
Settleable Solids	mL/L/hr	1.5		once/quarter	grab
Oil & Grease	mg/L	10		once/quarter	grab
Dibenzo(a,h)anthracene	µg/L	5		once/quarter	grab
Indeno(1,2,3-cd)pyrene	µg/L	5		once/quarter	grab
Pentachlorophenol	µg/L	5		once/quarter	grab
2-methylphenol (o-cresol)	µg/L	*		once/quarter	grab
3-methylphenol (m-cresol)	µg/L	*		once/quarter	grab
4-methylphenol (p-cresol)	µg/L	*		once/quarter	grab
2,4,6-trichlorophenol	µg/L	2.0 (10 ML) <sup>♦</sup>		once/quarter	grab
2,4-dichlorophenol	µg/L	7.0		once/quarter	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE APRIL 28, 2015. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

All samples shall be collected from a discharge resulting from a precipitation event greater than 0.5 inches in magnitude. If a qualifying precipitation event does not occur within the reporting period, report as **no discharge**. Samples should be obtained within the first two hours after the discharge begins.

◇ Note the total amount of precipitation from the event from which the samples were collected.

◆ This effluent limit is below the minimum quantification level (ML) of the most common and practical EPA approved CLTRC methods. The Department has determined the current acceptable ML for this parameter to be 10 µg/L when using the applicable EPA method. The permittee will conduct analyses in accordance with an EPA approved method, or equivalent, and report actual analytical values. Measured values greater than or equal to the minimum quantification level of 10 µg/L will be considered violations of the permit and values less than the minimum quantification level of 10 µg/L will be considered to be in compliance with the permit limitation. The minimum quantification level does not authorize the discharge of 2,4,6-trichlorophenol in excess of the effluent limits stated in the permit.

\* Monitoring requirement only.

\*\* pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.5 to 9.0 pH units.

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

## 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 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;
    - (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 Substances  
The permittee shall notify the Director as soon as it knows or has reason to believe:
  - (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
    - (1) One hundred micrograms per liter (100 µg/L);
    - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
    - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
    - (4) The level established by the Director in accordance with 40 CFR 122.44(f).
  - (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
5. Report as no-discharge when a discharge does not occur during the report period.
6. Reporting of Analytical 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.

C. SPECIAL CONDITIONS (continued)

- (b) The permittee shall not report a sample result as “Non-Detect” (or ND) 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 provide the “Non-Detect” sample result using the less than sign and the minimum detection limit (e.g. <0.2).
  - (d) See Standard Conditions Part I, Section A, #4 regarding proper detection limits used for sample analysis.
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 permittee shall implement a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP must be prepared and implemented 90 days after 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, if needed, every five (5) years or as site conditions change. The permittee shall select, install, use, operate, and maintain the Best Management Practices prescribed in the SWPPP in accordance with the concepts and methods described in the following document: Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators, (Document number EPA 833-B-09-002) published by the United States Environmental Protection Agency (USEPA) in February 2009.
- The SWPPP must include the following:
- a. A listing of specific Best Management Practices (BMPs) and a narrative explaining how BMPs will be implemented to control and minimize the amount of potential contaminants that may enter stormwater. The BMPs at the facility should be designed to meet this value during rainfall event up to the 10 year, 24 hour rain event.
  - b. The SWPPP must include a schedule for once per month site inspections and brief written reports. The inspection report must include weather information for the entire period since last inspection, as well as observations and evaluations of BMP effectiveness. Deficiencies must be corrected within seven (7) days and the actions taken to correct the deficiencies shall be included with the written report, including photographs. Any corrective measure that necessitates major construction may also need a construction permit. Inspection reports must be kept on site with the SWPPP and maintained for a period of five (5) years. These must be made available to department personnel upon request.
  - c. A provision for designating an individual to be responsible for environmental matters.
  - d. A provision for providing training to all personnel involved in material handling and storage, and housekeeping of maintenance and cleaning areas. Proof of training shall be submitted on request of the department.
10. 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 storm water from these substances.
  - b. Provide collection facilities and arrange for proper disposal of waste products including but not limited to petroleum waste products, and solvents.
  - c. Store all paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) so that these materials are not exposed to storm water or provide other prescribed BMPs such as plastic lids and/or portable spill pans to prevent the commingling of storm water with container contents. Commingled water may not be discharged under this permit. Provide spill prevention control, and/or management sufficient to prevent any spills of these pollutants from entering waters of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater.
  - d. Provide good housekeeping practices on the site to keep trash from entry into waters of the state.
  - e. Provide sediment and erosion control sufficient to prevent or control sediment loss off of the property. This could include the use of straw bales, silt fences, or sediment basins, if needed, to comply with effluent limits.
11. The purpose of the SWPPP and the BMPs listed herein is the prevention of pollution of waters of the state. A deficiency of a BMP means it was not effective in preventing pollution [10 CSR 20-2.010(56)] of waters of the state, and corrective actions means the facility took steps to eliminate the deficiency.
12. Release of a hazardous substance must be reported to the department in accordance with 10 CSR 24-3.010. A record of each reportable spill shall be retained with the SWPPP and made available to the department upon request.

**MISSOURI DEPARTMENT OF NATURAL RESOURCES  
FACT SHEET  
FOR THE PURPOSE OF RENEWAL  
OF  
MO-0120294  
FORMER KOPPERS FACILITY (BEAZER EAST)**

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

As per [40 CFR Part 124.8(a)] and [10 CSR 20-6.020(1)2.] a Factsheet shall be prepared to give pertinent information regarding the applicable regulations, rationale for the development of effluent limitations and conditions, and the public participation process for the attached Missouri State Operating Permit (operating permit).

A factsheet is not an enforceable part of an operating permit. This factsheet is for a former industrial facility which only discharges stormwater.

**Part I. Facility Information**

Facility Type: Industrial; Facility SIC Code: 2491

Facility Description:

Koppers is a former wood treatment facility that operated from the early 1920s until 1988. By 1994, all of the facility's structures, including a RCRA regulated storage area for hazardous waste had been removed. The RCRA storage container area was closed as a landfill by limited excavation of contaminated soil and covered with a clay cap. The facility owner now holds a Missouri Hazardous Waste Management Facility (MHWMF) permit # MOD007146517, requiring post closure care of the facility.

Application Date: 04/21/2014  
Expiration Date: 10/22/2014  
Last Inspection: 06/27/2012

**OUTFALL(S) TABLE:**

OUTFALL	DESIGN FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE
#004	dependent upon precipitation	none	stormwater only
#005		none	stormwater only

Facility Performance History & Comments:

A discharge monitoring report (DMR) was obtained for the most recent five years (last permit cycle) on August 13, 2014. In this operating permit renewal, the department has changed the facility's monitoring and reporting to quarterly as the facility reported no discharge for approximately 75 percent of their reporting periods (monthly) because qualifying precipitation events do not necessarily result in representative discharges from the facility's outfalls. Additionally, at the request of the permittee, the precipitation trigger has been modified from 0.1 inches of rainfall to 0.5 inches of rainfall to better recognize actual stormwater runoff from the site.

Also included in the DMR was 47 exceedences of permit limits. Thirty four occurred in monitoring period 03/31/2012. After review of the analytical data sent from the laboratory, reporting limits were set above the permit limits. Although the laboratory reported a "U" qualifier which indicated "analyte was analyzed for but not detected", a value was entered into the electronic MO Clean Water Information System which exceeded the permit limits. Similarly, in monitoring period 04/30/2011, eleven exceedences were reported even though the laboratory reported a non-detect; the MOCWIS is incorrect in these 45 instances because of limitations of the system itself. In light of these data inaccuracies, an ML has been established for one parameter where laboratory method detection limit and permit limit are similar. Of the 47 exceedences, only two appear valid and they occurred in monitoring period 09/30/2010; dibenzo(a,h)anthracene (5.8 µg/L: limit 5 µg/L) and indeno(1,2,3-cd)pyrene (5.6 µg/L: limit 5 µg/L) both polycyclic aromatic hydrocarbons.

The facility has been attempting to receive a “no exposure” permit. The regional office has denied this request for two reasons; 1) the facility has failed to submit some discharge monitoring reports, and 2) the inspector noticed at least one outfall discharging when the permittee submitted a DMR stating “no discharge”. The permittee stated outfall #005 has a constant flow of water discharging regardless of precipitation. At this facility, they have made the determination to disregard this “base flow” as not representative of the facility’s discharge and therefore do not sample from outfall #005 if the base flow has not increased. Additionally, the permittee stated outfall #004 rarely has any discharge except in significant rainfall events. The permit writer has accounted for the supplied information and written the permit accordingly.

**Part II. Receiving Stream Information**

**RECEIVING WATER BODY’S WATER QUALITY:**

No stream surveys were reported on the Blue River within the associated ecological drainage unit.

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

As per Missouri’s Effluent Regulations [10 CSR 20-7.015], the waters of the state are divided into the below listed seven (7) categories. Each category lists effluent limitations for specific parameters, which are presented in each outfall’s Effluent Limitation Table and further discussed in the Derivation & Discussion of Limits section. As per Missouri’s Stormwater Regulations [10 CSR 20.6.200(6)(B)2.], the department shall establish effluent limits as necessary to protect waters of the state. Effluent limitations for stormwater are established using best professional judgment based on the category and designated uses of the receiving stream.

- Missouri or Mississippi River:
- Lake or Reservoir:
- Losing:
- Metropolitan No-Discharge:
- Special Stream:
- Subsurface Water:
- All Other Waters:

**RECEIVING STREAM(S):**

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

OUTFALL	WATERBODY NAME	CLASS	WBID	DESIGNATED USES*	DISTANCE TO CLASSIFIED SEGMENT	HUC**
#004	Tributary to Blue River	U		GEN	n/a	10300101-0106
#005						
#004	Blue River	P	0418	AQL, IND, LWV, SCR, WBC-B	≈ 0.28 mi.	Outlet Blue River
#005					≈ 0.31 mi.	

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

\*\* - Hydrologic Unit Code

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

OUTFALL	RECEIVING STREAM (U)	LOW-FLOW VALUES (CFS)		
		1Q10	7Q10	30Q10
#004 & #005	Tributary to Blue River	0.0	0.0	0.0

**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 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:**

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

- Limitations in this operating permit for the reissuance of this permit conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Act, and 40 CFR Part 122.44. Information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance.

This facility is a closed facility and is maintaining natural cover as remediation. Effluent limitation values remain the same for the compounds which were retained in this permit; two representative species of phenolic compounds were added to the permit based on Missouri's water quality standards for those compounds, the remaining phenolic compounds were removed because they were not detected in the permittee's effluent over the past five years nor are they expected to occur in the future. Natural attenuation is occurring at the site. Several additional compounds were removed from the monitoring and reporting requirement because they were not present in the facility's effluent at detectable levels within the last permit cycle. See individual comments relating to the constituents of concern in Section IV of the fact sheet. This is a stormwater only permit and the facility was required to sample monthly in the previous permit. It is the permit writer's best professional judgment that quarterly sampling will be just as representative of the stormwater discharges from this facility.

#### **ANTIDEGRADATION:**

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

Renewal. No degradation proposed and no further review necessary.

#### **BIOSOLIDS & SEWAGE SLUDGE:**

Biosolids are solid materials resulting from domestic wastewater treatment that meet federal and state criteria for beneficial uses (i.e. fertilizer). Sewage sludge is solids, semi-solids, or liquid residue generated during the treatment of domestic sewage in a treatment works; including but not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works. Additional information regarding biosolids and sludge is located at the following web address:

<http://extension.missouri.edu/main/DisplayCategory.aspx?C=74>, items WQ422 through WQ449.

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

#### **COMPLIANCE AND ENFORCEMENT:**

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

Not Applicable. The permittee/facility is not currently under Water Protection Program enforcement action. However, the facility has been issued violations for non-receipt of DMRs in April, May, and June of 2014.

#### **REASONABLE POTENTIAL ANALYSIS (RPA):**

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

Not Applicable. A RPA was not conducted for this facility (stormwater only discharge).

#### **INDUSTRIAL SLUDGE:**

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

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

**SCHEDULE OF COMPLIANCE (SOC):**

A schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements (actions, operations, or milestone events) leading to compliance with the Missouri Clean Water Law, its implementing regulations, and/or the terms and conditions of an operating permit.

Not Applicable. This permit does not contain a SOC.

**STORM WATER POLLUTION PREVENTION PLAN (SWPPP):**

In accordance with 40 CFR 122.44(k) *Best Management Practices (BMPs)* to control or abate the discharge of pollutants when: (1) Authorized under section 304(e) of the Clean Water Act (CWA) for the control of toxic pollutants and hazardous substances from ancillary industrial activities; (2) Authorized under section 402(p) of the CWA for the control of storm water discharges; (3) Numeric effluent limitations are infeasible; or (4) the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA. In accordance with the EPA's *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (Document number EPA 833-B-09-002) [published by the United States Environmental Protection Agency (USEPA) in February 2009], BMPs are measures or practices used to reduce the amount of pollution entering (regarding this operating permit) waters of the state. BMPs may take the form of a process, activity, or physical structure. Additionally in accordance with the Storm Water Management, a SWPPP is a series of steps and activities to (1) identify sources of pollution or contamination, and (2) select and carry out actions which prevent or control the pollution of storm water discharges.

Applicable. A SWPPP shall be developed and implemented for each site and shall incorporate required practices identified by the Department with jurisdiction, incorporate erosion control practices specific to site conditions, and provide for maintenance and adherence to the plan. As this is a new requirement, the facility has 90 days after permit issuance to comply.

**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.

**VARIANCE:**

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

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

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

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

Not Applicable. Wasteload allocations were not calculated.

**WLA MODELING:**

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

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

**WATER QUALITY STANDARDS:**

Per [10 CSR 20-7.031(3)], General Criteria shall be applicable to all waters of the state at all times including mixing zones. Additionally, [40 CFR 122.44(d)(1)] directs the Department to establish in each NPDES permit to include conditions to achieve water quality established under Section 303 of the Clean Water Act, including State narrative criteria for water quality.

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

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

Not Applicable. At this time, the permittee is not required to conduct WET test for this facility because the discharge is stormwater only.

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

Section 303(d) of the federal Clean Water Act requires that each state identify waters that are not meeting water quality standards and for which adequate water pollution controls have not been required. Water quality standards protect such beneficial uses of water as whole body contact (such as swimming), maintaining fish and other aquatic life, and providing drinking water for people, livestock and wildlife. The 303(d) list helps state and federal agencies keep track of waters that are impaired but not addressed by normal water pollution control programs. TMDL is a calculation of the maximum amount of a given pollutant that a body of water can absorb before its water quality is affected. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan will be developed that shall include the TMDL calculation

Applicable; the Blue River is listed on the 2004-2006 Missouri 303(d) List for bacteria.

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

**Part IV. Effluent Limits Determination**

*Outfall #004 and #005 – Stormwater Outfalls*

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

Due to the nature of the discharges from these outfalls being stormwater only, a maximum daily limit (MDL) or monitoring requirement will be implemented for many of the parameters listed below. Stormwater events are acute occurrences that result in the greatest concentrations of pollutants being discharged in the first part of the runoff. This first flush can best be represented by a grab sample within the first hours of runoff. Additionally, stormwater events are highly variable. Recording an average monthly limit (AML) is not representative of the nature of these discharges.

**EFFLUENT LIMITATIONS TABLE:**

Parameter	Unit	Basis for Limits	Daily Maximum	Monthly Average	Previous Permit limitations
Flow	gal/min	6	*	n/a	same
Precipitation	inches	6	*	n/a	new
pH	SU	2	*	n/a	same
Settleable Solids	mL/L/hr	2	1.5	n/a	same
Oil & Grease	mg/L	2	10	n/a	15
Dibenzo(a,h)anthracene	µg/L	6	5	n/a	same
Indeno(1,2,3-cd)pyrene	µg/L	6	5	n/a	same
Pentachlorophenol	µg/L	6	5	n/a	same
2-methylphenol (o-cresol)	µg/L	6	*	n/a	same
3-methylphenol (m-cresol)	µg/L	6	*	n/a	same
4-methylphenol (p-cresol)	µg/L	6	*	n/a	same
2,4,6-trichlorophenol	µg/L	2	2.0	n/a	surrogate
2,4-dichlorophenol	µg/L	2	7.0	n/a	surrogate

\* - Monitoring/reporting requirement only

**Basis for Limitations Codes:**

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

**OUTFALLS #004 AND #005 – DERIVATION AND DISCUSSION OF LIMITS:**

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification. This is held over from the previous permit.
- **Precipitation.** Monitoring only requirement. Measuring the amount of rainfall during an event is necessary to ensure adequate stormwater management exists at the site. Knowing the amount of potential stormwater runoff can provide the permittee a better understanding of specific control measure that should be employed to ensure protection of water quality.

- **Settleable Solids (SS).**  
The previous permit set the limits for Settleable solids at 1.5 mL/L/hr for a daily maximum and 1.0 mL/L/hr for a monthly average maximum. These values were retained in the current permit.
- **pH.** – 6.5-9.0 SU. 10 CSR 7.031(4)(E) No mixing zone is allowed due to the classification of the receiving stream, therefore the water quality standard must be met at the outfall. This is continued from the previous permit.
- **Oil & Grease.** Conventional pollutant, in accordance with 10 CSR 20-7.031 Table A: Criteria for Designated Uses; effluent limitation for protection of aquatic life; 10 mg/L daily maximum. The previous permit allowed for 15 mg/L for a daily maximum; the facility only samples once quarterly therefore the allowable limit was lowered to the more protective standard. The facility did not have any excursions above the newly established daily maximum value in the previous permit cycle.
- **Temperature.** Due to the nature of the discharge being stormwater only, the permittee will not be required to monitor for this pollutant during stormwater flows from the outfalls. The permit writer has used BPJ to determine the discharge will not cause an exceedance in temperature in the receiving stream during discharges of stormwater only.
- **BTEX.** Benzene, toluene, ethylbenzene, and xylenes were removed from the permit. The facility has shown in the previous permit cycle their effluent contains undetectable limits of these constituents.
- **Dioxins and Furans.** Dioxin (2,3,7,8-TCDD) and dibenzofuran were removed from the permit. The original reasoning for the inclusion of these parameters into the initial permit is unknown. They also do not occur in the Missouri general stormwater permit for SIC code 2491. Additionally, throughout the previous permit cycle, the facility's analytical results show non-detects for these compounds.
- **Phenolic Compounds.** Some of these compounds have been retained from the previous permit and two surrogates will serve as indicator parameters for the phenolic compounds used in the wood treatment which occurred at the facility. The ones which were eliminated are either not listed in Table A of 10 CSR 20-7.031 or have such a high allowable effluent limit, the facility has shown through the last permit cycle that discharges will not approach the protective values. Phenolic pollutants which were removed from the permit were: phenol, p-chloro-m-cresol, 4,6-dinitro-o-cresol, and 2,3,4,6-tetrachlorophenol. Pentachlorophenol was retained because of the bioaccumulative toxic effects of the compound; the limits were also retained. All three cresol isomers were retained as monitoring only for the site. Missouri has established chronic criteria standards for protection of aquatic life which includes human health for drinking and fish consumption for 2,4-dichlorophenol (7 µg/L) and 2,4,6-trichlorophenol (2 µg/L). These phenolic constituents were added as surrogates for the phenolic compounds that once were used on the facility grounds and hence were established at the most protective level for the pollutant.
- **Polycyclic Aromatic Hydrocarbons (PAHs).** Most of the PAHs were removed from the permitting requirements as the previous permit cycle has determined they are contained in the effluent limitations below the detectable limits (if present at all) except for two compounds: dibenzo(a,h)anthracene and indeno(1,2,2-cd)pyrene. These two were detected once in 2010. The previous limit was 5µg/L for both compounds at the daily maximum and was retained in this permit. PAHs which were removed were: acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, carbazole, chrysene, fluoranthene, fluorene, 2-methylnaphthalene, naphthalene, phenanthrene, and pyrene.
- **Minimum Sampling and Reporting Frequency Requirements.**
  - All parameters listed shall be sampled quarterly and reported quarterly. See page 2 of the permit.
  - Sampling Frequency Justification: Sampling and Reporting Frequency was decreased from the previous permit. The facility reported approximately 75% “no discharges” in the previous permit cycle. By changing from a monthly sampling regimen to quarterly sampling, the reported results will still be able to effectively characterize the stormwater effluent from the facility.
- **Sampling Type Justification**  
Grab samples are appropriate for this site; the effluent is stormwater only and the site has been closed since 1988.

## **Part V. 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. 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. To obtain permit synchronization, **this permit will expire the 1<sup>st</sup> Quarter of 2019.**

### **PUBLIC NOTICE:**

The Department shall give public notice that a draft permit has been prepared and its issuance is pending. Additionally, public notice will be issued if a public hearing is to be held because of a significant degree of interest in and water quality concerns related to a draft permit. No public notice is required when a request for a permit modification or termination is denied; however, the requester and permittee must be notified of the denial in writing.

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

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

- The Public Notice period for this operating permit ended 12/08/2014. No responses were received.

**DATE OF FACT SHEET:** OCTOBER 14, 2014

### **COMPLETED BY:**

Pam Hackler, Environmental Specialist  
Missouri Department of Natural Resources  
Water Protection Program  
Operating Permits Section - Industrial Unit  
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MISSOURI CLEAN WATER COMMISSION  
REVISED  
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These Standard Conditions incorporate permit conditions as required by 40 CFR 122.41 or other applicable state statutes or regulations. These minimum conditions apply unless superseded by requirements specified in the permit.

## Part I – General Conditions

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

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

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

### Section B – Reporting Requirements

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



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

## Section C – Bypass/Upset Requirements

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

## Section D – Administrative Requirements

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



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- imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.
- c. Any person may be assessed an administrative penalty by the EPA Director for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000.
- d. It is unlawful for any person to cause or permit any discharge of water contaminants from any water contaminant or point source located in Missouri in violation of sections 644.006 to 644.141 of the Missouri Clean Water Law, or any standard, rule or regulation promulgated by the commission. In the event the commission or the director determines that any provision of sections 644.006 to 644.141 of the Missouri Clean Water Law or standard, rules, limitations or regulations promulgated pursuant thereto, or permits issued by, or any final abatement order, other order, or determination made by the commission or the director, or any filing requirement pursuant to sections 644.006 to 644.141 of the Missouri Clean Water Law or any other provision which this state is required to enforce pursuant to any federal water pollution control act, is being, was, or is in imminent danger of being violated, the commission or director may cause to have instituted a civil action in any court of competent jurisdiction for the injunctive relief to prevent any such violation or further violation or for the assessment of a penalty not to exceed \$10,000 per day for each day, or part thereof, the violation occurred and continues to occur, or both, as the court deems proper. Any person who willfully or negligently commits any violation in this paragraph shall, upon conviction, be punished by a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than one year, or both. Second and successive convictions for violation of the same provision of this paragraph by any person shall be punished by a fine of not more than \$50,000 per day of violation, or by imprisonment for not more than two (2) years, or both.
2. **Duty to Reapply.**
- a. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.
- b. A permittee with a currently effective site-specific permit shall submit an application for renewal at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Department. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)
- c. A permittee with currently effective general permit shall submit an application for renewal at least 30 days before the existing permit expires, unless the permittee has been notified by the Department that an earlier application must be made. The Department may grant permission for a later submission date. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)
3. **Need to Halt or Reduce Activity Not a Defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
4. **Duty to Mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
5. **Proper Operation and Maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
6. **Permit Actions.**
- a. Subject to compliance with statutory requirements of the Law and Regulations and applicable Court Order, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:
- i. Violations of any terms or conditions of this permit or the law;
- ii. Having obtained this permit by misrepresentation or failure to disclose fully any relevant facts;
- iii. A change in any circumstances or conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge; or
- iv. Any reason set forth in the Law or Regulations.
- b. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
7. **Permit Transfer.**
- a. Subject to 10 CSR 20-6.010, an operating permit may be transferred upon submission to the Department of an application to transfer signed by the existing owner and the new owner, unless prohibited by the terms of the permit. Until such time the permit is officially transferred, the original permittee remains responsible for complying with the terms and conditions of the existing permit.
- b. The Department may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Missouri Clean Water Law or the Federal Clean Water Act.
- c. The Department, within 30 days of receipt of the application, shall notify the new permittee of its intent to revoke or reissue or transfer the permit.
8. **Toxic Pollutants.** The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Federal Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
9. **Property Rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.



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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.

# Beazer

BEAZER EAST, INC. C/O THREE RIVERS MANAGEMENT, INC.  
MANOR OAK ONE, SUITE 200, 1910 COCHRAN ROAD, PITTSBURGH, PA 15220

April 18, 2014

Ms. Mandy Sappington, Permits Section  
Department of Natural Resources  
Water Protection Program  
1101 Riverside Drive  
Jefferson City, MO 65101

**RE: Former Koppers Facility, 6740 Stadium Drive, Kansas City, MO 64129  
Missouri State Operating Permit No. MO-0120294**

**Subject: Permit Renewal Application Submittal**

Dear Ms. Sappington:

Beazer East, Inc. (Beazer) hereby provides the permit renewal application (Permit Application) to the Missouri Department of Natural Resources (MDNR). This Permit Application is being submitted at least 180 days prior to the expiration date for NPDES Permit MO-0120294 (Permit, expiration date of October 22, 2014), for the Former Koppers Wood Treating Site located in Kansas City, Missouri (Site). The following attachments are provided as part of this submittal:

- Form A – Application for Construction or Operating Permit; and,
- Form 2F – Application for Permit to Discharge Storm Water Discharges Associated with Industrial Activity with attached laboratory data reports.

Regarding the enclosed Permit Application it is important to note that several years after implementing remedial activities at the Site *No Exposure Certification for Exclusion from NPDES Storm Water Permitting* (No Exposure) request was submitted to MDNR on May 21, 2007 by Field & Technical Services, LLC (FTS), on behalf of Beazer. MDNR conducted an Environmental Assistance Visit (EAV #KCR200710180814294) on October 18, 2007 to evaluate Site and operating conditions relative to the No Exposure request. The No Exposure request was subsequently denied by MDNR in a letter dated November 30, 2007, citing the EPA Guidance Manual (EPA 833-B-00-001), under section 3.1.1, which prohibits opening a drum outdoors for the addition or withdrawal of any materials. Ongoing remediation operating activities conducted at the Site at that time included the recovery and containerization in drums of negligible volumes of DNAPL. Beazer provided further rationale to support issuance of the No Exposure in a Response to MDNR dated February 7, 2008.

A subsequent evaluation of onsite DNAPL management practices was conducted by Field & Technical Services, LLC (FTS), and additional engineering controls were proposed to MDNR in a Memo dated November 14, 2011. The proposed engineering control consists of a fully enclosed and secondarily contained hazardous waste storage and transfer unit (Enclosed Unit).

The Enclosed Unit would have served to provide an indoor DNAPL transfer area, satisfying EPA guidance related to addition and withdraw of materials to/from containers while outdoors.

A conference call to review current Site conditions and ongoing remedial activities was conducted between FTS and MDNR on June 7, 2012 and a Memo summarizing MDNR comments and Beazer/FTS responses was issued on June 26, 2012. MDNR then conducted a second Technical Assistance Visit (TAV) on June 27, 2012. MDNR issued a formal TAV report to Beazer on October 24, 2012 suggesting that in addition to the proposed Enclosed Unit, Beazer would need to demonstrate that permitted effluent limits can be consistently complied with and that reasonable potential to cause pollution to waters of the State does not exist in order to satisfy requirements of the proposed No Exposure.

Following its receipt of MDNR's TAV report in October 2012, Beazer instructed FTS to pursue the demonstration of effluent quality. As required by the Permit, every attempt has been made to collect surface water discharge samples each month in conjunction with qualifying precipitation events of  $\geq 0.1$  inches. However, due to the limited runoff generated by the qualifying precipitation events at the Permit monitoring points, sample collection has occurred five (5) times in a twenty (20) month span due to no observed discharge. Laboratory analytical results reported for the five (5) qualifying storm water sampling events reported all Permit monitored constituents below Permit limits set forth in the existing operating Permit. In addition, as there was no discharge for the other fifteen (15) events, no pollution to waters of the State occurred.

Based on these data, Beazer requests that the MDNR reconsider its October 24, 2012 No Exposure denial, contingent on Beazer's installation of the proposed Enclosed Unit. However, recognizing that the Permit Application must be submitted prior to MDNR's reconsideration of the Beazer's No Exposure request, the enclosed Permit Application requests a reduction in sampling and reporting to an annual frequency, as monthly monitoring is unwarranted due to the limited discharge and lack of impact to surface water from the Site. Beazer understands that the MDNR will provide an invoice for re-issuance of the Permit, should MDNR again deny Beazer's request for a No Exposure determination.

Beazer and FTS are available to discuss this letter and the enclosed Permit Application should MDNR believe that would be helpful. Please feel free to contact me at 412-208-8867.

Sincerely,



Michael Slenska, PE  
Senior Environmental Manager

Enclosures

cc: A. Gatchie-FTS  
File



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**

APR 19 11 4

FOR AGENCY USE ONLY	
CHECK NUMBER	
DATE RECEIVED	4/21/14
FEE SUBMITTED	-0- JS

**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- 0120294 Expiration Date 10/22/2014

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	
FORMER KOPPERS FACILITY		(412) 428-9421	
		FAX (412) 279-4332	
ADDRESS (PHYSICAL)	CITY	STATE	ZIP CODE
6740 STADIUM DRIVE	KANSAS CITY	MO	64129

**3. OWNER**

NAME		E-MAIL ADDRESS	TELEPHONE WITH AREA CODE	
BEAZER EAST, INC.		Mike.Slenska@TRMI.biz	(412) 208-8867	
			FAX (412) 208-8803	
ADDRESS (MAILING)	CITY	STATE	ZIP CODE	
MANOR OAK ONE, SUITE 200, 1910 COCHRAN ROAD	PITTSBURGH	PA	15220	

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

**4. CONTINUING AUTHORITY**

NAME		TELEPHONE WITH AREA CODE	
BEAZER EAST, INC.		(412) 208-8867	
		FAX (412) 208-8803	
ADDRESS (MAILING)	CITY	STATE	ZIP CODE
MANOR OAK ONE, SUITE 200, 1910 COCHRAN ROAD	PITTSBURGH	PA	15220

**5. OPERATOR**

NAME		CERTIFICATE NUMBER	TELEPHONE WITH AREA CODE	
FIELD & TECHNICAL SERVICES, LLC		NOT APPLICABLE	(412) 428-9397	
			FAX (412) 279-4512	
ADDRESS (MAILING)	CITY	STATE	ZIP CODE	
200 THIRD AVENUE	CARNEGIE	PA	15106	

**6. FACILITY CONTACT**

NAME		TITLE	TELEPHONE WITH AREA CODE	
HANK PAPPERT		PROJECT MANAGER	(412) 498-2602	
			FAX (412) 279-4512	

**7. ADDITIONAL FACILITY INFORMATION**

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

004 NW ¼ NE ¼ Sec 24 T 49N R 33W Jackson County  
 UTM Coordinates Easting (X): +3903432 Northing (Y): -09430155  
 For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)

005 SW ¼ SE ¼ Sec 13 T 49N R 33W Jackson County  
 UTM Coordinates Easting (X): +3903409 Northing (Y): -09430141

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

004 – SIC 2491 and NAICS 321114

005 – SIC 2491 and NAICS 321114

KC  
 4/21/14

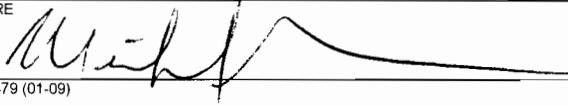
**8. ADDITIONAL FORMS AND MAPS NECESSARY TO COMPLETE THIS APPLICATION  
(Complete all forms that are applicable.)**

- 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 LEEDS INDUSTRIAL PARK, INC.			
ADDRESS 6817 STADIUM DRIVE	CITY KANSAS CITY	STATE MO	ZIP CODE 64129

**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) MICHAEL SLENSKA, PE, SENIOR ENVIRONMENTAL MANAGER	TELEPHONE WITH AREA CODE (412) 208-8867
SIGNATURE 	DATE SIGNED 4-18 2014

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?



Continued from the Front

**IV. Narrative Description of Pollutant Sources**

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall.

Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)	Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)
	NA				

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas, and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

NA

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall Number	Treatment	List Codes from Table 2F-1
004 005	Drummed materials stored on site are contained within a locked fence, on secondary containment (drip pad containers) under the I-70 overpass located in the northern portion of the site. Measures have been taken in order to reduce stormwater exposure.	

**V. Nonstormwater Discharges**

A. I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, and that all nonstormwater discharged from these outfall(s) are identified in either an accompanying Form 2C or From 2E application for the outfall.

Name and Official Title (type or print)	Signature	Date Signed
NA		

B. Provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

**VI. Significant Leaks or Spills**

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

NO SIGNIFICANT LEAKS OR SPILLS TO REPORT

Continued from Page 2

**VII. Discharge Information**

A, B, C, & D: See instructions before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided.  
Table VII-A, VII-B, VII-C are included on separate sheets numbers VII-1 and VII-2.

E. Potential discharges not covered by analysis – is any toxic pollutant listed in table 2F-2, 2F-3, or 2F-4, a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

- Yes (list all such pollutants below)  No (go to Section IX)

Empty space for listing pollutants.

**VIII. 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 a receiving water in relation to your discharge within the last 3 years?

- Yes (list all such pollutants below)  No (go to Section IX)

Empty space for biological toxicity testing data.

**IX. Contract Analysis Information**

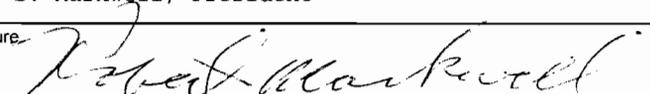
Were any of the analyses reported in Item VII performed by a contract laboratory or consulting firm?

- Yes (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)  No (go to Section X)

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed
TEST AMERICA LABORATORIES, INC.	RIDC PARK 301 ALPHA DRIVE PITTSBURGH, PA 15238	412-963-7058	BTEX - 8260B SVOCS - 8270C SETTLEABLE SOLIDS - SM2540F OIL & GREASE - 1664A 2,3,7,8-TCDD - 9280A

**X. Certification**

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

A. Name & Official Title (Type Or Print) Robert S. Markwell, President	B. Area Code and Phone No. (412) 208-8812
C. Signature 	D. Date Signed 07-16-14







## OUTFALL #004 VII. Discharge Information

Part B	Maximum Values				Average Values				Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	mg/L/h	ug/L	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	mg/L/h	ug/L	
Settleable Solids	<1.0	N/A	ml/L/h	ml/L/h	<0.27	N/A	ml/L/h	ml/L/h	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Oil & Grease	<5.6	N/A	mg/l	mg/l	<2.5	N/A	mg/l	mg/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Acenaphthene	6.5	N/A	ug/l	ug/l	2.8	N/A	ug/l	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Acenaphthylene	<6.0	N/A	ug/l	ug/l	<2.5	N/A	ug/l	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Anthracene	<6.0	N/A	ug/l	ug/l	<2.5	N/A	ug/l	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Benzo(a)anthracene	<6.0	N/A	ug/l	ug/l	<2.5	N/A	ug/l	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Benzo(b)fluoranthene	<6.0	N/A	ug/l	ug/l	<2.5	N/A	ug/l	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Benzo(k)fluoranthene	<6.0	N/A	ug/l	ug/l	<2.5	N/A	ug/l	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Benzo(a)pyrene	<6.0	N/A	ug/l	ug/l	<2.5	N/A	ug/l	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Benzene	<5.0	N/A	ug/l	ug/l	<1.6	N/A	ug/l	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Chrysene	<6.0	N/A	ug/l	ug/l	<2.5	N/A	ug/l	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Dibenzo(a,h)anthracene	5.8	N/A	ug/l	ug/l	2.7	N/A	ug/l	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
4,6-dinitro-o-cresol	<30	N/A	ug/l	ug/l	<12.5	N/A	ug/l	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Ethylbenzene	<5.0	N/A	ug/l	ug/l	<1.6	N/A	ug/l	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)

## OUTFALL #004 VII. Discharge Information

Part B	Maximum Values			Average Values				Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	ug/l	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	ug/l	Number of Storm Events Sampled	
Fluoranthene	<6.0	N/A	ug/l	<2.5	N/A	ug/l	16	and creosote) Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Indeno(1,2,3-cd)pyrene	5.6	N/A	ug/l	2.7	N/A	ug/l	16	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
2-methylnaphthalene	<6.0	N/A	ug/l	<2.5	N/A	ug/l	16	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Naphthalene	28	N/A	ug/l	4.3	N/A	ug/l	16	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Pentachlorophenol	<6.0	N/A	ug/l	<2.5	N/A	ug/l	16	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Phenanthrene	<6.0	N/A	ug/l	<2.5	N/A	ug/l	16	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Pyrene	<6.0	N/A	ug/l	<2.5	N/A	ug/l	16	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Carbazole	<6.0	N/A	mg/l	<2.5	N/A	mg/l	16	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
p-chloro-m-cresol	<6.0	N/A	ug/l	<2.5	N/A	ug/l	16	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
2-methylphenol(o-cresol)	<6.0	N/A	ug/l	<2.5	N/A	ug/l	16	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
3+4-methylphenol	<12	N/A	ug/l	<5.0	N/A	ug/l	16	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Dibenzofuran	<6.0	N/A	ug/l	<2.5	N/A	ug/l	16	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Fluorene	<6.0	N/A	ug/l	<2.5	N/A	ug/l	16	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Phenol	<6.0	N/A	ug/l	<2.5	N/A	ug/l	16	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)

## OUTFALL #004 VII. Discharge Information

Part B	Maximum Values			Average Values				Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	ug/l	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	ug/l	Number of Storm Events Sampled	
2,3,4,6-tetrachlorophenol	<6.0	N/A	ug/l	<2.5	N/A	ug/l	16	present in fill material (pentachlorophenol and creosote)
2,3,7,8-TCDD	<0.0055	N/A	ug/l	<0.0015	N/A	ug/l	15	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Toluene	<5.0	N/A	ug/l	<1.6	N/A	ug/l	15	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Xylenes, Total	<15	N/A	ug/l	<4.5	N/A	ug/l	15	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)

## OUTFALL #004 VII. Discharge Information

Part C	Maximum Values			Average Values				Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	ug/l	Flow-Weighted Composite	ug/l	Grab Sample Taken During First 20 Minutes	ug/l	Flow-Weighted Composite		
Acenaphthene	6.5	ug/l	N/A	ug/l	2.8	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Acenaphthylene	<6.0	ug/l	N/A	ug/l	<2.5	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Anthracene	<6.0	ug/l	N/A	ug/l	<2.5	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Benzene	<5.0	ug/l	N/A	ug/l	<1.6	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Benzo(a)fluoranthene	<6.0	ug/l	N/A	ug/l	<2.5	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Benzo(k)fluoranthene	<6.0	ug/l	N/A	ug/l	<2.5	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Benzo(a)pyrene	<6.0	ug/l	N/A	ug/l	<2.5	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
p-Chloro-m-cresol	<6.0	ug/l	N/A	ug/l	<2.5	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Chrysene	<6.0	ug/l	N/A	ug/l	<2.5	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Dibenzo(a,h)anthracene	5.8	ug/l	N/A	ug/l	2.7	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Ethylbenzene	<5.0	ug/l	N/A	ug/l	<1.6	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Fluoranthene	<6.0	ug/l	N/A	ug/l	<2.5	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Fluorene	<6.0	ug/l	N/A	ug/l	<2.5	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Naphthalene	28	ug/l	N/A	ug/l	4.3	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Pentachlorophenol	<6.0	ug/l	N/A	ug/l	<2.5	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Phenol	<6.0	ug/l	N/A	ug/l	<2.5	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Pyrene	<6.0	ug/l	N/A	ug/l	<2.5	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Toluene	<5.0	ug/l	N/A	ug/l	<1.6	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)

## OUTFALL #004 VII. Discharge Information

Part D – Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.						
Date of Storm Event	Duration of Storm Event (in minutes)	Total rainfall during storm event (in inches)	Number of hours between beginning of storm measured and end of previous measurable rain event	Maximum flow rate during rain event (gallons/minute or specify units)	Total flow from rain event (gallons or specify units)	
10/08/2009	60	1.38	>72 Hrs.	1,473 GPM	88,300 gallons	
09/01/2010	115	0.58	>72 Hrs.	14.03 GPM	1,614 gallons	
7. Provide a description of the method of flow measurement or estimate.						
Flow was measured by taking the width of the ditch, the average depth of the water across the width of the ditch, and timing a floatable object over a 5 foot length.						

## OUTFALL #005 VII. Discharge Information

Part A	Maximum Values			Average Values				Sources of Pollutants	
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	mg/l	mg/l	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	mg/l		Number of Storm Events Sampled
Oil and Grease N/A	5.6	N/A	mg/l	mg/l	2.9	N/A	N/A	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Biological Oxygen Demand (BOD5)	N/A	N/A				N/A	N/A		Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Chemical Oxygen Demand (COD)	N/A	N/A				N/A	N/A		Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Total Suspended Solids (TSS)	N/A	N/A				N/A	N/A		Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Total Nitrogen	N/A	N/A				N/A	N/A		Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Total Phosphorus	N/A	N/A				N/A	N/A		Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
pH	7.78	N/A	SU	SU	7.37	N/A	N/A	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)

## OUTFALL #005 VII. Discharge Information

Part B	Maximum Values			Average Values				Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	ug/l	Grab Sample Taken During First 20 Minutes	ug/l	Flow-Weighted Composite	ug/l	
Settleable Solids	<1.0	N/A	mL/L/h	<0.25	mL/L/h	N/A	mL/L/h	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Oil & Grease	5.6	N/A	mg/l	2.9	mg/l	N/A	mg/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Acenaphthene	<5.2	N/A	ug/l	<2.5	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Acenaphthylene	<5.2	N/A	ug/l	<2.5	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Anthracene	<5.2	N/A	ug/l	<2.5	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Benzo(a)anthracene	<5.2	N/A	ug/l	<2.5	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Benzo(b)fluoranthene	<5.2	N/A	ug/l	<2.5	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Benzo(k)fluoranthene	<5.2	N/A	ug/l	<2.5	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Benzo(a)pyrene	<5.2	N/A	ug/l	<2.5	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Benzene	<5.0	N/A	ug/l	<1.5	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Chrysene	<5.2	N/A	ug/l	<2.5	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Dibenzo(a,h)anthracene	<5.2	N/A	ug/l	<2.5	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
4,6-dinitro-o-cresol	<26	N/A	ug/l	<12	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Ethylbenzene	<5.0	N/A	ug/l	<1.5	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)

**OUTFALL #005 VII. Discharge Information**

Part B	Maximum Values			Average Values				Sources of Pollutants		
	Grab Sample Taken During First 20 Minutes	Units	Flow-Weighted Composite	Units	Grab Sample Taken During First 20 Minutes	Units	Flow-Weighted Composite		Units	
Fluoranthene	<5.2	ug/l	N/A	ug/l	<2.5	ug/l	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Indeno(1,2,3-cd)pyrene	<5.2	ug/l	N/A	ug/l	<2.5	ug/l	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
2-methylnaphthalene	<5.2	ug/l	N/A	ug/l	<2.5	ug/l	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Naphthalene	<5.2	ug/l	N/A	ug/l	<2.5	ug/l	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Pentachlorophenol	<5.2	ug/l	N/A	ug/l	<2.5	ug/l	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Phenanthrene	<5.2	ug/l	N/A	ug/l	<2.5	ug/l	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Pyrene	<5.2	ug/l	N/A	ug/l	<2.5	ug/l	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Carbazole	<5.2	mg/l	N/A	mg/l	<2.5	mg/l	N/A	mg/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
p-chloro-m-cresol	<5.2	ug/l	N/A	ug/l	<2.5	ug/l	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
2-methylphenol(o-cresol)	<5.2	ug/l	N/A	ug/l	<2.5	ug/l	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
3+4-methylphenol	<10	ug/l	N/A	ug/l	<4.9	ug/l	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Dibenzofuran	<5.2	ug/l	N/A	ug/l	<2.5	ug/l	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Fluorene	<5.2	ug/l	N/A	ug/l	<2.5	ug/l	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)

## OUTFALL #005 VII. Discharge Information

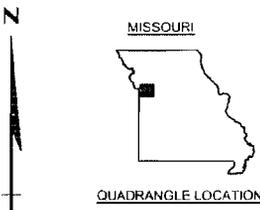
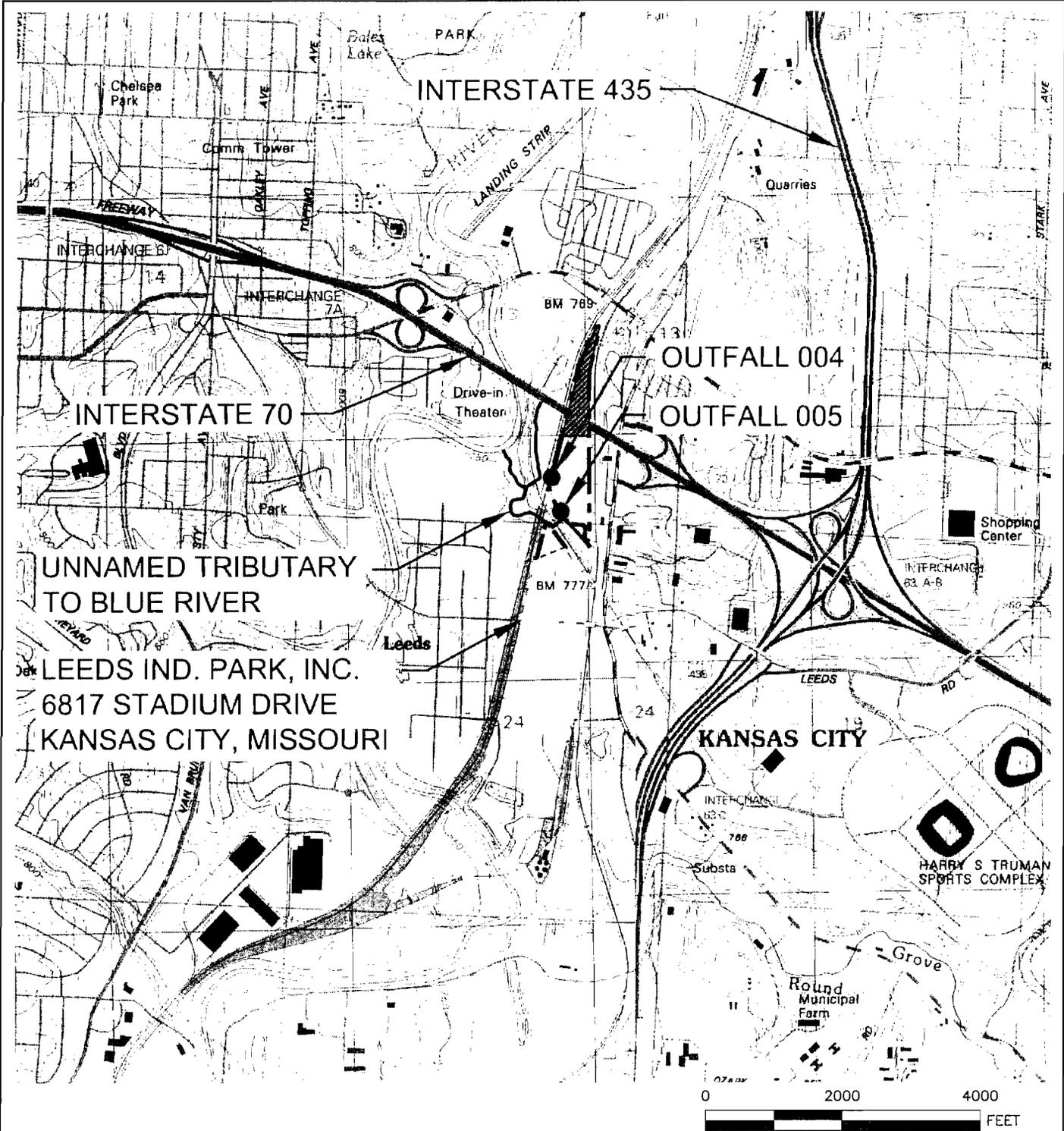
Part B	Maximum Values				Average Values				Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Units	Flow-Weighted Composite	Units	Grab Sample Taken During First 20 Minutes	Units	Flow-Weighted Composite	Units	
Phenol	<5.2	ug/l	N/A	ug/l	<2.5	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
2,3,4,6-tetrachlorophenol	<5.2	ug/l	N/A	ug/l	<2.5	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
2,3,7,8-TCDD	<0.0058	ug/l	N/A	ug/l	<0.0014	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Toluene	<5.0	ug/l	N/A	ug/l	<1.5	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Xylenes, Total	<15	ug/l	N/A	ug/l	<4.3	ug/l	N/A	ug/l	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)

## OUTFALL #005 VII. Discharge Information

Part C	Maximum Values			Average Values				Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	ug/l	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	ug/l	Number of Storm Events Sampled	
Acenaphthene	<5.2	N/A	ug/l	<2.5	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Acenaphthylene	<5.2	N/A	ug/l	<2.5	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Anthracene	<5.2	N/A	ug/l	<2.5	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Benzene	<5.0	N/A	ug/l	<1.5	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Benzo(a)fluoranthene	<5.2	N/A	ug/l	<2.5	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Benzo(k)fluoranthene	<5.2	N/A	ug/l	<2.5	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Benzo(a)pyrene	<5.2	N/A	ug/l	<2.5	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
p-Chloro-m-cresol	<5.2	N/A	ug/l	<2.5	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Chrysene	<5.2	N/A	ug/l	<2.5	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Dibenzo(a,h)anthracene	<5.2	N/A	ug/l	<2.5	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Ethylbenzene	<5.0	N/A	ug/l	<1.5	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Fluoranthene	<5.2	N/A	ug/l	<2.5	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Fluorene	<5.2	N/A	ug/l	<2.5	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Naphthalene	<5.2	N/A	ug/l	<2.5	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Pentachlorophenol	<5.2	N/A	ug/l	<2.5	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Phenol	<5.2	N/A	ug/l	<2.5	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Pyrene	<5.2	N/A	ug/l	<2.5	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)
Toluene	<5.0	N/A	ug/l	<1.5	N/A	ug/l	14	Wood treating constituents potentially present in fill material (pentachlorophenol and creosote)

## OUTFALL #005 VII. Discharge Information

Part D – Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.					
Date of Storm Event	Duration of Storm Event (in minutes)	Total rainfall during storm event (in inches)	Number of hours between beginning of storm measured and end of previous measurable rain event	Maximum flow rate during rain event (gallons/minute or specify units)	Total flow from rain event (gallons or specify units)
09/01/2010	115	0.58	>72 Hrs.	151 GPM	17,375 gallons
7. Provide a description of the method of flow measurement or estimate.					
Flow was measured by taking the width of the ditch, the average depth of the water across the width of the ditch, and timing a floatable object over a 5 foot length.					



**LEGEND**

-  REVISED PERMITTED SITE
-  NORTHERN AND SOUTHERN DELISTED AREAS
-  ORIGINALLY PERMITTED SITE
-  WATER FLOW

REFERENCE: USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLES:  
 - KANSAS CITY, MO-KS 1996.  
 - INDEPENDENCE, MO 1996.

BEAZER EAST, INC.  
 PITTSBURGH, PENNSYLVANIA

DRWN: CRJ	DATE: 12/27/07
CHKD: RMB	DATE: 12/27/07
APPD: TEJ	DATE: 12/27/07
SCALE: 1" = 2000'	
ISSUE DATE:	



FIELD & TECHNICAL SERVICES, LLC.  
 200 THIRD AVENUE  
 CARNEGIE, PA 15106

NPDES PERMIT RENEWAL  
 FORMER KOPPERS FACILITY KANSAS CITY SITE  
 KANSAS CITY, MISSOURI

SITE LOCATION MAP

PROJECT NO: OMO47407  
 DRAWING NUMBER  
**FIGURE 1**



○ OUTFALL 004

● SL-04

MW-15A ⊕

MW-04B ⊕  
MW-04A

I-70

MW-22B ⊕  
MW-22A

● SL-10

MW-23A ⊕

MW-17CR ⊕  
MW-17B

MW-18BR ⊕

MW-19B ⊕

US-40

MW-09B ⊕  
MW-09A

OUTFALL LOCATIONS

DRAINAGE AREA FOR OUTFALL 004 = 660060 SQUARE FEET

DRAINAGE AREA FOR OUTFALL 005 = 982311 SQUARE FEET



BEAZER EAST, INC.  
PITTSBURGH, PENNSYLVANIA

DRWN: SCC	DATE: 03/20/14
CHKD: RMB	DATE: 03/20/14
APPD: TEL	DATE: 03/20/14
SCALE: AS SHOWN	



FIELD & TECHNICAL  
SERVICES, LLC.  
200 THIRD AVENUE  
CARNEGIE, PA 15106