

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-0115924

Owner: Independence Power and Light  
Address: P.O. Box 1019, Independence MO 64501

Continuing Authority: same as above  
Address: same as above

Facility Name: Independence Blue Valley Power Plant  
Facility Address: 21500 East Truman Road, Independence MO 64501

Legal Description: see page two  
UTM Coordinates: see page two

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

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

**FACILITY DESCRIPTION**

SIC # 4911; NAICS # 221112.

Natural-gas fired electric power plant with a transmission and distribution service center and substation. Only stormwater discharges are allowed to waters of the state. Process water is sent to the local wastewater treatment facility.

See page two for additional information.

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.

November 1, 2016  
Effective Date

Harry D. Bozian, Director, Department of Natural Resources

October 31, 2021  
Expiration Date

John Madras, Director, Water Protection Program

## **FACILITY DESCRIPTION (CONTINUED)**

OUTFALL #001 – Stormwater from Power Plant; SIC # 4911; NAICS # 221112; Area 1 drainage  
Legal Description: SW¼, NW¼, Sec.03, T49N, R31W, Jackson County  
UTM Coordinates: X = 385204, Y = 4327719  
Receiving Stream: Tributary to Spring Branch  
First Classified Stream and ID: 8-20-13 MUDD V1.0 (C) WBID # 3960  
USGS Basin & Sub-watershed No.: Burr Oak Creek-Little Blue River 10300101-0207  
Design Flow: 0.262 MGD  
Average Flow: 0.1491 MGD  
Actual Flow: dependent upon precipitation

FEATURE #002 – Ash pond discharge from this feature shall continue to the Little Blue Valley Sewer District as designed; discharge from this outfall to waters of the state is not authorized.

OUTFALL #003 – Stormwater from Power Plant; SIC # 4911; NAICS # 221112; Area 3 drainage  
Legal Description: SE¼, NW¼, Sec.03, T49N, R31W, Jackson County  
UTM Coordinates: X = 385724, Y = 4327746  
Receiving Stream: Tributary to Little Blue River  
First Classified Stream and ID: Little Blue River (P) WBID # 0422; 303(d) listed  
USGS Basin & Sub-watershed No.: Little Blue River 10300101-0208  
Design Flow: 0.0072 MGD  
Average Flow: 0.003 MGD  
Actual Flow: dependent upon precipitation

OUTFALL #004 – Stormwater from Power Plant; SIC # 4911; NAICS # 221112; Area 4 drainage  
Legal Description: NE¼, NW¼, Sec.03, T49N, R31W, Jackson County  
UTM Coordinates: X = 385827, Y = 4328442  
Receiving Stream: Tributary to Little Blue River  
First Classified Stream and ID: 8-20-13 MUDD V1.0 (C) WBID # 3960  
USGS Basin & Sub-watershed No.: Little Blue River 10300101-0208  
Design Flow: 1.9 MGD  
Average Flow: 0.51 MGD  
Actual Flow: dependent upon precipitation

OUTFALL #005 – Stormwater from Power Plant; SIC # 4911; NAICS # 221112; Area 5 drainage  
Legal Description: SE¼, NW¼, Sec.03, T49N, R31W, Jackson County  
UTM Coordinates: X = 385567, Y = 4327696  
Receiving Stream: Tributary to Little Blue River  
First Classified Stream and ID: Little Blue River (P) WBID # 0422; 303(d) listed  
USGS Basin & Sub-watershed No.: Little Blue River 10300101-0208  
Design Flow: 0.44 MGD  
Average Flow: 0.23 MGD  
Actual Flow: dependent upon precipitation

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

EFFLUENT PARAMETERS		UNITS	FINAL LIMITATIONS		BENCH-MARKS	MONITORING REQUIREMENTS	
			DAILY MAXIMUM	MONTHLY AVERAGE		MEASUREMENT FREQUENCY	SAMPLE TYPE
<p><b>OUTFALLS #001, #004, &amp; #005</b> <i>Stormwater Only</i></p> <p style="text-align: center;"><b>TABLE A-1</b> <b>FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</b></p> <p>The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on <b>November 1, 2016</b> and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:</p>							
<b>PHYSICAL</b>							
Flow	MGD	*		-	once/quarter ◊	24 hr. estimate	
Precipitation	inches	*		-	once/quarter ◊	measured	
<b>CONVENTIONAL</b>							
Chemical Oxygen Demand	mg/L	**		60	once/quarter ◊	grab ∞	
Oil & Grease	mg/L	**		10	once/quarter ◊	grab ∞	
pH (Note A)	SU	**		6.5 to 9.0	once/quarter ◊	grab ∞	
Total Suspended Solids	mg/L	**		50	once/quarter ◊	grab ∞	
<p>MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u>; THE FIRST REPORT IS DUE <u>JANUARY 28, 2017</u>. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.</p>							

\* Monitoring requirement only.

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

(see additional notes on page 5)

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

<b>OUTFALL #003</b> <i>Stormwater Only</i>		<b>TABLE A-2</b> <b>INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</b>				
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The interim effluent limitations shall become effective on <b>November 1, 2016</b> and remain in effect through <b>October 31, 2018</b> . Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
EFFLUENT PARAMETERS	UNITS	INTERIM LIMITATIONS		BENCH-MARKS	MONITORING REQUIREMENTS	
		DAILY MAXIMUM	MONTHLY AVERAGE		MEASUREMENT FREQUENCY	SAMPLE TYPE
<b>PHYSICAL</b>						
Flow	MGD	*		-	once/quarter ◊	24 hr. estimate
Precipitation	inches	*		-	once/quarter ◊	measured
<b>CONVENTIONAL</b>						
Chemical Oxygen Demand	mg/L	**		60	once/quarter ◊	grab ∞
Oil & Grease	mg/L	**		10	once/quarter ◊	grab ∞
pH (Note A)	SU	**		6.5 to 9.0	once/quarter ◊	grab ∞
Total Suspended Solids	mg/L	**		50	once/quarter ◊	grab ∞
<b>OTHER</b>						
Pentachlorophenol ***	µg/L	*		-	once/quarter ◊	grab ∞
MONITORING REPORTS SHALL BE SUBMITTED <b>QUARTERLY</b> ; THE FIRST REPORT IS DUE <b>JANUARY 28, 2017</b> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

<b>OUTFALL #003</b> <i>Stormwater Only</i>		<b>TABLE A-3</b> <b>FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</b>				
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on <b>November 1, 2018</b> and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
EFFLUENT PARAMETERS	UNITS	FINAL LIMITATIONS		BENCH-MARKS	MONITORING REQUIREMENTS	
		DAILY MAXIMUM	MONTHLY AVERAGE		MEASUREMENT FREQUENCY	SAMPLE TYPE
<b>PHYSICAL</b>						
Flow	MGD	*		-	once/quarter ◊	24 hr. estimate
Precipitation	inches	*		-	once/quarter ◊	measured
<b>CONVENTIONAL</b>						
Chemical Oxygen Demand	mg/L	**		60	once/quarter ◊	grab ∞
Oil & Grease	mg/L	**		10	once/quarter ◊	grab ∞
pH (Note A)	SU	**		6.5 to 9.0	once/quarter ◊	grab ∞
Total Suspended Solids	mg/L	**		50	once/quarter ◊	grab ∞
<b>OTHER</b>						
Pentachlorophenol ***	µg/L	19		-	once/quarter ◊	grab ∞
MONITORING REPORTS SHALL BE SUBMITTED <b>QUARTERLY</b> ; THE FIRST REPORT IS DUE <b>JANUARY 28, 2019</b> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

\* Monitoring requirement only.

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

\*\*\* See special condition #17

(see additional notes on page 5)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (CONTINUED)

- \* Monitoring requirement only.
- \*\* Monitoring requirement with associated benchmark. See Special Conditions #9 through #12
- \*\*\* See special condition #17
- ∞ All samples shall be collected from a discharge resulting from a precipitation event greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable precipitation event. If a discharge does not occur within the reporting period, report as no discharge. The total amount of precipitation should be noted from the event from which the samples were collected.

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

◇ Quarterly sampling

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

B. STANDARD CONDITIONS

In addition to specified conditions stated herein, this permit is subject to the attached Part I standard conditions dated August 1, 2014, 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 Pollutant  
In addition to the reporting requirements under §122.41(1), all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:
  - (a) That an activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
    - (1) One hundred micrograms per liter (100 µg/L);
    - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile;
    - (3) Five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol;
    - (4) One milligram per liter (1 mg/L) for antimony;
    - (5) Five (5) times the maximum concentration value reported for the pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
    - (6) The notification level established by the department in accordance with 40 CFR 122.44(f).
  - (b) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
    - (1) Five hundred micrograms per liter (500 µg/l);
    - (2) One milligram per liter (1 mg/l) for antimony;
    - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with §122.21(g)(7).
    - (4) The level established by the Director in accordance with §122.44(f).
5. Report as no-discharge when a discharge does not occur during the report period.

### C. SPECIAL CONDITIONS (CONTINUED)

6. Reporting of Non-Detects
  - (a) An analysis conducted by the permittee or their contracted laboratory shall be conducted in such a way that the precision and accuracy of the analyzed result can be enumerated.
  - (b) The permittee shall not report a sample result as “Non-Detect” without also reporting the detection limit of the test. Reporting as “Non-Detect” without also including the detection limit will be considered failure to report, which is a violation of this permit.
  - (c) The permittee shall report the “Non-Detect” result using the less than sign and the minimum detection limit (e.g. <10).
  - (d) The permittee shall use one-half (½) of the detection limit for the non-detect result when calculating and reporting monthly averages.
  - (e) 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 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.
10. Facility SIC codes found in 40 CFR 122.26(b)(14) and/or 10 CSR 20-6.200(2) shall implement a SWPPP and must be prepared and implemented upon permit issuance. The SWPPP must be kept on-site and should not be sent to the department unless specifically requested. The SWPPP must be reviewed and updated every five (5) years or as site conditions change (see Rationale and Derivation: antidegradation analysis and SWPPP in the fact sheet). The permittee shall select, install, use, operate, and maintain the Best Management Practices prescribed in the SWPPP in accordance with the concepts and methods described in: *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (EPA 833-B-09-002) published by the EPA in February 2009 ([www.epa.gov/npdes/pubs/industrial\\_swppp\\_guide.pdf](http://www.epa.gov/npdes/pubs/industrial_swppp_guide.pdf)). The SWPPP must include:
  - (a) A listing of specific contaminants and their control measures (or BMPs) and a narrative explaining how BMPs are implemented to control and minimize the amount of contaminants potentially entering stormwater. The BMPs should be designed to treat the stormwater up to the 10 year, 24 hour rain event.
  - (b) For new, altered, or expanded stormwater discharges, the SWPPP shall identify reasonable and effective BMPs while accounting for environmental impacts of varying control methods. The antidegradation analysis must document why no discharge or no exposure options are not feasible. The selection and documentation of appropriate control measures shall serve as an alternative analysis of technology and fulfill the requirements of antidegradation [10 CSR 20-7.031(3)]. Failure to implement and maintain the chosen BMP is a permit violation. For further guidance, consult the antidegradation implementation procedure at <http://dnr.mo.gov/env/wpp/docs/AIP050212.pdf>.
  - (c) The SWPPP must include a schedule for once per month site inspections and brief written reports. The inspection report must include precipitation information for the entire period since last inspection, as well as observations and evaluations of BMP effectiveness. Throughout coverage under this permit, the facility must perform ongoing SWPPP review and revision to incorporate any site condition changes.
    - i. Operational deficiencies must be corrected within seven (7) calendar days.
    - ii. Minor structural deficiencies must be corrected within fourteen (14) calendar days.
    - iii. Major structural deficiencies must be reported to the regional office within seven (7) days of discovery. The initial report shall consist of the deficiency noted, the proposed remedies, the interim or temporary remedies (including the general timing of the placement of the interim measures), and an estimate of the timeframe needed to wholly complete the repairs or construction. The permittee will work with the regional office to determine the best course of action, including but not limited to temporary structures to control stormwater runoff. The facility shall correct the major structural deficiency as soon as reasonably achievable.
    - iv. All actions taken to correct the deficiencies shall be included with the written report, including photographs.
    - v. Inspection reports must be kept on site with the SWPPP and maintained for a period of five (5) years. These must be made available to department and EPA personnel upon request.
  - (d) A provision for designating an individual to be responsible for environmental matters.
  - (e) A provision for providing training to all personnel involved in material handling and storage, and housekeeping of maintenance and cleaning areas. Proof of training shall be submitted on request of the department.

C. SPECIAL CONDITIONS (CONTINUED)

11. This permit stipulates pollutant benchmarks applicable to your discharge. The benchmarks do not constitute direct numeric effluent limitations; therefore, a benchmark exceedance alone is not a permit violation. Benchmark monitoring and visual inspections shall be used to determine the overall effectiveness of SWPPP and to assist you in knowing when additional corrective action may be necessary to protect water quality. If a sample exceeds a benchmark concentration you must review your SWPPP and your BMPs to determine what improvements or additional controls are needed to reduce that pollutant in your stormwater discharge(s).  
  
Any time a benchmark exceedance occurs a Corrective Action Report (CAR) must be completed. A CAR is a document that records the efforts undertaken by the facility to improve BMPs to meet benchmarks in future samples. CARs must be retained with the SWPPP and available to the department upon request. If the efforts taken by the facility are not sufficient and subsequent exceedances of a benchmark occur, the facility must contact the department if a benchmark value cannot be achieved. Failure to take corrective action to address a benchmark exceedance and failure to make measureable progress towards achieving the benchmarks is a permit violation.
12. Permittee shall adhere to the following minimum Best Management Practices (BMPs):
  - (a) Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, or warehouse activities and thereby prevent the contamination of stormwater from these substances.
  - (b) Provide collection facilities and arrange for proper disposal of waste products including but not limited to petroleum waste products, and solvents.
  - (c) Store all paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) so that these materials are not exposed to stormwater or provide other prescribed BMPs such as plastic lids and/or portable spill pans to prevent the commingling of stormwater with container contents. Commingled water may not be discharged under this permit. Provide spill prevention control, and/or management sufficient to prevent any spills of these pollutants from entering waters of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater.
  - (d) Provide good housekeeping practices on the site to keep trash from entry into waters of the state.
  - (e) Provide sediment and erosion control sufficient to prevent or control sediment loss off of the property. This could include the use of straw bales, silt fences, or sediment basins, if needed, to comply with effluent limits or benchmarks.
  - (f) Ensure that adequate provisions are provided to prevent surface water intrusion into the storage basin, to divert stormwater runoff around the storage basin, and to protect embankments from erosion.
13. To protect the general criteria found at 10 CSR 20-7.031(4), before releasing water accumulated in secondary containment areas, it must be examined for hydrocarbon odor and presence of sheen. If the presence of odor or sheen is indicated, the water shall be treated using an appropriate method or disposed of in accordance with legally approved methods, such as being sent to a wastewater treatment facility. Following treatment, the water shall be tested for oil and grease, benzene, toluene, ethylbenzene, and xylene using 40 CFR part 136 methods. All pollutant levels must be below the most protective, applicable standards for the receiving stream, found in 10 CSR 20-7.031 Table A. Records of all testing and treatment of water accumulated in secondary containment shall be stored in the SWPPP to be available on demand to MDNR and EPA personnel.
14. Release of a hazardous substance must be reported to the department in accordance with 10 CSR 24-3.010. A record of each reportable spill shall be retained with the SWPPP and made available to the department upon request.
15. 40 CFR 423.13(a): There shall be no discharge of polychlorinated biphenyl compounds (PCBs) such as those commonly used for transformer fluid.

(continued)

C. SPECIAL CONDITIONS (CONTINUED)

16. Groundwater Monitoring Program: The permittee shall implement an effective groundwater monitoring program designed to determine if the coal ash impoundments have an impact on groundwater quality. The monitoring system must be capable of comparing up-gradient to down-gradient water quality in the first continuous water-bearing zone beneath the impoundment. The monitoring system must be based upon a thorough hydrogeological characterization of the impoundment area that determines the appropriate hydrostratigraphic unit to monitor, its groundwater gradient(s) and any seasonal variations in its gradient(s). Any hydrogeological characterization conducted for the design of the groundwater monitoring program shall be approved by the department's Missouri Geological Survey and must be conducted under the guidance of a geologist registered in the State of Missouri. The number of monitoring wells required for the groundwater monitoring program shall be based on site-specific hydrogeologic conditions and sufficient for effective monitoring. To complete the following work plans and reports, the Water Protection Program recommends using applicable portions of the document issued by the Missouri Geological Survey (MGS), dated December 10, 2010, *Guidance for Conducting a Detailed Hydrogeologic Site Characterization and Designing a Groundwater Monitoring Program* as guidance. The plans shall be submitted as two hard copies and one electronic copy to the Missouri Department of Natural Resources central office: The Water Protection Program at P.O. Box 176, Jefferson City MO 65102-9920. In order to accomplish this, the permittee shall:
- a) By September 17, 2018 (or sooner), submit a Site Characterization Workplan to the Central Office for approval.
  - b) By September 17, 2020 submit a Site Characterization Report detailing the findings from completion of the Site Characterization Workplan to the Central Office for verification of conclusions.
  - c) By March 17, 2021 (or sooner) submit a draft Groundwater Monitoring, Sampling, and Analysis Plan (GMSAP) to the Central Office for approval.
  - d) By December 17, 2021 (or sooner) submit a final Groundwater Monitoring, Sampling, and Analysis Plan (GMSAP) to the Central Office for approval. The design of the groundwater monitoring network should be approved by the department prior to installation. However, if installation occurs prior to approval, the WPP and MGS reserves the right to insist on additional wells or changes to the network.
  - e) By December 17, 2022 (or sooner) have all elements of the GMSAP fully implemented. The facility shall collect groundwater quality samples at a discrete interval (typically quarterly) which must demonstrate each sample is independent and representative of the groundwater being monitored.

(continued)

### C. SPECIAL CONDITIONS (CONTINUED)

17. This permit requires quarterly sampling of pentachlorophenol at outfall #003. Because of the bioaccumulative toxicity of this pollutant, if the discharge exceeds 19 µg/L (at any time regardless if final effluent limits are in place), the facility must take the following actions. All records and documents shall be kept with the SWPPP and provided to the EPA or DNR upon request.
- a) First exceedance in a rolling 12 month period:
    - i. Document conditions associated with the sampling event (flow volume, precipitation volume, soil saturation/runoff coefficient, land disturbance, and other applicable observations)
    - ii. Review the SWPPP and make BMP changes as appropriate. Complete within 20 calendar days of exceedance.
  - b) Second exceedance in a rolling 12 month period:
    - i. The facility must sample monthly for 12 consecutive months. If no additional exceedances of 19 µg/L occur within the 12 months, the facility may return to quarterly sampling.
    - ii. Document conditions associated with the sampling event (flow volume, precipitation volume, soil saturation/runoff coefficient, land disturbance, and other applicable observations)
    - iii. Review the SWPPP and make BMP changes as appropriate. Complete within 20 calendar days of exceedance.
  - c) Third exceedance in a rolling 12 month period:
    - i. Document conditions associated with the sampling event (flow volume, precipitation volume, soil saturation/runoff coefficient, land disturbance, and other applicable observations)
    - ii. Review the SWPPP and make BMP changes as appropriate. Complete within 20 calendar days of exceedance.
    - iii. The facility will contact the regional office within 30 calendar days of third exceedance. The facility will coordinate with the state to design and implement a permanent means of stormwater pollution prevention. This may include a stormwater capture and/or treatment system, covering poles, or other effective system. The facility will work with the regional office to determine the best course of action and timeframe to have the project completed. A construction permit or land disturbance permit may be required.

### D. SCHEDULE OF COMPLIANCE

Schedules of compliance are allowed under 40 CFR 122.47. The facility shall attain compliance with final effluent limitations for pentachlorophenol at outfall #003 as soon as reasonably achievable.

By one year from the date of issuance, the facility will complete an interim report for controlling pentachlorophenol discharges at outfall #003 and submit the report to the Kansas City Regional Office:

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

**MISSOURI DEPARTMENT OF NATURAL RESOURCES**  
**FACT SHEET**  
**FOR THE PURPOSE OF RENEWAL**  
**OF**  
**MO-0115924**  
**INDEPENDENCE BLUE VALLEY POWER PLANT**

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

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

**Part I. FACILITY INFORMATION**

Facility Type:	Major Categorical Industrial
Facility SIC Code(s):	4911
Facility NAICS Code:	221112
Application Date:	11/03/2015
Modification Date:	n/a
Expiration Date:	05/05/2016
Last Inspection:	10/27/2014 - compliant

**FACILITY DESCRIPTION:**

The Blue Valley Power Plant is located in Independence Missouri, Jackson County. The facility has only burned natural gas since September 9, 2015 when the facility ceased burning coal. The facility is no longer allowed to burn coal according to the air pollution control program (APCP) permit; the APCP allows them to burn natural gas and burn fuel oil. The facility not only generates power but also includes a transmission and distribution service center and substation. Storage is provided on-site for fluids, reclaimable waste products (fuel oil, used equipment oil), chlorine, demineralizer, cooling tower chemicals, and hydrogen gas. The facility can generate up to 93,000 megawatts. The power comes from Two Allis-Chalmers 21,000 kilowatt turbines and one General Electric 51,000 kilowatt turbine-generator units. Coal ash is no longer generated. The facility uses groundwater for cooling tower makeup water therefore CWA §316(b) is not applicable.

**Outfall #001**

Area 1 is drained by outfall #001. This area contains the substation and employee parking. Area 1 is about 7 acres.

**Feature #002**

Area 2 is diverted to Feature #002 and also contains the power plant itself, cooling towers, roadways, and storage sheds. Area 2 is about 68 acres. The coal area slopes inward preventing stormwater runoff; all stormwater collected on the coal pile is diverted to the ash ponds and Feature #002 which is discharged to the Independence sanitary sewer and treated at the wastewater treatment plant. The facility has never been permitted to discharge ash sluice water to waters of the state.

**Outfall #003**

Area three, on the southeast portion of the plant property is about 23 acres and houses power pole storage, a wood chip area, and is partially vegetated. Storage of power poles required monitoring of pentachlorophenol in the last permit. This permit established limits for the facility as exceedances of water quality standards were found.

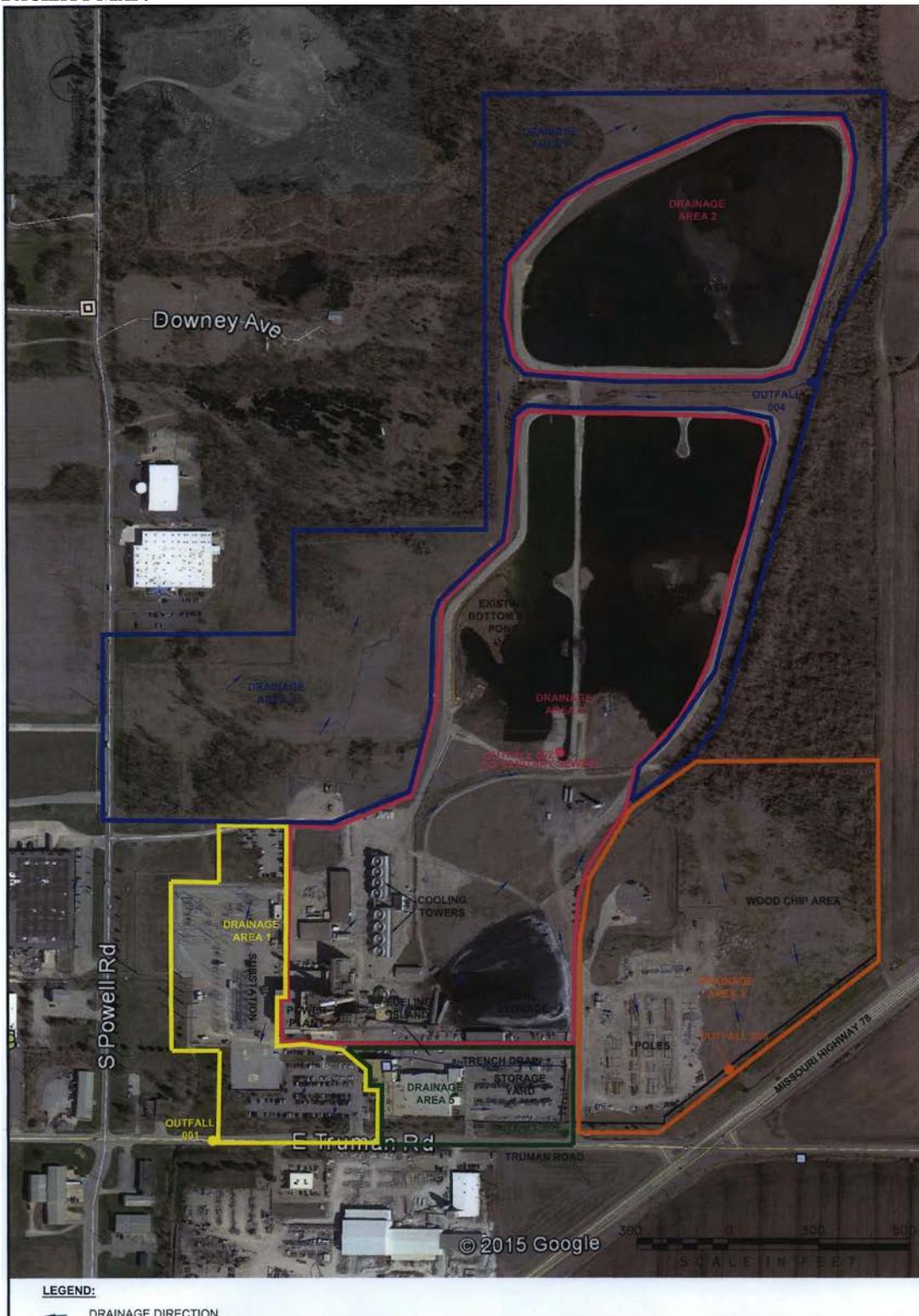
**Outfall #004**

Area 4 drains to outfall #004 and is the roadway surrounding the ash ponds and a vegetated area to the northwest of the power plant. This outfall drains approximately 37 acres.

Outfall #005

Area 5 is identified as the area south of the power plant and the coal storage area. Drainage lines indicate this area has a trench drain system and receives stormwater runoff from the fueling island and storage yard. This area is approximately 5 acres.

**FACILITY MAP:**



**PERMITTED FEATURES TABLE:**

OUTFALL	AVERAGE FLOW (MGD)	DESIGN FLOW (MGD)	TREATMENT LEVEL	EFFLUENT TYPE
#001	0.1491	0.262	BMPs	stormwater
#003	0.003	0.0072	BMPs	stormwater
#004	0.51	1.9	BMPs	stormwater
#005	0.23	0.44	BMPs	stormwater

BMPs = Best Management Practices

**FACILITY PERFORMANCE HISTORY & COMMENTS:**

The electronic discharge monitoring reports were reviewed for the last five years. No exceedances of permitted limits were noted. Benchmark exceedances were as follows: COD benchmark was 60 mg/L; outfall #001, 06/30/2011 COD 84 mg/L; outfall #001, 12/31/2011 COD 85 mg/L; outfall #001, 06/30/2012 COD 116 mg/L; outfall #001, 09/30/2012 COD 70 mg/L; outfall #003, 03/31/2011 COD 66 mg/L. The TSS benchmark was 50 mg/L; outfall #003, 03/31/2012 TSS 54 mg/L; outfall #004, 03/31/2012 TSS 94 mg/L. Oil and Grease and pH also had benchmarks and no exceedances occurred with these parameters.

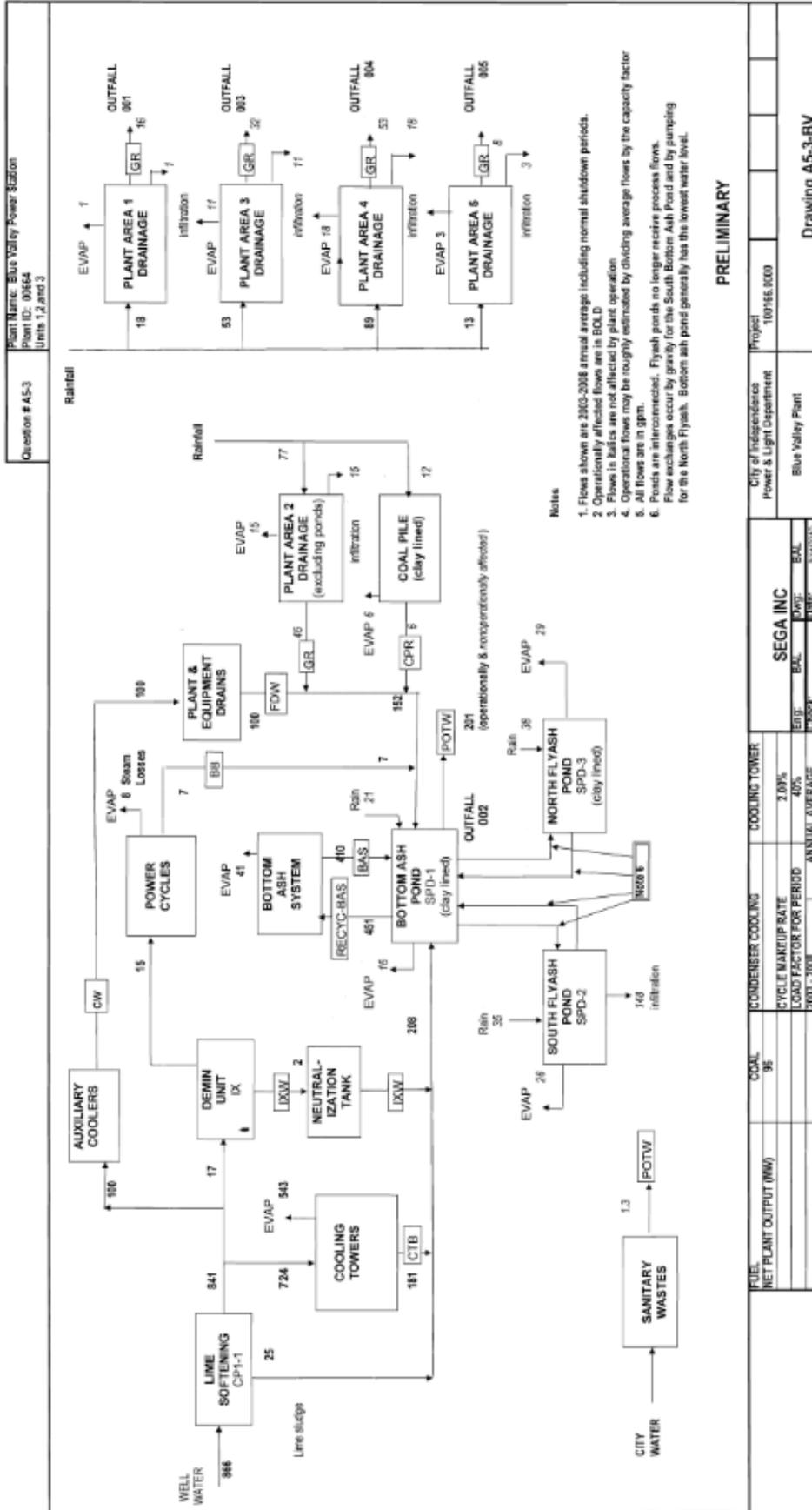
During the last permit cycle, the facility was monitoring for pentachlorophenol at outfall #003. The facility reported values between non-detection and 653 µg/L. The water quality standards for protection of aquatic life is 3.2 µg/L for a pH of 6.5, through 23 µg/L for a pH of 8.5; the human health protective factor is 8 µg/L. The permit writer has determined additional sampling is required for this parameter because of the bioaccumulative effects. See outfall #003, derivation and discussion of limits.

**WATER USE:**

The facility uses groundwater at a rate of 866 gallons per minute (1.247 MGD) and lime softens it for use in the plant's systems. 724 gpm (1.043 MGD) is used in the cooling towers where 543 gpm (0.782 MGD) is lost to evaporation. 181 gpm (0.261 MGD) of cooling tower blowdown is sent to the bottom ash pond. Plant drains and the coal pile runoff is sent to the bottom ash pond. All ash ponds are interconnected and liquid is sent to the city's wastewater treatment plant. See diagram on next page.

The facility uses potable water for personnel use and all sanitary wastes are sent to the city's wastewater treatment facility.

**WATER BALANCE DIAGRAM:**



**Part II. RECEIVING STREAM INFORMATION**

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

- ✓ As per Missouri’s Effluent Regulations [10 CSR 20-7.015(1)(B)], the waters of the state are divided into the following seven categories. Each category lists effluent limitations for specific parameters, which are presented in each outfall’s Effluent Limitation Table and further discussed in the Derivation & Discussion of Limits section.

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

Classes [10 CSR 20-7.031(1)(F)1. to 8.] of water bodies which may be found in the receiving streams table below are:

Lakes: L1 = drinking supply lakes; L2 = major reservoirs; L3 = other

Streams: P = permanent streams; P1 = standing water of P streams; C = may cease flow in droughts but maintains permanent pools; E = ephemeral; W = natural wetlands

- ✓ As per 10 CSR 20-7.031 Missouri Water Quality Standards, the department defines the Clean Water Commission’s water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and 1<sup>st</sup> classified receiving stream’s beneficial water uses to be maintained are in the following receiving stream table in accordance with [10 CSR 20-7.031(1)(C)].

Uses which may be found in the following receiving streams table:

10 CSR 20-7.031(1)(C)1.: Protection and propagation of fish, shellfish, and wildlife (formerly AQL; this permit uses AQL effluent limitations in 10 CSR 20-7.031 Table A for all habitat temperature designations unless otherwise specified)

WWH = Warm Water Habitat; CLH = Cool Water Habitat; CDH = Cold Water Habitat; EAH = Ephemeral Aquatic Habitat; MAH = Modified Aquatic Habitat; LAH = Limited Aquatic Habitat

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

WBC = Whole Body Contact; WBC-A = public swimming; WBC-B = swimming

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

10 CSR 20-7.031(1)(C)3. to 7.: HHP (formerly HHF) = Human Health Protection (fish consumption); IRR = irrigation;

LWP (formerly LWW) = Livestock And Wildlife Protection; DWS = Drinking Water Supply;

IND = industrial water supply

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

- ✓ As per Missouri’s stormwater regulations [10 CSR 20.6.200(6)(B)2.] and federal regulations [40 CFR 122.26(b)(14)], the department shall establish limits necessary to protect waters of the state. Effluent limitations or benchmarks for stormwater are established using best professional judgment based on the category, impairments, technology available, and designated uses of the receiving stream.

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

The facility discharges stormwater to tributaries to the Little Blue River. Little Blue River watershed is a Metropolitan No Discharge watershed. This means industrial dischargers are not allowed to discharge process wastewaters to this watershed. However, this permit is for stormwater only therefore this discharge is allowed.

Three different streams (two were newly classified) eventually discharge to the Little Blue River. The receiving tributaries have no concurrent water quality data available. The Little Blue River has been assessed for stream quality and was found to be impaired for the whole body contact category B use from excess *Escherichia coli*. A TMDL is scheduled to be completed for this pollutant; the facility is not likely a contributor to this impairment.

The department has determined the facility has likely discharged coal combustion residuals to the groundwater. Groundwater is a water of the state therefore the department has determined an investigation of these potential releases is required.

**303(D) LIST:**

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. <http://dnr.mo.gov/env/wpp/waterquality/303d/303d.htm>

- ✓ Applicable; The Little Blue River is listed on the 2012-2014 Missouri 303(d) list for *E. coli*.
- ✓ This facility is not considered to be a source of the above listed pollutants or considered to contribute to the impairment.

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

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

- ✓ Applicable; the facility is located within the Missouri River PCB/Chlordane TMDL approved in November 2006.
- ✓ This facility is not considered to be a source of the above listed pollutants or considered to contribute to the impairment.

**RECEIVING STREAMS TABLE:**

OUTFALL	WATERBODY NAME	CLASS	WBID	DESIGNATED USES	DISTANCE TO SEGMENT	12-DIGIT HUC
#001	Tributary to 8-20-13 MUDD V1.0	n/a	n/a	GEN	0.0	10300101-0207 Burr Oak Creek-Little Blue River
	8-20-13 MUDD V1.0	C	3960	HHP (HHF), IRR, LWP (LWW), SCR, WBC-B, WWH (AQL)	0.3 mi	
#003	Tributary to Little Blue River	n/a	n/a	GEN	0.0 mi	10300101-0208 Little Blue River
	Little Blue River	P	0422	HHP (HHF), IRR, LWP (LWW), SCR, WBC-B, WWH (AQL)	1.3 mi	
#004	Tributary to 8-20-13 MUDD V1.0	n/a	n/a	GEN	0.0 mi	
	8-20-13 MUDD V1.0	C	3960	HHP (HHF), IRR, LWP (LWW), SCR, WBC-B, WWH (AQL)	0.8 mi	
#005	Tributary to Little Blue River	n/a	n/a	GEN	0.0 mi	
	Little Blue River	P	0422	HHP (HHF), IRR, LWP (LWW), SCR, WBC-B, WWH (AQL)	1.2 mi	

n/a = not applicable

WBID = Waterbody ID: Missouri Use Designation Dataset 8-20-13 MUDD V1.0 data can be found as an ArcGIS shapefile on MSDIS at [ftp://msdis.missouri.edu/pub/Inland\\_Water\\_Resources/MO\\_2014\\_WQS\\_Stream\\_Classifications\\_and\\_Use\\_shp.zip](ftp://msdis.missouri.edu/pub/Inland_Water_Resources/MO_2014_WQS_Stream_Classifications_and_Use_shp.zip)

Due to newly classified streams, the distances to the classified segments for outfalls #001 and #004 have decreased.

**MIXING CONSIDERATIONS:**

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

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

**RECEIVING STREAM MONITORING REQUIREMENTS:**

No receiving water monitoring requirements are recommended at this time.

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

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

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

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

#### **ANTI-BACKSLIDING:**

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

- ✓ All limits in this operating permit are at least as protective as those previously established; therefore, backsliding does not apply.

#### **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.

#### **BENCHMARKS:**

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

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

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

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

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

Biosolids are solid materials resulting from domestic wastewater treatment 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.

**COAL COMBUSTION RESIDUALS (CCR):**

Coal Combustion Residuals (CCR), often referred to as coal ash, is currently considered solid waste which are not hazardous wastes under an amendment to RCRA, the Resource Conservation and Recovery Act. Coal ash is residues from the combustion of coal in power plants and captured by pollution control technologies, like precipitators or scrubbers. Potential environmental concerns from coal ash pertain to pollution from impoundment and landfills leaching into groundwater and structural failures of impoundments. The US EPA has imposed the first-ever national rules to ensure the safe disposal and management of coal ash from coal-fired power plants under the nation’s primary law for regulating solid waste, the RCRA. While the NPDES program is not an enforcement agency for RCRA, the water protection program, (WPP or program) has viewed these concerns as applicable to NPDES permits as the state has determined groundwater is a water of the state and should be protected.

This operating permit will contain a special condition to address concerns regarding ash ponds at this facility and their potential to impact groundwater. Missouri Water Quality Standard 10 CSR 20-7.031(5)(A) states, “Water contaminants shall not cause or contribute to exceedances of Table A, groundwater limits in aquifers and caves...” The established special condition will allow the department to (1) determine if groundwater is being impacted from either the lined or unlined coal ash impoundments, and (2) establish controls, limits, management strategies, and/or groundwater cleanup criteria. See “Groundwater Monitoring” in this section.

**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.

**GROUNDWATER MONITORING:**

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

- ✓ This facility is required to monitor groundwater around the ash ponds. Groundwater monitoring is part of a new directive to characterize and protect groundwater from coal combustion residual leachates in Missouri. A timeline is provided to the facility in special condition #16 of the permit. The permittee shall submit four documents over the course of four years to the Central Office for approval. Permittee shall develop the GMSAP which should generally follow the applicable guidelines contained in *Guidance for Conducting a Detailed Hydrogeologic Site Characterization and Designing a Groundwater Monitoring Program*. At that time the permit will be modified during the renewal process to include the monitoring well locations. The facility shall collect groundwater quality samples at an interval such they are representative of the groundwater and are collected at discrete intervals. By December 17, 2022, the permittee will have all elements of the GMSAP fully implemented. The facility shall, at a minimum, collect eight (8) groundwater quality samples. Results shall be submitted electronically to the Water Protection Program using forms provided by the department. The list of parameters that the facility will monitor and report will be contained in the GMSAP and will be selected from the table below :

Metals	Organics
Aluminum	Sulfate, as SO <sub>4</sub>
Antimony	Total Organic Carbon (TOC)
Arsenic	Total Organic Halogens (TOX)
Barium	Nitrate+Nitrite
Beryllium	
Boron	
Cadmium	
Chromium III	Field Parameters
Chromium VI	pH
Cobalt	Specific conductance
Copper	Oxidation/Reduction Potential (ORP)
Iron	
Lead	
Lithium	Radionuclides
Magnesium	Radium 226 ( <sup>226</sup> Ra)
Manganese	Radium 228 ( <sup>228</sup> Ra)
Mercury	
Molybdenum	
Nickel	Other
Selenium	Chemical Oxygen Demand (COD)
Silver	Chloride
Sodium	Fluoride
Thallium	Hardness, as CaCO <sub>3</sub>
Zinc	Total Dissolved Solids (TDS)

Any hydrogeologic evaluation and groundwater data collection completed prior to the issuance of the NPDES permit and the approval of a detailed site investigation will be voluntary as it pertains to the NPDES permit.

This permit is to comply with the requirements in 644.143 RSMo and to establish a long term approach and stewardship of the site and the beneficial uses of the groundwater on this site. This permit does not implement the federal CCR rule, as that is a self-implementing rule and covered under RCRA. This permit does not shield a facility from the CCR requirements. Compliance with the terms and conditions of this permit that are identical to, or more stringent than, the requirements in the federal CCR rule may constitute compliance with the federal CCR rule.

The department realizes there are two different timelines associated with this permit for groundwater monitoring. One is driven solely by the effective date of 40 CFR 257, where the permittee will publish the results from eight statistically independent groundwater samples accurately representing background water quality and the quality of the groundwater surrounding the ash ponds pursuant to 40 CFR 257.93. The other is solely water protection program requirements and will be required to report that data to the water protection program. While the two have different dates and reporting requirements, the department will allow, if appropriate, the same monitoring well network and sampling data to be used for the two different requirements. All investigations and reports for the water protection program must be approved by the water protection program and Missouri geological survey. Any data gathered by the facility prior to WPP approval may not be acknowledged as appropriate monitoring. Data and submittals driven by 40 CFR 257 are not approved by the water protection program.

In a pre-public notice comment letter dated 2/22/2016, the facility indicated they had permanently ceased all coal firing at Blue Valley and ceased sluicing ash to the three impoundments on 9/9/2015 qualifying all three ash impoundments as “inactive surface impoundments” under 40 CFR 257.100. The department appreciates the information regarding the cessation of activities however, the coal combustion residuals may have impacted groundwater therefore the water protection program is requiring groundwater monitoring. The water protection program is not governed by 40 CFR 257. All reference to this rule is unnecessary regarding requirements or closure status; the requirements put forth in this permit are based on the judgment of the water protection program and are applied to each and every facility which has or had coal combustion residuals on site. The facility must sample groundwater until such time the facility has proven there were no releases to groundwater.

**IMPINGEMENT AND ENTRAINMENT AT CWIS; CWA § 316(b):**

The Clean Water Act (CWA) Section 316(b) provides for protection of aquatic life from cooling water intake structures (CWIS) where the facility withdraws more than 2 MGD from surface waters. The Blue Valley Power Plant uses groundwater for cooling water therefore is not subject to any impingement and entrainment studies and reviews as promulgated in 40 CFR 122.21(r) and 40 CFR Subpart J.

**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.

**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 standards. In accordance with [40 CFR Part 122.44(d)(1)(iii)] if the permit writer determines that any give pollutant has the reasonable potential to cause, or contribute to an in-stream excursion above the WQS, the permit must contain effluent limits for that pollutant.

✓ Not applicable; a RPA was not conducted for this facility. This permit establishes permit limits and benchmarks for stormwater. The department has determined stormwater is not a continuous discharge and is therefore not subject to RPA. However, the permit writer completed an RPD, a reasonable potential determination, using best professional judgment for all of the parameters in this permit. A RPD consists of reviewing the data for the last five years and comparing those data to the water quality standards. Should the data exceed the water quality standards, the parameter is included in the permit with benchmarks or limits. Should all of the monitoring data be non-detects or well below the water quality standards, the parameter no longer requires monitoring. Intermediate results are typically included in the permit for monitoring only, or possibly with an associated benchmark.

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

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

- ✓ Applicable; the time given for effluent limitations of this permit listed under Interim Effluent Limitation and Final Effluent Limitations were established in accordance with [10 CSR 20-7.031(12)]. The facility has been given a schedule of compliance to meet final effluent limits for pentachlorophenol at outfall #003. The facility will be allotted two years to determine the best course of action to mitigate pentachlorophenol discharges at outfall #003.
- ✓ In accordance with 40 CFR 122.63(c), a minor modification may be made to this permit to change one or more interim compliance dates in the Schedule of Compliance so long as the new date is not more than 120 days after the date specified for change and does not interfere with attaining the final compliance date requirement.

### **SPILL REPORTING:**

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

### **STORMWATER PERMITTING:**

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

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

Sufficient rainfall to cause a discharge for one hour or more from a facility would not necessarily cause significant flow in a receiving stream. Acute WQSs are based on a one hour of exposure, and must be protected at all times in unclassified streams, and within mixing zones of class P streams [10 CSR 20-7.031(3) and (4)]. Therefore, industrial stormwater facilities with toxic contaminants do have the potential to cause a violation of acute WQSs if those toxic contaminants occur in sufficient amounts.

It is due to the items stated above that staff drafting this fact sheet are unable to perform statistical Reasonable Potential Analysis and calculate Wasteload Allocations via a mass-balance equation for effluent limit determination. However, staff may use their best professional judgment in determining if a facility has a potential to violate Missouri's Water Quality Standards.

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

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

The purpose of a SWPPP is to comply with all applicable stormwater regulations by creating an adaptive management plan to control and mitigate pollution of stormwater runoff. Developing a SWPPP provides opportunities to employ appropriate BMPs to minimize the risk of pollutants being discharged with during storm events. The following paragraph outlines the general steps the permittee should take to determine which BMPs will work to achieve the benchmark values discussed in Part V above. This section is not intended to be all encompassing or restrict the use of any physical BMP or operational and maintenance procedure that will assist in pollution control. Additional steps or revisions to the SWPPP may be required to meet the requirements of the permit. Additional information can be found in 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].

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

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

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

#### **VARIANCE:**

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

- ✓ Not applicable; this operating permit is not drafted under premises of a petition for variance.

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

As per [10 CSR 20-2.010(78)], the WLA is the amount of pollutant each discharger is allowed 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.

#### **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(4)], general criteria shall be applicable to all waters of the state at all times including mixing zones. Additionally, [40 CFR 122.44(d)(1)] directs the Department to establish in each NPDES permit to include conditions to achieve water quality established under Section 303 of the Clean Water Act, including State narrative criteria for water quality.

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

A WET test is a quantifiable method of determining if a discharge from 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. Due to the variable nature of stormwater and irreproducible results of the WET test under these conditions, the facility is not subject to WET testing requirements.

## **Part IV. EFFLUENT LIMITS DETERMINATION**

### **EFFLUENT LIMITATION GUIDELINE**

The facility has an associated Effluent Limit Guideline (ELG) at 40 CFR 423. However, the facility does not discharge ash sluice water, cooling tower blowdown, coal pile runoff, low volume wastes, or Flue Gas Desulphurization (FGD) products to surface waters of the state. The limits in the ELG therefore do not apply.

### **OUTFALL #001, #003, #004, #005 – STORMWATER ONLY OUTFALLS**

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

### **EFFLUENT LIMITATIONS TABLE:**

PARAMETERS	UNIT	BASIS	DAILY MAXIMUM LIMIT	BENCH-MARK	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	MINIMUM REPORTING FREQUENCY	SAMPLE TYPE
<b>PHYSICAL</b>								
FLOW	MGD	1	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	24 HR. ESTIMATE
PRECIPITATION	INCHES	6	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	24 HR. TOT
<b>CONVENTIONAL</b>								
COD	MG/L	6, 8	**	60	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
OIL & GREASE	MG/L	1, 3	**	10	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
pH ‡	SU	1, 3	**	6.5 TO 9.0	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
TSS	MG/L	6, 8	**	50	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
<b>OUTFALL #003 ONLY</b>								
PENTACHLOROPHENOL	µg/L	1, 3	*	-	I, NEW	ONCE/MONTH	ONCE/QUARTER	GRAB
PENTACHLOROPHENOL	µg/L	1, 3	19	-	F, NEW	ONCE/MONTH	ONCE/QUARTER	GRAB

\* - Monitoring requirement only

\*\* - Monitoring with associated benchmark

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

NEW = Parameter not established in previous operating permit

I = interim limit

F = final limits

#### **Basis for Limitations Codes:**

- |  |                                   |  |
|--|-----------------------------------|--|
| 1. State or Federal Regulation/Law       | 5. Water Quality Model            | 9. Benchmark based on Missouri Water Quality Standards |
| 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. Benchmark based on MSGP        |  |

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

#### **PHYSICAL:**

##### **Flow**

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

##### **Precipitation**

Monitoring only requirement; measuring the amount of precipitation [(10 CSR 20-6.200(2)(C)1.E(VI)] during an event is necessary to ensure adequate stormwater management exists at the site. Knowing the amount of potential stormwater runoff can provide the permittee a better understanding of specific control measure that should be employed to ensure protection of water quality. The facility will provide the 24 hour accumulation value of precipitation from the day of sampling the other parameters. It is not necessary to report all days of precipitation during the quarter because of the readily available on-line data. New requirement this permit. The facility will record or measure and report precipitation on the days of sampling; quarterly for outfalls #001, #004, and #005. The facility will report monthly for outfall #003 at the same time as sampling for pentachlorophenol.

## CONVENTIONAL:

### **Chemical Oxygen Demand (COD)**

Previous benchmark 60 mg/L. Monitoring is included using the permit writer's best professional judgment. There is no water quality standard for COD; however, increased oxygen demand may impact instream water quality. COD is also a valuable indicator parameter. COD monitoring allows the permittee to identify increases in COD that may indicate materials/chemicals coming into contact with stormwater that cause an increase in oxygen demand. Increases in COD may indicate a need for maintenance or improvement of BMPs. Additionally, a benchmark value will be implemented for this parameter. The benchmark value will be set at 60 mg/L; same as previous permit. Quarterly benchmark monitoring and reporting; continued from previous permit. While there were five exceedances of this benchmark parameter in the previous five years, the permit writer has used best professional judgment to continue with benchmarks. Benchmarks provide the facility an opportunity to improve on-site conditions without numerical limit violations; for a parameter such as COD, this method of controlling pollutants from entering waters of the state is preferable so the facility is improving the site, the staff training, the operational controls, and the best management practices. Overall, this approach will improve waters of the state by decreasing COD.

### **Oil & Grease**

Previous permit limits establish a 10 mg/L benchmark; continued. The facility reported mostly non-detections from the analytical results. Ten mg/L is expected to be protective of non-numeric water quality criteria found in 10 CSR 20-7.031(4) applicable to all waters of the state at all times, including mixing zones. The facility is not allowed to discharge stormwater with petroleum sheen.

### **pH**

6.5 to 9.0 SU. The Water Quality Standard at 10 CSR 20-7.031(5)(E) states water contaminants shall not cause pH to be outside the range of 6.5 to 9.0 standard pH units. Benchmark continued from previous permit.

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

There is no water quality standard for TSS; however, sediment discharges can negatively impact aquatic life habitat. TSS is also a valuable indicator parameter. TSS monitoring allows the permittee to identify increases in TSS that may indicate uncontrolled materials leaving the site. Additionally, a benchmark value will be implemented for this parameter. The benchmark value will be set at 50 mg/L; continued from previous permit. Quarterly monitoring and reporting continued from previous permit. While there were two exceedances of this benchmark parameter in the previous permit, the permit writer has used best professional judgment to continue with benchmarks. Benchmarks provide the facility an opportunity to improve on-site conditions without numerical limit violations; for a parameter such as TSS, this method of controlling sediments from entering waters of the state is preferable so the facility is improving the site, the staff training, the operational controls, and the best management practices. Overall, this approach will improve waters of the state by decreasing TSS.

## METALS:

The permittee reported all metals were believed absent at all outfalls.

## NUTRIENTS:

The permittee reported all nutrients were believed absent at all outfalls.

## OTHER:

### **Pentachlorophenol**

Bioaccumulative anthropogenic toxin; biocide; probable carcinogen; outfall #003 only. Previous permit had quarterly monitoring only with no associated limit or benchmark. Water quality standards for protection of aquatic life are based on the pH of the effluent. According to the pH data for outfall #003, the pH of the stormwater ranges from 7.7 to 8.39 SU. The median of this range is 8.2 SU. At a pH of 8.0, the AQL WQS is 14 µg/L; at a pH of 8.5 the limit is 23 µg/L. The permit writer has determined the median on the WQS to be **19 µg/L** which will be the limit for this parameter. Because of the nature of this parameter, the permit writer has used best professional judgment to require the facility monitor for this parameter quarterly when stormwater is discharging. The facility is not able to meet the WQS at this time hence is afforded a two year schedule of compliance. Of the reported detections, the following values were reported to the department: 10, 11.9, 10, 10, 183, 180, 653, 471, and 97.8 µg/L. During sampling for permit renewal, the facility found 11.9 µg/L. There were three non-detects reported. The facility must use a sufficiently sensitive method to determine the true concentration of this parameter in the stormwater. When using EPA Method 625 (gas chromatography and mass spectroscopy – GC/MS), the detection limit is 2.5 µg/L with a practical quantitation limit of 5 µg/L as reported by the department's laboratory. The facility is expected to use this method or similar. Because the method detection limit and practical quantitation limit are below the effluent limits in this permit, there will be no minimum level (ML) established for this parameter. The facility will report "no-discharge" for this parameter when a discharge does not occur from outfall #003 for the quarter. The permittee will sample monthly if accelerated testing is required but report quarterly. See special condition #17.

The facility has indicated they no longer accept wet poles from the vendor.

Additional information on pentachlorophenol:

Pignatello JJ, Martinson MM, Steiert JG, Carlson RE, Crawford RL. Biodegradation and photolysis of pentachlorophenol in artificial freshwater streams. *Applied and Environmental Microbiology*. 1983;46(5):1024-1031.

Abstract <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC239514/pdf/aem00168-0068.pdf>

The biodegradation, photolysis, and adsorption of pentachlorophenol (PCP) in outdoor, aquatic environments were examined with man-made channels built by the U.S. Environmental Protection Agency at a field station on the Mississippi River near Monticello, Minn. Four channels were used, each channel being approximately 520 m long and receiving river water that flowed through the channels for about 10 h before reentering the river. The channels were dosed continuously during the summer of 1982 with various concentrations of PCP (approximately 0, 48, 144, and 432 micrograms/liter). We monitored the biotic and abiotic degradation of PCP in these channels for approximately 16 weeks. Photolysis of PCP was rapid at the water surface, but greatly attenuated with depth. Depending on sunlight conditions, photolysis accounted for a 5 to 28% decline in initial PCP concentration. Adsorption of PCP by sediment and uptake by biota accounted for less than 15% and probably less than 5% in unacclimated water. Microbial degradation of PCP became significant about 3 weeks after the initiation of dosing and eventually became the primary mechanism of PCP removal, accounting for a 26 to 46% (dose-dependent) decline in initial PCP. Most of the PCP-mineralizing microorganisms that developed in the channels were either attached to surfaces (e.g., rocks and macrophytes) or associated with surface sediments. Total bacterial numbers (direct microscopic counts) in the various channels were not affected significantly by PCP concentrations of micrograms per liter. Numerous strains of bacteria able to grow at the expense of PCP were isolated from the adapted channels. The experiments reported here will help predict the responses of flowing aquatic ecosystems to contamination by biocides such as pentachlorophenol.

## **Part V. SAMPLING AND REPORTING REQUIREMENTS:**

Refer to each outfall's derivation and discussion of limits section to review individual sampling and reporting frequencies and sampling type.

### **ELECTRONIC DISCHARGE MONITORING REPORTING:**

Due to upcoming federal regulations, all facilities will need to begin submitting their discharge monitoring reports electronically, called the eDMR system. To begin the process, please visit <http://dnr.mo.gov/env/wpp/edmr.htm>. This process is expected to save time, lessen paperwork, and reduce operating costs for both the facilities and the water protection program. Additional information may also be found at <http://dnr.mo.gov/pubs/pub2474.pdf>.

### **SAMPLING FREQUENCY JUSTIFICATION:**

Sampling and reporting frequency was generally retained from previous permit. Sampling frequency for stormwater-only outfalls is typically quarterly even though BMP inspection occurs monthly. The facility may sample more frequently if they need additional data to determine if their best management technology is performing as expected.

40 CFR 122.45(d)(1) indicates all continuous discharges shall be permitted with daily maximum and monthly average limits.

### **SAMPLING TYPE JUSTIFICATION:**

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

## **Part VI. ADMINISTRATIVE REQUIREMENTS**

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

### **PERMIT SYNCHRONIZATION:**

The Department of Natural Resources is currently undergoing a synchronization process for operating permits. Permits are normally issued on a five-year term, but to achieve synchronization many permits will need to be issued for less than the full five years allowed by regulation. The intent is that all permits within a watershed will move through the Watershed Based Management (WBM) cycle together will all expire in the same fiscal year. <http://dnr.mo.gov/env/wpp/cpp/docs/watershed-based-management.pdf>. This will allow further streamlining by placing multiple permits within a smaller geographic area on public notice simultaneously, thereby reducing repeated administrative efforts. This will also allow the department to explore a watershed based permitting effort at some point in the future. Renewal applications must continue to be submitted within 180 days of expiration, however, in instances where effluent data from the previous renewal is less than three years old, that data may be re-submitted to meet the requirements of the renewal application. If the permit provides a schedule of compliance for meeting new water quality based effluent limits beyond the expiration date of the permit, the time remaining in the schedule of compliance will be allotted in the renewed permit. *This permit would become synchronized by expiring the end of the 4<sup>th</sup> quarter, 2018; however, the schedule for groundwater sampling extends for longer than two years therefore this permit will be issued for a period of five years.*

### **PUBLIC NOTICE:**

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

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

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

- The Public Notice period for this operating permit was from 6/26/2016 to 7/26/2016. One comment was received.

Comment: The facility believed pentachlorophenol on Table A-3 should be a benchmark and not a discharge limit. During the last permit cycle the permit writer changed the facility from limits to stormwater only benchmarks because the facility does not discharge industrial wastewater; additionally, a SWPPP was added to address exceedances with BMP changes. Both conditions remain true; the facility does not have a wastewater discharge or state discharge limits but strictly stormwater discharge. The facility believes moving pentachlorophenol value to a benchmark also correlates better with the established language of special condition 17 which discusses our SWPPP and required best management practices revisions to address pentachlorophenol.

Response: The department reviewed the data supplied by the permittee for stormwater discharges of pentachlorophenol. The department determined the stormwater has reasonable potential to cause or contribute to pollution of waters of the state therefore per 40 CFR 122.44(d)(i) the parameter must have an enforceable limitation; in this case a numeric limit. Special condition #17 was added to compel the permittee into taking BMP action to control pentachlorophenol stormwater discharges.

**DATE OF FACT SHEET:** AUGUST 1, 2016

### **COMPLETED BY:**

PAM HACKLER, ENVIRONMENTAL SCIENTIST  
MISSOURI DEPARTMENT OF NATURAL RESOURCES  
WATER PROTECTION PROGRAM  
OPERATING PERMITS SECTION - INDUSTRIAL UNIT  
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STANDARD CONDITIONS FOR NPDES PERMITS  
ISSUED BY  
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES  
MISSOURI CLEAN WATER COMMISSION  
REVISED  
AUGUST 1, 2014

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

## Part I – General Conditions

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

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

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

### Section B – Reporting Requirements

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



STANDARD CONDITIONS FOR NPDES PERMITS  
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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



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

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



STANDARD CONDITIONS FOR NPDES PERMITS  
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MISSOURI CLEAN WATER COMMISSION  
REVISED  
AUGUST 1, 2014

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

# City of Independence

POWER & LIGHT DEPARTMENT

21500 E. TRUMAN ROAD • P.O. BOX 1019 • INDEPENDENCE, MISSOURI 64051-0519  
www.ci.independence.mo.us

(816) 325-7500  
FAX (816) 325-7470



October 30, 2015

RECEIVED

NOV 03 2015

Missouri Department of Natural Resources

Water Protection Program

Water Protection Program  
PO Box 176  
Jefferson City, MO 65102-0176

RE: Operating Permit renewal for the Blue Valley Power Plant (Permit MO-0115924)

To whom it may concern,

The City of Independence, Independence Power and Light Department is submitting the enclosed permit renewal application for the Blue Valley Power Plant. This submittal satisfies the required 180 day, prior to permit expiration, application submittal. The existing permit expiration date is May 5, 2016.

If you have any questions or concerns, please do not hesitate to contact me by email at [jbuehre@indepmo.org](mailto:jbuehre@indepmo.org) or by phone at 816.325.6286.

Sincerely,

Joshua Buehre  
Environmental Program Specialist  
Independence Power & Light

Attachments

RECEIVED  
NOV 03 2015

AP 22285



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

FOR AGENCY USE ONLY	
CHECK NUMBER	
DATE RECEIVED	FEE SUBMITTED
1113115	0 82

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

1. This application is for:

An operating permit for a new or unpermitted facility:  
Please indicate the original Construction Permit # \_\_\_\_\_

An operating permit renewal:  
Please indicate the permit # MO- 0115924 Expiration Date 5/5/2016

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

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

**2. FACILITY**

NAME Independence Blue Valley Power Plant		TELEPHONE NUMBER WITH AREA CODE (816) 325-7500	
		FAX (816) 750-7474	
ADDRESS (PHYSICAL) 21500 East Truman Road	CITY Independence	STATE MO	ZIP CODE 64051

**3. OWNER**

NAME Independence Power and Light		TELEPHONE NUMBER WITH AREA CODE (816) 325-7500	
EMAIL ADDRESS eholder@indepmo.org		FAX (816) 750-7474	
ADDRESS (MAILING) P.O. Box 1019	CITY Independence	STATE MO	ZIP CODE 64051

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

**4. CONTINUING AUTHORITY**

NAME Independence Power and Light		TELEPHONE NUMBER WITH AREA CODE (816) 325-7500	
EMAIL ADDRESS eholder@indepmo.org		FAX (816) 750-7474	
ADDRESS (MAILING) P.O. Box 1019	CITY Independence	STATE MO	ZIP CODE 64051

**5. OPERATOR**

NAME NA	CERTIFICATE NUMBER	TELEPHONE NUMBER WITH AREA CODE	
		FAX	
ADDRESS (MAILING)	CITY	STATE	ZIP CODE

**6. FACILITY CONTACT**

NAME Eric Holder	TITLE Environmental Program Supervisor	TELEPHONE NUMBER WITH AREA CODE (816) 325-7455
	E-MAIL ADDRESS eholder@indepmo.org	FAX (816) 325-7474

**7. ADDITIONAL FACILITY INFORMATION**

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

001 SW 1/4 NW 1/4 Sec 3 T 49N R 31W Jksn County  
UTM Coordinates Easting (X): 385204 Northing (Y): 4327719  
For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)

005 002 SE 1/4 NW 1/4 Sec 3 T 49N R 31W Jksn County  
UTM Coordinates Easting (X): 385567 Northing (Y): 4327696

003 SE 1/4 NW 1/4 Sec 3 T 49N R 31W Jksn County  
UTM Coordinates Easting (X): 385724 Northing (Y): 4327746

004 NE 1/4 NW 1/4 Sec 3 T 49N R 31W Jksn County  
UTM Coordinates Easting (X): 385827 Northing (Y): 4328442

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

001 - SIC 4911 and NAICS 221112      005 002 - SIC 4911 and NAICS 221112  
003 - SIC 4911 and NAICS 221112      004 - SIC 4911 and NAICS 221112

**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 or 2F.  
(2F is the U.S. EPA's Application for Storm Water Discharges Associate with Industrial Activity.)
- B. Is application for storm water discharges only? YES  NO   
If yes, complete Form C or 2F.
- C. Is your facility considered a "Primary Industry" under EPA guidelines: YES  NO   
If yes, complete Forms C or 2F and D.
- D. Is wastewater land applied? YES  NO   
If yes, complete Form I.
- E. Is sludge, biosolids, ash or residuals generated, treated, stored or land applied? YES  NO   
If yes, complete Form R.
- F. If you are a Class IA CAFO, please disregard part D and E of this section. However, please attach any revision to your Nutrient Management Plan.
- F. Attach a map showing all outfalls and the receiving stream at 1" = 2,000' scale.

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

NAME  
See Attachment A

ADDRESS	CITY	STATE	ZIP CODE
---------	------	-------	----------

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) <i>E. Leon Daggett, Director</i>	TELEPHONE NUMBER WITH AREA CODE <i>816 325 7864</i>
---	--

SIGNATURE <i>E. Leon Daggett</i>	DATE SIGNED <i>10/30/2015</i>
-------------------------------------	----------------------------------

MO 780-1479 (07-14)

**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 or 2F, if applicable?
- Form D, if applicable?
- Form I (Irrigation), if applicable?
- Form R (Sludge), if applicable?
- Revised Nutrient Management Plan, if applicable?

ATTACHMENT A  
DOWNSTREAM LANDOWNERS

**OUTFALLS 001 AND 005**

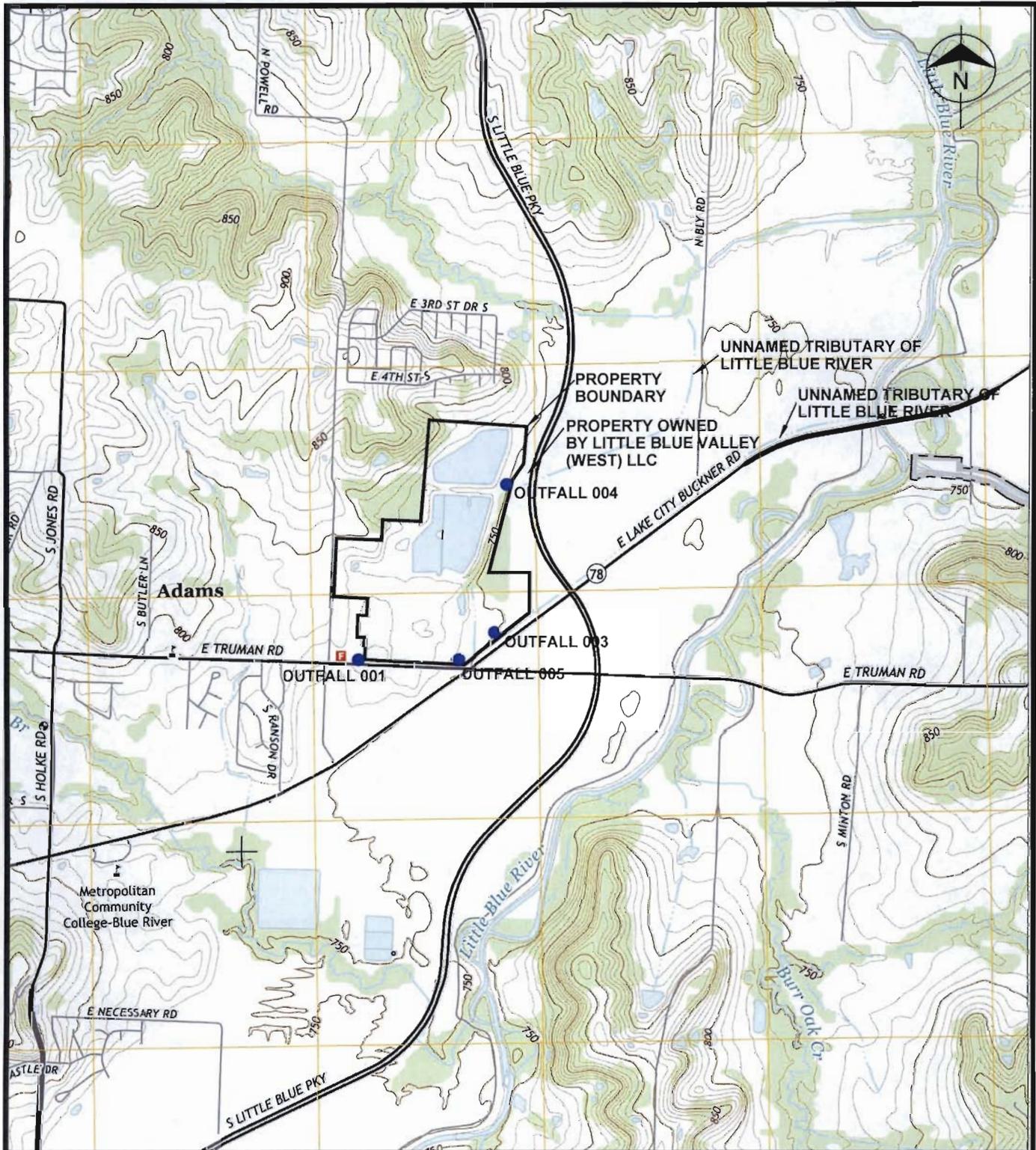
DISCHARGE TO DRAINAGE DITCH ALONG TRUMAN ROAD AND HIGHWAY 78  
BEFORE DISCHARGING TO LITTLE BLUE RIVER  
CITY RIGHT-OF-WAY, NO DOWNSTREAM LANDOWNERS

**OUTFALL 003**

DISCHARGES TO UNNAMED TRIBUTARY OF LITTLE BLUE RIVER  
BETWEEN PARCELS 24-310-98091-00-0-00-000  
AND 17-940-97-01-00-0-00-000  
LITTLE BLUE VALLEY (WEST) LLC  
C/O % LEGAL SERVICES  
1001 W WALNUT  
INDEPENDENCE, MO 64050

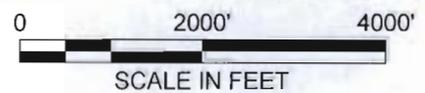
**OUTFALL 004**

DISCHARGE TO INTERMITTANT STREAM FLOWING NORTHEAST  
UNDER LITTLE BLUE PKWY AND DISCHARGES TO LITTLE BLUE RIVER  
FLOWS THROUGH AGRICULTURAL LAND BETWEEN  
PARCELS 17-940-96-01-00-0-00-000 AND 17-800-01-18-00-0-00-000  
LITTLE BLUE VALLEY (WEST) LLC  
C/O % LEGAL SERVICES  
1001 W WALNUT  
INDEPENDENCE, MO 64050



**LEGEND:**

- OUTFALL LOCATION



**BURNS  
MEDONNELL**

**SITE LOCATION  
INDEPENDENCE POWER  
AND LIGHT  
INDEPENDENCE, MISSOURI**

NOV 03 2015



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

FOR AGENCY USE ONLY	
CHECK NO.	
DATE RECEIVED	FEE SUBMITTED

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

1.00 NAME OF FACILITY  
Independence Blue Valley Power Plant

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER  
MO-0115924

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

2.00 LIST THE STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODES APPLICABLE TO YOUR FACILITY (FOUR DIGIT CODE)  
A. FIRST 2911 B. SECOND \_\_\_\_\_  
C. THIRD \_\_\_\_\_ D. FOURTH \_\_\_\_\_

2.10 FOR EACH OUTFALL GIVE THE LEGAL DESCRIPTION.  
OUTFALL NUMBER (LIST) \_\_\_\_\_ 1/4 \_\_\_\_\_ 1/4 SEC \_\_\_\_\_ T \_\_\_\_\_ R \_\_\_\_\_ COUNTY \_\_\_\_\_  
Outfall 001 SW 1/4, NW 1/4, Sec. 3, T49N, R31W, Jackson County  
Outfall 003 SE 1/4, NW 1/4, Sec. 3, T49N, R31W, Jackson County  
Outfall 004 NE 1/4, NW 1/4, Sec. 3, T49N, R31W, Jackson County  
Outfall 005 SE 1/4, NW 1/4, Sec. 3, T49N, R31W, Jackson County

OUTFALL NUMBER (LIST)	RECEIVING WATER
Outfall 001 (Stormwater drainage from Area 1)	Tributary to Little Blue River
Outfall 003 (Stormwater drainage from Area 3)	Tributary to Little Blue River
Outfall 004 (Stormwater drainage from Area 4)	Tributary to Little Blue River
Outfall 005 (Stormwater drainage from Area 5)	Tributary to Little Blue River

2.30 BRIEFLY DESCRIBE THE NATURE OF YOUR BUSINESS  
Electric power generation for the City of Independence, Missouri



**2.40 CONTINUED**

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

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

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

**2.50 MAXIMUM PRODUCTION**

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

YES (COMPLETE B.)       NO (GO TO SECTION 2.60)

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

YES (COMPLETE c.)       NO (GO TO SECTION 2.60)

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

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

**2.60 IMPROVEMENTS**

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

YES (COMPLETE THE FOLLOWING TABLE)       NO (GO TO 3.00)

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

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

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



3.10 BIOLOGICAL TOXICITY TESTING DATA

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

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

3.20 CONTRACT ANALYSIS INFORMATION

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

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

A. NAME	B. ADDRESS	C. TELEPHONE (area code and number)	D. POLLUTANTS ANALYZED (list)
Water Pollution Control Dept Environmental Compliance Testing Laboratory	9600 Norledge Independence, MO 64053	816-325-7711	COD, TSS, Oil and Grease

3.30 CERTIFICATION

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

NAME AND OFFICIAL TITLE (TYPE OR PRINT) <i>E. Leon Daggett, Director</i>	TELEPHONE NUMBER WITH AREA CODE <i>816-325-7864</i>
SIGNATURE (SEE INSTRUCTIONS) <i>E. Leon Daggett</i>	DATE SIGNED <i>10/30/2015</i>

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

FORM C  
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS										OUTFALL NO. 001
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PART A -- You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT				3. UNITS (specify if blank)				4. INTAKE (optional)		
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE (1) CONCENTRATION	B. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS					
A. Biochemical Oxygen Demand (BOD)	*	*			*	*					
B. Chemical Oxygen Demand (COD)	43	26			25	22	4	mg/L	lbs		
C. Total organic Carbon (TOC)	*	*			*	*					
D. Total Suspended Solids (TSS)	18	39			12	16	4	mg/L	lbs		
E. Ammonia (as N)	*	*			*	*					
F. Flow	VALUE 0.262		VALUE		VALUE 0.149		4	MGD	n/a	VALUE	
G. Temperature (winter)	VALUE -20		VALUE		VALUE -1.2		31 (Jan 15)	°C		VALUE	
H. Temperature (summer)	VALUE 33.3		VALUE		VALUE 19.3		31 (Aug 15)	°C		VALUE	
I. pH	MINIMUM 8.19	MAXIMUM 8.54	MINIMUM	MAXIMUM			4	STANDARD UNITS			

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

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

MO 780-1514 (06-13)

\* - BOD, COD, and Ammonia (as N) sampling is not required by current Permit.

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

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS			5. INTAKE (optional)		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE (if available)		B. MAXIMUM 30 DAY VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
<b>METALS, AND TOTAL PHENOLS</b>												
1M. Antimony, Total (7440-36-9)		X										
2M. Arsenic, Total (7440-38-2)		X										
3M. Beryllium, Total (7440-41-7)		X										
4M. Cadmium, Total (7440-43-9)		X										
5M. Chromium III (16065-83-1)		X										
6M. Chromium VI (18540-29-9)		X										
7M. Copper, Total (7440-50-8)		X										
8M. Lead, Total (7439-92-1)		X										
9M. Mercury, Total (7439-97-6)		X										
10M. Nickel, Total (7440-02-0)		X										
11M. Selenium, Total (7782-49-2)		X										
12M. Silver, Total (7440-22-4)		X										
13M. Thallium, Total (7440-28-0)		X										
14M. Zinc, Total (7440-66-6)		X										
15M. Cyanide, Amenable to Chlorination		X										
16M. Phenols, Total		X										
<b>RADIOACTIVITY</b>												
(1) Alpha Total		X										
(2) Beta Total		X										
(3) Radium Total		X										
(4) Radium 226 Total		X										

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

FORM C  
TABLE 1 FOR 3.00 ITEM A AND B

OUTFALL NO.  
001

INTAKE AND EFFLUENT CHARACTERISTICS

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

1. POLLUTANT	2. EFFLUENT				3. UNITS (specify if blank)				4. INTAKE (optional)			
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCEN- TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
A. Biochemical Oxygen Demand (BOD)	*	*			*	*						
B. Chemical Oxygen Demand (COD)	43	26			25	22	4	mg/L	lbs			
C. Total organic Carbon (TOC)	*	*			*	*						
D. Total Suspended Solids (TSS)	18	39			12	16	4	mg/L	lbs			
E. Ammonia (as N)	*	*			*	*						
F. Flow	VALUE 0.262		VALUE		VALUE 0.149		4	MGD	n/a	VALUE		
G. Temperature (winter)	VALUE -20		VALUE		VALUE -1.2		31 (Jan 15)	°C		VALUE		
H. Temperature (summer)	VALUE 33.3		VALUE		VALUE 19.3		31 (Aug 15)	°C		VALUE		
I. pH	MINIMUM 8.19	MAXIMUM 8.54	MINIMUM	MAXIMUM			4	STANDARD UNITS				

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

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

CONVENTIONAL AND NONCONVENTIONAL POLLUTANTS

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

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS				5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE (if available)		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		A. CONCENTRATION	B. MASS	D. NO. OF ANALYSES	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS						
<b>METALS, AND TOTAL PHENOLS</b>														
1M. Antimony, Total (7440-36-9)		X												
2M. Arsenic, Total (7440-38-2)		X												
3M. Beryllium, Total (7440-41-7)		X												
4M. Cadmium, Total (7440-43-9)		X												
5M. Chromium III (16065-83-1)		X												
6M. Chromium VI (18540-29-9)		X												
7M. Copper, Total (7440-50-8)		X												
8M. Lead, Total (7439-92-1)		X												
9M. Mercury, Total (7439-97-6)		X												
10M. Nickel, Total (7440-02-0)		X												
11M. Selenium, Total (7782-49-2)		X												
12M. Silver, Total (7440-22-4)		X												
13M. Thallium, Total (7440-28-0)		X												
14M. Zinc, Total (7440-66-6)		X												
15M. Cyanide, Amenable to Chlorination		X												
16M. Phenols, Total		X												
<b>RADIOACTIVITY</b>														
(1) Alpha Total		X												
(2) Beta Total		X												
(3) Radium Total		X												
(4) Radium 226 Total		X												

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

FORM C  
TABLE 1 FOR 3.00 ITEM A AND B

OUTFALL NO.  
003

INTAKE AND EFFLUENT CHARACTERISTICS

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

1. POLLUTANT	2. EFFLUENT				3. UNITS (specify if blank)				4. INTAKE (optional)		B. NO. OF ANALYSES	
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION		(2) MASS
A. Biochemical Oxygen Demand (BOD)	*	*			*	*						
B. Chemical Oxygen Demand (COD)	28	1.44			24.	0.59	4	mg/L	lbs			
C. Total organic Carbon (TOC)	*	*			*	*						
D. Total Suspended Solids (TSS)	41	0.77			15	0.38	4	mg/L	lbs			
E. Ammonia (as N)	*	*			*	*						
F. Flow	VALUE 0.0072		VALUE		VALUE 0.0030		4	MGD		VALUE		
G. Temperature (winter)	VALUE -20		VALUE -20		VALUE -1.2		31 (Jan 15)	°C		VALUE		
H. Temperature (summer)	VALUE 33.3		VALUE 33.3		VALUE 19.3		31 (Aug 15)	°C		VALUE		
I. pH	MINIMUM 7.8	MAXIMUM 8.19	MINIMUM	MAXIMUM			4	STANDARD UNITS				

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

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

CONVENTIONAL AND NONCONVENTIONAL POLLUTANTS

MO 780-1514 (06-13)

PAGE 6

\* - BOD, COD, and Ammonia (as N) sampling is not required by current Permit.

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

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS			5. INTAKE (optional)		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE		C. LONG TERM AVRG. VALUE		D. NO. OF ANALYSES	A. CONCEN- TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
<b>METALS, AND TOTAL PHENOLS</b>														
1M. Antimony, Total (7440-36-9)		X												
2M. Arsenic, Total (7440-38-2)		X												
3M. Beryllium, Total (7440-41-7)		X												
4M. Cadmium, Total (7440-43-9)		X												
5M. Chromium III (16065-83-1)		X												
6M. Chromium VI (18540-29-9)		X												
7M. Copper, Total (7440-50-8)		X												
8M. Lead, Total (7439-92-1)		X												
9M. Mercury, Total (7439-97-6)		X												
10M. Nickel, Total (7440-02-0)		X												
11M. Selenium, Total (7782-49-2)		X												
12M. Silver, Total (7440-22-4)		X												
13M. Thallium, Total (7440-28-0)		X												
14M. Zinc, Total (7440-66-6)		X												
15M. Cyanide, Amenable to Chlorination		X												
16M. Phenols, Total		X												
<b>RADIOACTIVITY</b>														
(1) Alpha Total		X												
(2) Beta Total		X												
(3) Radium Total		X												
(4) Radium 226 Total		X												

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

FORM C  
TABLE 1 FOR 3.00 ITEM A AND B

OUTFALL NO.  
004

INTAKE AND EFFLUENT CHARACTERISTICS

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

1. POLLUTANT	2. EFFLUENT				3. UNITS (specify if blank)				4. INTAKE (optional)			
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
A. Biochemical Oxygen Demand (BOD)	*	*			*	*						
B. Chemical Oxygen Demand (COD)	38	603			29	160	4	mg/L	lbs			
C. Total organic Carbon (TOC)	*	*			*	*						
D. Total Suspended Solids (TSS)	36	571			24	148	4	mg/L	lbs			
E. Ammonia (as N)	*	*			*	8						
F. Flow	VALUE 1.90		VALUE		VALUE 0.51		4	MGD		VALUE		
G. Temperature (winter)	VALUE -20		VALUE		VALUE -1.2		31 (Jan 15)	°C		VALUE		
H. Temperature (summer)	VALUE 33.3		VALUE		VALUE 19.3		31 (Aug 15)	°C		VALUE		
I. pH	MINIMUM 7.7	MAXIMUM 7.73	MINIMUM	MAXIMUM			4	STANDARD UNITS				

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

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

MO 780-1514 (06-13)

PAGE 6

\* - BOD, COD, and Ammonia (as N) sampling is not required by current Permit.

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

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "x"		3. EFFLUENT						4. UNITS		5. INTAKE (Optional)		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			(1) CONCENTRATION	(2) MASS	
<b>METALS, AND TOTAL PHENOLS</b>													
1M. Antimony, Total (7440-36-9)		X											
2M. Arsenic, Total (7440-38-2)		X											
3M. Beryllium, Total (7440-41-7)		X											
4M. Cadmium, Total (7440-43-9)		X											
5M. Chromium III (16065-83-1)		X											
6M. Chromium VI (18540-29-9)		X											
7M. Copper, Total (7440-50-8)		X											
8M. Lead, Total (7439-92-1)		X											
9M. Mercury, Total (7439-97-6)		X											
10M. Nickel, Total (7440-02-0)		X											
11M. Selenium, Total (7782-49-2)		X											
12M. Silver, Total (7440-22-4)		X											
13M. Thallium, Total (7440-28-0)		X											
14M. Zinc, Total (7440-66-6)		X											
15M. Cyanide, Amenable to Chlorination		X											
16M. Phenols, Total		X											
<b>RADIOACTIVITY</b>													
(1) Alpha Total		X											
(2) Beta Total		X											
(3) Radium Total		X											
(4) Radium 226 Total		X											

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

FORM C  
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS										OUTFALL NO. 005
-------------------------------------	--	--	--	--	--	--	--	--	--	--------------------

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

1. POLLUTANT	2. EFFLUENT				3. UNITS (specify if blank)				4. INTAKE (optional)		B. NO. OF ANALYSES	
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION		(2) MASS
A. Biochemical Oxygen Demand (BOD)	*	*			*	*		mg/L				
B. Chemical Oxygen Demand (COD)	12	33			10	18	4	mg/L	lbs			
C. Total organic Carbon (TOC)	*	*			*	*						
D. Total Suspended Solids (TSS)	40	98			14	29	4	mg/L	lbs			
E. Ammonia (as N)	*	*			*	*						
F. Flow	VALUE 0.44		VALUE		VALUE 0.23		4	MGD			VALUE	
G. Temperature (winter)	VALUE -20		VALUE -20		VALUE -1.2		31 (Jan 15)	°C			VALUE	
H. Temperature (summer)	VALUE 33.3		VALUE 33.3		VALUE 19.3		31 (Aug 15)	°C			VALUE	
I. pH	MINIMUM 7.02	MAXIMUM 8.38	MINIMUM	MAXIMUM			4	STANDARD UNITS				

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

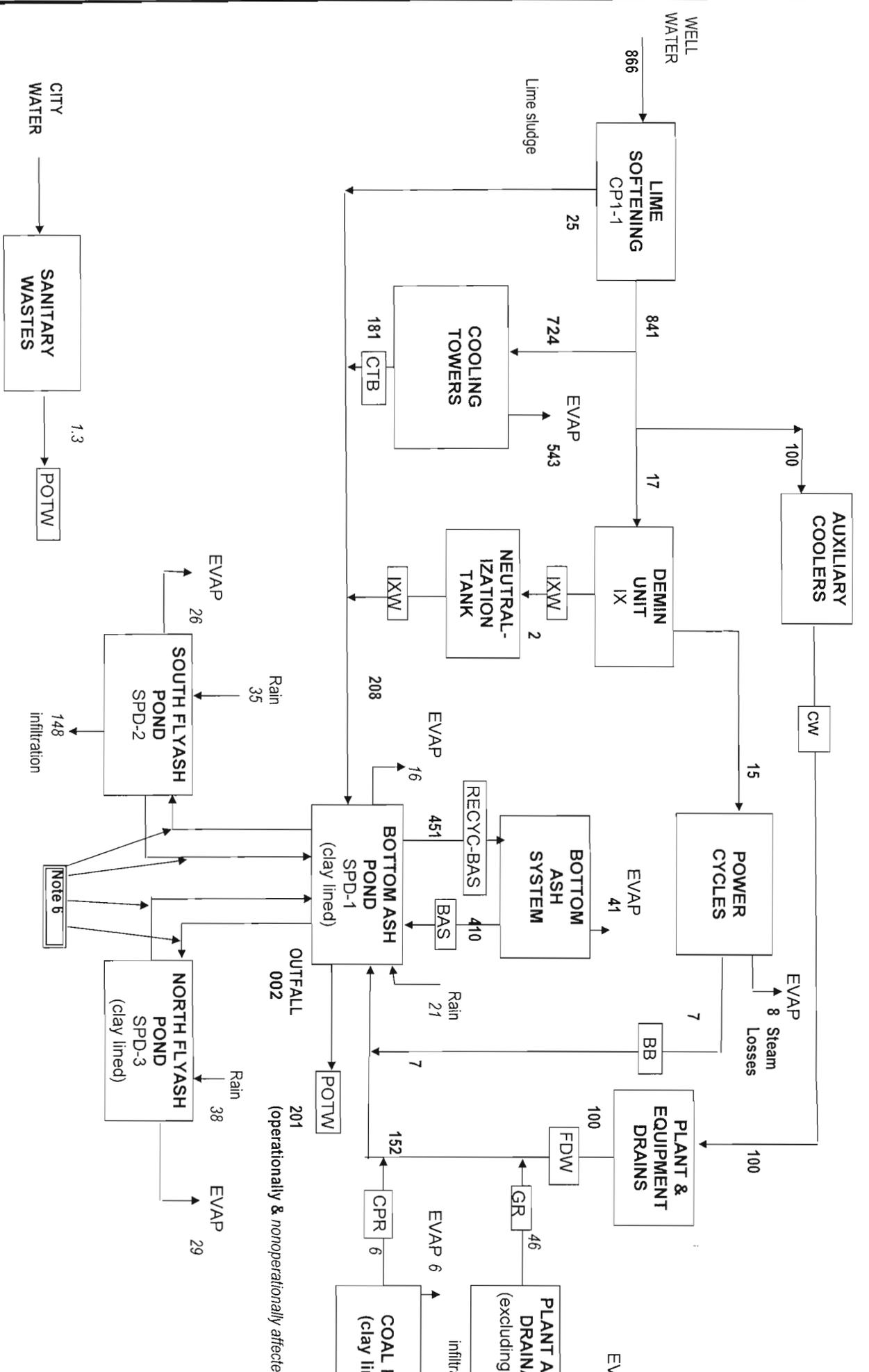
1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS				5. INTAKE (optional)		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG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

MO 780-1514 (06-13) PAGE 6

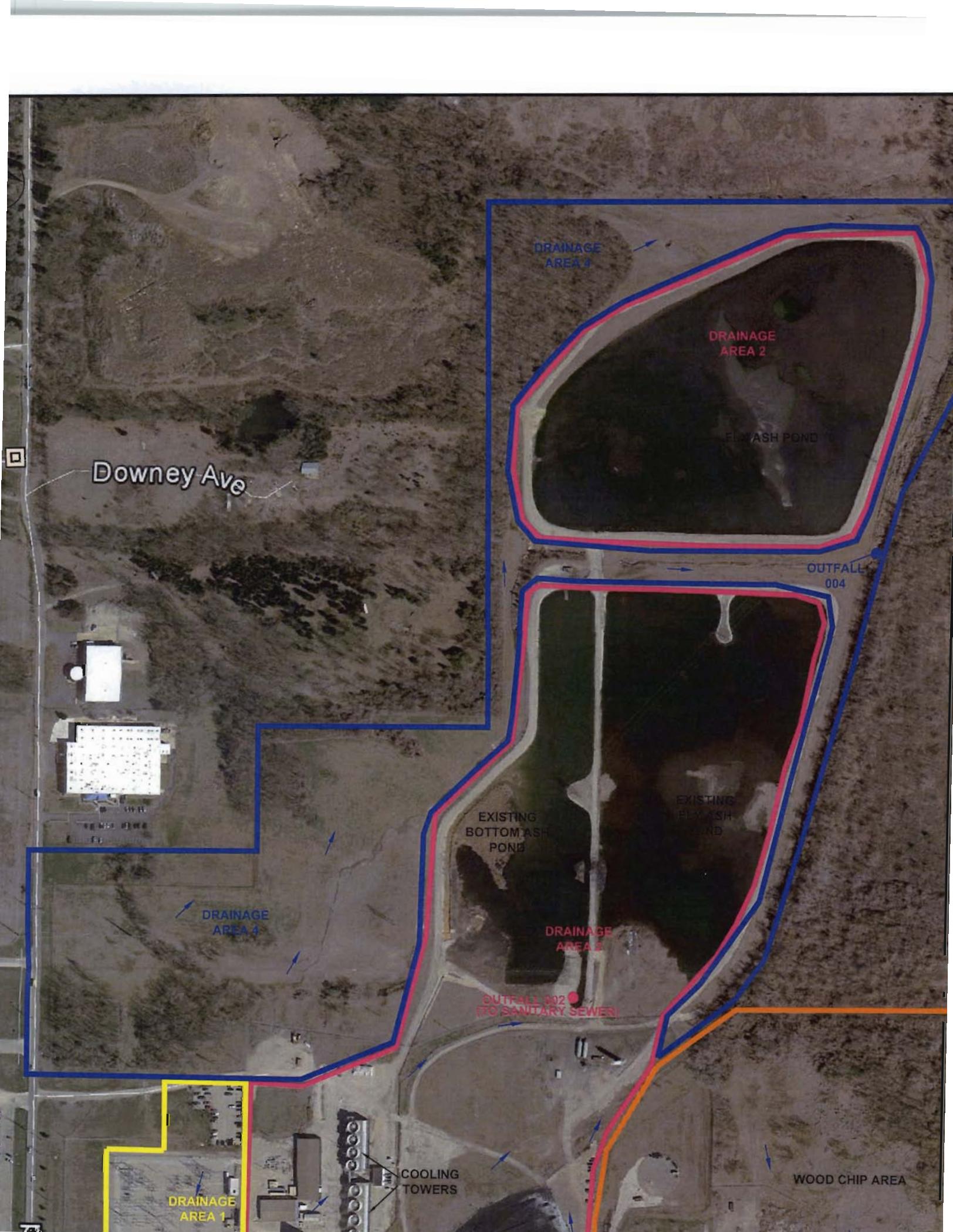
\* - BOD, COD, and Ammonia (as N) sampling is not required by current Permit.

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

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS				5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCEN- TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS						
<b>METALS, AND TOTAL PHENOLS</b>														
1M. Antimony, Total (7440-36-9)	X													
2M. Arsenic, Total (7440-38-2)	X													
3M. Beryllium, Total (7440-41-7)	X													
4M. Cadmium, Total (7440-43-9)	X													
5M. Chromium III (15065-83-1)	X													
6M. Chromium VI (18540-29-9)	X													
7M. Copper, Total (7440-50-8)	X													
8M. Lead, Total (7439-92-1)	X													
9M. Mercury, Total (7439-97-6)	X													
10M. Nickel, Total (7440-02-0)	X													
11M. Selenium, Total (7782-49-2)	X													
12M. Silver, Total (7440-22-4)	X													
13M. Thallium, Total (7440-28-0)	X													
14M. Zinc, Total (7440-66-6)	X													
15M. Cyanide, Amenable to Chlorination	X													
16M. Phenols, Total	X													
<b>RADIOACTIVITY</b>														
(1) Alpha Total	X													
(2) Beta Total	X													
(3) Radium Total	X													
(4) Radium 226 Total	X													



<b>FUEL</b>	<b>CONDENSER COOLING</b>	<b>COOLING TOWER</b>	<b>SEGA INC</b>
NET PLANT OUTPUT (MW)	CYCLE MAKEUP RATE	LOAD FACTOR FOR PERIOD	Eng: BAL
COAL	2.00%	40%	Dwg: BAL
96	ANNUAL AVERAGE		



Downey Ave

DRAINAGE AREA 1

DRAINAGE AREA 2

FLY ASH POND

OUTFALL 004

EXISTING BOTTOM ASH POND

EXISTING FLY ASH POND

DRAINAGE AREA 3

DRAINAGE AREA 4

OUTFALL 002 (TO SANITARY SEWER)

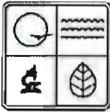
DRAINAGE AREA 5

COOLING TOWERS

WOOD CHIP AREA

RECEIVED

NOV 03 2015



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH  
**FORM D – APPLICATION FOR DISCHARGE PERMIT**  
PRIMARY INDUSTRIES

FOR AGENCY USE ONLY	
CHECK NO.	
DATE RECEIVED	FEE SUBMITTED

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

1.00 NAME OF FACILITY  
Independence Blue Valley Power Plant

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER  
**MO - 0115924**

This form is to be filled out in addition to forms A and C "Application for Discharge Permit" for the Industries listed below:

**INDUSTRY CATEGORY**

- |                                   |   |
|-----------------------------------|---|
| Adhesives and sealants            | Ore mining                                    |
| Aluminum forming                  | Organic chemicals manufacturing               |
| Auto and other laundries          | Paint and ink formulation                     |
| Battery manufacturing             | Pesticides                                    |
| Coal mining                       | Petroleum refining                            |
| Coil coating                      | Pharmaceutical preparations                   |
| Copper forming                    | Photographic equipment and supplies           |
| Electric and electronic compounds | Plastic and synthetic materials manufacturing |
| Electroplating                    | Plastic processing                            |
| Explosives manufacturing          | Porcelain enameling                           |
| Foundries                         | Printing and publishing                       |
| Gum and wood chemicals            | Pulp and paperboard mills                     |
| Inorganic chemicals manufacturing | Rubber processing                             |
| Iron and steel manufacturing      | Soap and detergent manufacturing              |
| Leather tanning and finishing     | Steam electric power plants                   |
| Landfill                          | Textile mills                                 |
| Mechanical products manufacturing | Timber products processing                    |
| Nonferrous metals manufacturing   |   |

**APPLICATION FOR DISCHARGE PERMIT  
FORM D – PRIMARY INDUSTRIES**

<b>TABLE II</b>	
NPDES # (IF ASSIGNED) MO-0115924	OUTFALL NUMBER 001

**1.30** If you are a primary industry and this outfall contains process wastewater, refer to Table A in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-A for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. Mark "X" in column 2-B for each pollutant you know or have reason to believe is present. Mark "X" in column 2-C for each pollutant you believe to be absent. If you mark either columns 2-A or 2-B for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part, please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)		
	A. TESTING REQUIRED	B. BELIEVE PRESENT	C. BELIEVE ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. LONG TERM AVRG. VALUE (1) CONCENTRATION	B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			
<b>METALS, AND TOTAL PHENOLS</b>												
1M. Antimony, Total (7440-36-9)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
2M. Arsenic, Total (7440-38-2)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
3M. Beryllium, Total (7440-41-7)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
4M. Cadmium, Total (7440-43-9)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
5M. Chromium III (16065-83-1)	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
6M. Chromium VI (18540-29-9)	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
7M. Copper, Total (7440-50-8)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
8M. Lead, Total (7439-92-1)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
9M. Magnesium Total (7439-95-4)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
10M. Mercury, Total (7439-97-6)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
11M. Molybdenum Total (7439-98-7)	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
12M. Nickel, Total (7440-02-0)	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
13M. Selenium, Total (7782-49-2)	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
14M. Silver, Total (7440-22-4)	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
15M. Thallium, Total (7440-28-0)	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
16M. Tin Total (7440-31-5)	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
17M. Titanium Total (7440-32-6)	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
18M. Zinc, Total (7440-66-6)	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>									

CONTINUED FROM PAGE 3

19M. Cyanide, Amenable to Chlorination	20M. Phenols, Total	DIOXIN	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)				
			A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		A. CONCENTRATION	B. MASS	A. LONG TERM VALUE	B. NO OF ANALYSES			
						(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS		
1. POLLUTANT AND CAS NUMBER (if available)			DESCRIBE RESULTS				A. MAXIMUM DAILY VALUE		D. NO. OF ANALYSES							
2,3,7,8 - Tetra - chlorodibenzo-P-Dioxin (1784-01-6)			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
<b>GC/MS FRACTION - VOLATILE COMPOUNDS</b>																
1V. Acrolein (107-02-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
2V. Acrylonitrile (107-13-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
3V. Benzene (71-43-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
4V. Bis (Chloromethyl) Ether (542-88-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
5V. Bromoform (75-25-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
6V. Carbon Tetrachloride (56-23-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
7V. Chlorobenzene (108-90-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
8V. Chlorodibromomethane (124-48-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
9V. Chloroethane (75-00-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
10V. 2-Chloroethylvinyl Ether (110-75-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
11V. Chloroform (67-66-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
12V. Dichlorobromomethane (75-27-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
13V. Dichlorodifluoromethane (75-71-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
14V. 1,1 - Dichloroethane (75-34-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
15V. 1,2 - Dichloroethane (107-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
16V. 1,1 - Dichloroethylene (75-35-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
17V. 1,3 - Dichloropropane (78-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
18V. 1,2 - Dichloropropylene (542-75-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
19V. Ethylbenzene (100-41-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
20V. Methyl Bromide (74-83-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
21V. Methyl Chloride (74-87-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS		5. INTAKE (optional)	
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		D. NO. OF ANALYSES	A. LONG TERM AVRG. VALUE	B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			
<b>GC/MS FRACTION – VOLATILE COMPOUNDS (continued)</b>										
22V. Methylene Chloride (75-09-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
23V. 1,1,2,2 – Tetra-chloroethane (79-34-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
24V. Tetrachloroethylene (127-18-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
25V. Toluene (108-88-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
26V. 1,2 – Trans Dichloroethylene (156-60-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
27V. 1,1,1 – Tri – chloroethane (71-55-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
28V. 1,1,2 – Tri-chloroethane (79-00-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
29V. Trichloro – ethylene (79-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
30V. Trichloro – fluoromethane (75-69-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
31V. Vinyl Chloride (75-01-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							

**GC/MS FRACTION – ACID COMPOUNDS**

1A. 2 – Chlorophenol (95-57-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
2A. 2,4 – Dichloro – phenol (120-83-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
3A. 2,4 – Dimethyl – phenol (105-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
4A. 4,6 – Dinitro – O-Cresol (534-52-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
5A. 2,4 – Dinitro – phenol (51-28-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
6A. 2-Nitrophenol (88-75-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
7A. 4-Nitrophenol (100-02-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
8A. p – Chloro – M Cresol (59-50-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
9A. Pentachloro – phenol (87-86-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
10A. Phenol (108-952)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
11A. 2,4,6 – Trichloro-phenol (88-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
12A. 2 – methyl – 4,6 dinitrophenol (534-52-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)	
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. LONG TERM AVRG. VALUE	B. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS		(1) CONCENTRATION	(2) MASS
<b>GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS</b>												
1B. Acenaphthene (83-32-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
2B. Acenaphthylene (208-96-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
3B. Anthracene (120-12-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
4B. Benzidine (92-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
5B. Benzo (a) Anthracene (56-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
6B. Benzo (a) Pyrene (50-32-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
7B. 3,4 - Benzofluoranthene (205-99-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
8B. Benzo (ghi) Perylene (191-24-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
9B. Benzo (k) Fluoranthene (207-08-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
11B. Bis (2-Chloroethyl) Ether (111-44-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
12B. Bis (2-Chloroisopropyl) Ether (39638-32-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
15B. Butyl Benzyl Phthalate (85-68-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
16B. 2-Chloronaphthalene (91-58-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
18B. Chrysene (218-01-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
19B. Dibenzo (a,h) Anthracene (53-70-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
20B. 1,2 - Dichlorobenzene (95-50-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
21B. 1,3 - Dichlorobenzene (541-73-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									

CONTINUED FROM PAGE 5

NPDES # (IF ASSIGNED)  
MO-0115924

OUTFALL NUMBER  
001

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)		
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. LONG TERM AVRG. VALUE	B. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)												
22B. 1, 4-Dichlorobenzene (106-46-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
23B. 3, 3'-Dichlorobenzidine (91-94-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
24B. Diethyl Phthalate (84-66-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
25B. Dimethyl Phthalate (131-11-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
26B. Di-N-butyl Phthalate (84-74-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
27B. 2,4-Dinitrotoluene (121-14-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
28B. 2,6-Dinitrotoluene (606-20-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
29B. Di-N-Octylphthalate (117-84-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
31B. Fluoranthene (206-44-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
32B. Fluorene (86-73-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
33B. Hexachlorobenzene (87-68-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
34B. Hexachlorobutadiene (87-68-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
35B. Hexachlorocyclopentadiene (77-47-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
36B. Hexachloroethane (67-72-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
37B. Indeno (1,2,3-c-d) Pyrene (193-39-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
38B. Isophorone (78-59-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
39B. Naphthalene (91-20-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
40B. Nitrobenzene (98-95-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
41B. N-Nitrosodimethylamine (62-75-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)		
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. LONG TERM AVRG. VALUE	B. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			
<b>GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)</b>												
42B. N-Nitroso N-Propylamine (621-64-7)			✓									
43B. N-Nitrosodiphenylamine (86-30-6)			✓									
44B. Phenanthrene (85-01-8)			✓									
45B. Pyrene (129-00-0)			✓									
46B. 1,2,4-Tri chlorobenzene (120-82-1)			✓									
<b>GC/MS FRACTION - PESTICIDES</b>												
1P. Aldrin (309-00-2)			✓									
2P. α-BHC (319-94-6)			✓									
3P. β-BHC (319-94-6)			✓									
4P. γ-BHC (58-89-9)			✓									
5P. δ-BHC (319-86-8)			✓									
6P. Chlordane (57-74-9)			✓									
7P. 4,4'-DDT (50-29-3)			✓									
8P. 4,4'-DDE (72-55-9)			✓									
9P. 4,4'-DDD (72-54-8)			✓									
10P. Dieldrin (60-57-1)			✓									
11P. α-Endosulfan (115-29-7)			✓									
12P. β-Endosulfan (115-29-7)			✓									
13P. Endosulfan Sulfate (1031-07-8)			✓									
14P. Endrin (72-20-8)			✓									
15P. Endrin Aldehyde (7421-93-4)			✓									
16P. Heptachlor (76-44-8)			✓									



**APPLICATION FOR DISCHARGE PERMIT  
FORM D – PRIMARY INDUSTRIES**

<b>TABLE II</b>	
NPDES # (IF ASSIGNED) MO-0115924	OUTFALL NUMBER 003

**1.30** If you are a primary industry and this outfall contains process wastewater, refer to Table A in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-A for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. Mark "X" in column 2-B for each pollutant you know or have reason to believe is present. Mark "X" in column 2-C for each pollutant you believe to be absent. If you mark either columns 2-A or 2-B for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part, please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)		
	A. TESTING REQUIRED	B. BELIEVE PRESENT	C. BELIEVE ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. LONG TERM AVRG. VALUE	B. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			
<b>METALS, AND TOTAL PHENOLS</b>												
1M. Antimony, Total (7440-36-9)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
2M. Arsenic, Total (7440-38-2)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
3M. Beryllium, Total (7440-41-7)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
4M. Cadmium, Total (7440-43-9)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
5M. Chromium III (16065-83-1)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
6M. Chromium VI (18540-29-9)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
7M. Copper, Total (7440-50-8)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
8M. Lead, Total (7439-92-1)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
9M. Magnesium Total (7439-95-4)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
10M. Mercury, Total (7439-97-6)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
11M. Molybdenum Total (7439-98-7)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
12M. Nickel, Total (7440-02-0)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
13M. Selenium, Total (7782-49-2)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
14M. Silver, Total (7440-22-4)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
15M. Thallium, Total (7440-28-0)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
16M. Tin Total (7440-31-5)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
17M. Titanium Total (7440-32-6)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
18M. Zinc, Total (7440-66-6)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									

CONTINUED FROM PAGE 3

19M. Cyanide, Amenable to Chlorination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
20M. Phenols, Total	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	

DIOXIN

2,3,7,8 - Tetra - chlorodibenzo-P-Dioxin (1764-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)								
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. LONG TERM AVRG. VALUE	B. NO. OF ANALYSES								
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS		(1) CONCENTRATION	(2) MASS								
<b>GC/MS FRACTION - VOLATILE COMPOUNDS</b>																				
1V. Acrolein (107-02-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
2V. Acrylonitrile (107-13-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
3V. Benzene (71-43-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
4V. Bis (Chloromethyl) Ether (542-88-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
5V. Bromoform (75-25-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
6V. Carbon Tetrachloride (56-23-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
7V. Chlorobenzene (108-90-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
8V. Chlorodibromomethane (124-48-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
9V. Chloroethane (75-00-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
10V. 2-Chloroethylvinyl Ether (110-75-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
11V. Chloroform (67-66-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
12V. Dichlorobromomethane (75-27-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
13V. Dichlorodifluoromethane (75-71-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
14V. 1,1 - Dichloroethane (75-34-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
15V. 1,2 - Dichloroethane (107-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
16V. 1,1 - Dichloroethylene (75-35-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
17V. 1,3 - Dichloropropane (78-67-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
18V. 1,2 - Dichloropropylene (542-75-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
19V. Ethylbenzene (100-41-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
20V. Methyl Bromide (74-83-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
21V. Methyl Chloride (74-87-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS		5. INTAKE (optional)		B. NO OF ANALYSES	
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)	D. NO. OF ANALYSES	A. LONG TERM AVRG. VALUE		
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			(1) CONCENTRATION		(2) MASS
<b>GC/MS FRACTION – VOLATILE COMPOUNDS (continued)</b>												
22V. Methylene Chloride (75-09-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
23V. 1,1,2,2 – Tetra-chloroethane (79-34-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
24V. Tetrachloroethylene (127-18-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
25V. Toluene (106-88-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
26V. 1,2 – Trans Dichloroethylene (156-60-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
27V. 1,1,1 – Tri-chloroethane (71-55-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
28V. 1,1,2 – Tri-chloroethane (79-00-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
29V. Trichloro – ethylene (79-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
30V. Trichloro – fluoromethane (75-69-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
31V. Vinyl Chloride (75-01-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									

<b>GC/MS FRACTION – ACID COMPOUNDS</b>											
1A. 2 – Chlorophenol (95-57-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>								
2A. 2,4 – Dichloro – phenol (120-83-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>								
3A. 2,4 – Dimethyl – phenol (105-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>								
4A. 4,6 – Dinitro – O-Cresol (534-52-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>								
5A. 2,4 – Dinitro – phenol (51-28-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>								
6A. 2-Nitrophenol (88-75-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>								
7A. 4-Nitrophenol (100-02-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>								
8A. P – Chloro – M Cresol (59-50-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>								
9A. Pentachloro – phenol (87-86-5)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.0119	0.0003	0.0067	0.0002	4	mg/L	lbs	
10A. Phenol (106-952)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>								
11A. 2,4,6 – Trichloro-phenol (88-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>								
12A. 2 – methyl – 4,6 dinitrophenol (534-52-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>								

Note: IPL no longer accepts wet telephone poles from their vendor. IPL anticipates this will result in no further detections of pentachlorophenol at Outfall 003.

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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)				
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
<b>GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS</b>															
1B. Acenaphthene (83-32-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2B. Acenaphthylene (208-96-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3B. Anthracene (120-12-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4B. Benzidine (92-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5B. Benzo (a) Anthracene (56-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
6B. Benzo (a) Pyrene (50-32-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7B. 3,4 - Benzofluoranthene (205-99-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8B. Benzo (ghi) Perylene (191-24-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9B. Benzo (k) Fluoranthene (207-08-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11B. Bis (2-Chloroethyl) Ether (111-44-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12B. Bis (2-Chloroisopropyl) Ether (39638-32-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
15B. Butyl Benzyl Phthalate (85-68-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
16B. 2-Chloronaphthalene (91-58-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
18B. Chrysene (218-01-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
19B. Dibenzo (a,h) Anthracene (53-70-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
20B. 1,2 - Dichlorobenzene (95-50-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
21B. 1,3 - Dichlorobenzene (541-73-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
<b>GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)</b>															
22B. 1, 4-Dichlorobenzene (106-46-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
23B. 3, 3'-Dichlorobenzidine (91-94-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
24B. Diethyl Phthalate (84-66-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
25B. Dimethyl Phthalate (131-11-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
26B. Di-N-butyl Phthalate (84-74-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
27B. 2, 4-Dinitrotoluene (121-14-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
28B. 2, 6-Dinitrotoluene (606-20-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
29B. Di-N-Octylphthalate (117-84-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
30B. 1, 2-Diphenylhydrazine (as Azobenzene) (122-66-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
31B. Fluoranthene (206-44-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
32B. Fluorene (86-73-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
33B. Hexachlorobenzene (87-68-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
34B. Hexachlorobutadiene (87-68-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
35B. Hexachlorocyclopentadiene (77-47-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
36B. Hexachloroethane (67-72-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
37B. Indeno (1, 2, 3-c-d) Pyrene (193-39-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
38B. Isophorone (78-59-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
39B. Naphthalene (91-20-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
40B. Nitrobenzene (98-95-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
41B. N-Nitrosodimethylamine (62-75-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)			
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. LONG TERM AVRG. VALUE	B. NO OF ANALYSES	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			(1) CONCENTRATION	(2) MASS
<b>GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)</b>													
42B. N-Nitroso N-Propylamine (621-64-7)			✓										
43B. N-Nitrosodiphenylamine (86-30-6)			✓										
44B. Phenanthrene (85-01-8)			✓										
45B. Pyrene (129-00-0)			✓										
46B. 1,2,4-Tri chlorobenzene (120-82-1)			✓										
<b>GC/MS FRACTION - PESTICIDES</b>													
1P. Aldrin (309-00-2)			✓										
2P. α-BHC (319-84-6)			✓										
3P. β-BHC (319-84-6)			✓										
4P. γ-BHC (58-89-9)			✓										
5P. δ-BHC (319-86-8)			✓										
6P. Chlordane (57-74-9)			✓										
7P. 4,4'-DDT (50-29-3)			✓										
8P. 4,4'-DDE (72-55-9)			✓										
9P. 4,4'-DDD (72-54-8)			✓										
10P. Dieldrin (60-57-1)			✓										
11P. α-Endosulfan (115-29-7)			✓										
12P. β-Endosulfan (115-29-7)			✓										
13P. Endosulfan Sulfate (1031-07-8)			✓										
14P. Endrin (72-20-8)			✓										
15P. Endrin Aldehyde (7421-93-4)			✓										
16P. Heptachlor (76-44-8)			✓										

3. EFFLUENT

2. MARK "X"

1. POLLUTANT AND CAS NUMBER (if available)	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	4. UNITS		5. INTAKE (optional)		
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS		A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE (1) CONCENTRATION	(2) MASS	B. NO OF ANALYSES
<b>GCMS FRACTION - PESTICIDES (continued)</b>															
17P. Heptachlor Epoxide (1024-57-3)			✓												
18P. PCB-1242 (53469-21-9)			✓												
19P. PBC-1254 (11097-69-1)			✓												
20P. PCB-1221 (11104-28-2)			✓												
21P. PCB-1232 (11141-16-5)			✓												
22P. PCB-1248 (12672-29-6)			✓												
23P. PCB-1260 (11096-82-5)			✓												
24P. PCB-1016 (12674-11-2)			✓												
25P. Toxaphene (8001-35-2)			✓												
<b>J. RADIOACTIVITY</b>															
(1) Alpha Total			✓												
(2) Beta Total			✓												
(3) Radium Total			✓												
(4) Radium 226 Total			✓												

**APPLICATION FOR DISCHARGE PERMIT  
FORM D – PRIMARY INDUSTRIES**

<b>TABLE II</b>	
NPDES # (IF ASSIGNED) MO-0115924	OUTFALL NUMBER 004

**1.30** If you are a primary industry and this outfall contains process wastewater, refer to Table A in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-A for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. Mark "X" in column 2-B for each pollutant you know or have reason to believe is present. Mark "X" in column 2-C for each pollutant you believe to be absent. If you mark either columns 2-A or 2-B for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part, please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS		5. INTAKE (optional)		
	A. TESTING REQUIRED	B. BELIEVE D PRESENT	C. BELIEVE D ABSENT	A. MAXIMUM DAILY VALUE		C. LONG TERM AVRG. VALUE (if available)		A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE (1) CONCENTRATION	B. NO. OF ANALYSES (2) MASS
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				
<b>METALS, AND TOTAL PHENOLS</b>											
1M. Antimony, Total (7440-36-9)		<input type="checkbox"/>	<input checked="" type="checkbox"/>								
2M. Arsenic, Total (7440-38-2)		<input type="checkbox"/>	<input checked="" type="checkbox"/>								
3M. Beryllium, Total (7440-41-7)		<input type="checkbox"/>	<input checked="" type="checkbox"/>								
4M. Cadmium, Total (7440-43-9)		<input type="checkbox"/>	<input checked="" type="checkbox"/>								
5M. Chromium III (16065-83-1)		<input type="checkbox"/>	<input checked="" type="checkbox"/>								
6M. Chromium VI (18540-29-9)		<input type="checkbox"/>	<input checked="" type="checkbox"/>								
7M. Copper, Total (7440-50-8)		<input type="checkbox"/>	<input checked="" type="checkbox"/>								
8M. Lead, Total (7439-92-1)		<input type="checkbox"/>	<input checked="" type="checkbox"/>								
9M. Magnesium Total (7439-96-4)		<input type="checkbox"/>	<input checked="" type="checkbox"/>								
10M. Mercury, Total (7439-97-6)		<input type="checkbox"/>	<input checked="" type="checkbox"/>								
11M. Molybdenum Total (7439-98-7)		<input type="checkbox"/>	<input checked="" type="checkbox"/>								
12M. Nickel, Total (7440-02-0)		<input type="checkbox"/>	<input checked="" type="checkbox"/>								
13M. Selenium, Total (7782-49-2)		<input type="checkbox"/>	<input checked="" type="checkbox"/>								
14M. Silver, Total (7440-22-4)		<input type="checkbox"/>	<input checked="" type="checkbox"/>								
15M. Thallium, Total (7440-28-0)		<input type="checkbox"/>	<input checked="" type="checkbox"/>								
16M. Tin Total (7440-31-5)		<input type="checkbox"/>	<input checked="" type="checkbox"/>								
17M. Titanium Total (7440-32-6)		<input type="checkbox"/>	<input checked="" type="checkbox"/>								
18M. Zinc, Total (7440-66-6)		<input type="checkbox"/>	<input checked="" type="checkbox"/>								

CONTINUED FROM PAGE 3

19M. Cyanide, Amenable to Chlorination	20M. Phenols, Total	DIOXIN	2,3,7,8 - Tetra - chlorodibenzo-P-Dioxin (1764-01-6)	2. MARK "X"				3. EFFLUENT				4. UNITS		5. INTAKE (optional)		
				A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. LONG TERM AVRG. VALUE	B. NO OF ANALYSES	
							(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			(1) CONCENTRATION	(2) MASS
<b>GC/MS FRACTION - VOLATILE COMPOUNDS</b>																
1V. Acrolein (107-02-8)																
2V. Acrylonitrile (107-13-1)																
3V. Benzene (71-43-2)																
4V. Bis (Chloromethyl) Ether (542-88-1)																
5V. Bromoform																
6V. Carbon Tetrachloride (56-23-5)																
7V. Chlorobenzene (108-90-7)																
8V. Chlorodibromomethane (124-48-1)																
9V. Chloroethane (75-00-3)																
10V. 2-Chloroethylvinyl Ether (110-75-8)																
11V. Chloroform (67-66-3)																
12V. Dichlorobromomethane (75-27-4)																
13V. Dichlorodifluoromethane (75-71-8)																
14V. 1,1 - Dichloroethane (75-34-3)																
15V. 1,2 - Dichloroethane (107-06-2)																
16V. 1,1 - Dichloroethylene (75-35-4)																
17V. 1,3 - Dichloropropane (78-67-5)																
18V. 1,2 - Dichloropropylene (542-75-6)																
19V. Ethylbenzene (100-41-4)																
20V. Methyl Bromide (74-83-9)																
21V. Methyl Chloride (74-87-3)																

1. POLLUTANT AND CAS NUMBER (if available)	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	4. UNITS		5. INTAKE (optional)		
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS		A. CONCEN- TRATION	B. MASS	A. LONG TERM AVRG. VALUE (1) CONCENTRATION	(2) MASS	B. NO OF ANALYSES
<b>GC/MS FRACTION – VOLATILE COMPOUNDS (continued)</b>															
22V. Methylene Chloride (75-09-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
23V. 1,1,2,2 – Tetra- chloroethane (79-34-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
24V. Tetrachloroethylene (127-18-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
25V. Toluene (108-88-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
26V. 1,2 – Trans Dichloroethylene (156-60-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
27V. 1,1,1 – Tri – chloroethane (71-55-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
28V. 1,1,2 – Tri- chloroethane (79-00-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
29V. Trichloro – ethylene (79-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
30V. Trichloro – fluoromethane (75-69-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
31V. Vinyl Chloride (75-01-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
<b>GC/MS FRACTION – ACID COMPOUNDS</b>															
1A. 2 – Chlorophenol (95-57-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2A. 2,4 – Dichloro – phenol (120-83-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3A. 2,4 – Dimethyl – phenol (105-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4A. 4,6 – Dinitro – O- Cresol (534-52-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5A. 2,4 – Dinitro – phenol (51-28-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
6A. 2-Nitrophenol (88-75-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7A. 4-Nitrophenol (100-02-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8A. P – Chloro – M Cresol (59-50-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9A. Pentachloro – phenol (87-86-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10A. Phenol (108-952)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11A. 2,4,6 – Trichloro- phenol (88-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12A. 2 - methyl – 4,6 dinitrophenol (534-52-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)		
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. LONG TERM AVRG. VALUE	B. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS		(1) CONCENTRATION	(2) MASS
<b>GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS</b>												
1B. Acenaphthene (83-32-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
2B. Acenaphthylene (208-96-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
3B. Anthracene (120-12-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
4B. Benzidine (92-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
5B. Benzo (a)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
6B. Benzo (a)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
7B. 3,4 - Benzofluoranthene (205-99-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
8B. Benzo (ghi) Perylene (191-24-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
9B. Benzo (k) Fluoranthene (207-08-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
10B. Bis (2-Chloroethoxy) Methane (111-97-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
11B. Bis (2-Chloroethyl) Ether (111-44-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
12B. Bis (2-Chloroisopropyl) Ether (39638-32-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
15B. Butyl Benzyl Phthalate (85-68-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
16B. 2-Chloronaphthalene (91-58-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
18B. Chrysene (218-01-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
19B. Dibenzo (a,h) Anthracene (53-70-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
20B. 1,2-Dichlorobenzene (95-50-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
21B. 1,3-Dichlorobenzene (541-73-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>									

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)			
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. LONG TERM AVRG. VALUE	B. NO. OF ANALYSES	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			(1) CONCENTRATION	(2) MASS
<b>GCMS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)</b>													
22B. 1, 4-Dichlorobenzene (106-46-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
23B. 3, 3'-Dichlorobenzidine (91-94-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
24B. Diethyl Phthalate (84-66-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
25B. Dimethyl Phthalate (131-11-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
26B. Di-N-butyl Phthalate (84-74-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
27B. 2,4-Dinitrotoluene (121-14-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
28B. 2,6-Dinitrotoluene (606-20-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
29B. Di-N-Octylphthalate (117-84-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
31B. Fluoranthene (206-44-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
32B. Fluorene (86-73-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
33B. Hexachlorobenzene (87-68-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
34B. Hexachlorobutadiene (87-68-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
35B. Hexachlorocyclopentadiene (77-47-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
36B. Hexachloroethane (67-72-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
37B. Indeno (1,2,3-c-d) Pyrene (193-39-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
38B. Isophorone (78-59-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
39B. Naphthalene (91-20-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
40B. Nitrobenzene (98-95-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
41B. N-Nitrosodimethylamine (62-75-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										

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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)		
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE (1) CONCENTRATION	B. NO OF ANALYSES (2) MASS
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS					
<b>GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)</b>														
42B. N-Nitroso N-Propylamine (621-64-7)			✓											
43B. N-Nitrosodiphenylamine (86-30-6)			✓											
44B. Phenanthrene (85-01-8)			✓											
45B. Pyrene (129-00-0)			✓											
46B. 1,2,4-Tri chlorobenzene (120-82-1)			✓											
<b>GC/MS FRACTION - PESTICIDES</b>														
1P. Aldrin (309-00-2)			✓											
2P. α-BHC (319-84-6)			✓											
3P. β-BHC (319-84-6)			✓											
4P. γ-BHC (58-89-9)			✓											
5P. δ-BHC (319-86-8)			✓											
6P. Chlordane (57-74-9)			✓											
7P. 4,4'-DDT (50-29-3)			✓											
8P. 4,4'-DDE (72-55-9)			✓											
9P. 4,4'-DDD (72-54-8)			✓											
10P. Dieldrin (60-57-1)			✓											
11P. α-Endosulfan (115-29-7)			✓											
12P. β-Endosulfan (115-29-7)			✓											
13P. Endosulfan Sulfate (1031-07-8)			✓											
14P. Endrin (72-20-8)			✓											
15P. Endrin Aldehyde (7421-93-4)			✓											
16P. Heptachlor (76-44-8)			✓											



**APPLICATION FOR DISCHARGE PERMIT  
FORM D – PRIMARY INDUSTRIES**

<b>TABLE II</b>	
NPDES # (IF ASSIGNED) MO-0115924	OUTFALL NUMBER 005

**1.30** If you are a primary industry and this outfall contains process wastewater, refer to Table A in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-A for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. Mark "X" in column 2-B for each pollutant you know or have reason to believe is present. Mark "X" in column 2-C for each pollutant you believe to be absent. If you mark either columns 2-A or 2-B for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part, please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)		
	A. TESTING REQUIRED	B. BELIEVE PRESENT	C. BELIEVE ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. LONG TERM AVRG. VALUE	B. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			
<b>METALS, AND TOTAL PHENOLS</b>												
1M. Antimony, Total (7440-36-9)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
2M. Arsenic, Total (7440-38-2)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
3M. Beryllium, Total (7440-41-7)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
4M. Cadmium, Total (7440-43-9)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
5M. Chromium III (16065-83-1)	—	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
6M. Chromium VI (18540-29-9)	—	<input type="checkbox"/>	<input checked="" type="checkbox"/>									
7M. Copper, Total (7440-50-8)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
8M. Lead, Total (7439-92-1)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
9M. Magnesium Total (7439-95-4)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
10M. Mercury, Total (7439-97-6)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
11M. Molybdenum Total (7439-98-7)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
12M. Nickel, Total (7440-02-0)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
13M. Selenium, Total (7782-49-2)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
14M. Silver, Total (7440-22-4)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
15M. Thallium, Total (7440-28-0)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
16M. Tin Total (7440-31-5)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
17M. Titanium Total (7440-32-6)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									
18M. Zinc, Total (7440-66-6)		<input type="checkbox"/>	<input checked="" type="checkbox"/>									

CONTINUED FROM PAGE 3

19M. Cyanide, Amenable to Chlorination	20M. Phenols, Total	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	DESCRIBE RESULTS									
					2. MARK "X"		3. EFFLUENT		4. UNITS		5. INTAKE (optional)			
					1. POLLUTANT AND CAS NUMBER (if available)	A. MAXIMUM DAILY VALUE (1) CONCENTRATION	B. MAXIMUM 30 DAY VALUE (1) CONCENTRATION	C. LONG TERM AVRG. VALUE (1) CONCENTRATION	D. NO. OF ANALYSES	A. LONG TERM AVRG. VALUE (1) CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE (1) CONCENTRATION	B. NO. OF ANALYSES	
<b>GC/MS FRACTION – VOLATILE COMPOUNDS</b>														
1V. Acrolein (107-02-8)				<input checked="" type="checkbox"/>										
2V. Acrylonitrile (107-13-1)			<input type="checkbox"/>	<input checked="" type="checkbox"/>										
3V. Benzene (71-43-2)			<input type="checkbox"/>	<input checked="" type="checkbox"/>										
4V. Bis (Chloromethyl) Ether (542-88-1)			<input type="checkbox"/>	<input checked="" type="checkbox"/>										
5V. Bromoform (75-25-2)			<input type="checkbox"/>	<input checked="" type="checkbox"/>										
6V. Carbon Tetrachloride (56-23-5)			<input type="checkbox"/>	<input checked="" type="checkbox"/>										
7V. Chlorobenzene (108-90-7)			<input type="checkbox"/>	<input checked="" type="checkbox"/>										
8V. Chlorodibromomethane (124-48-1)			<input type="checkbox"/>	<input checked="" type="checkbox"/>										
9V. Chloroethane (75-00-3)			<input type="checkbox"/>	<input checked="" type="checkbox"/>										
10V. 2-Chloroethylvinyl Ether (110-75-8)			<input type="checkbox"/>	<input checked="" type="checkbox"/>										
11V. Chloroform (67-66-3)			<input type="checkbox"/>	<input checked="" type="checkbox"/>										
12V. Dichlorobromomethane (75-27-4)			<input type="checkbox"/>	<input checked="" type="checkbox"/>										
13V. Dichlorodifluoromethane (75-71-8)			<input type="checkbox"/>	<input checked="" type="checkbox"/>										
14V. 1,1 – Dichloroethane (75-34-3)			<input type="checkbox"/>	<input checked="" type="checkbox"/>										
15V. 1,2 – Dichloroethane (107-06-2)			<input type="checkbox"/>	<input checked="" type="checkbox"/>										
16V. 1,1 – Dichloroethylene (75-35-4)			<input type="checkbox"/>	<input checked="" type="checkbox"/>										
17V. 1,3 – Dichloropropane (78-87-5)			<input type="checkbox"/>	<input checked="" type="checkbox"/>										
18V. 1,2 – Dichloropropylene (542-75-6)			<input type="checkbox"/>	<input checked="" type="checkbox"/>										
19V. Ethylbenzene (100-41-4)			<input type="checkbox"/>	<input checked="" type="checkbox"/>										
20V. Methyl Bromide (74-83-9)			<input type="checkbox"/>	<input checked="" type="checkbox"/>										
21V. Methyl Chloride (74-87-3)			<input type="checkbox"/>	<input checked="" type="checkbox"/>										

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS		5. INTAKE (optional)	
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		D. NO. OF ANALYSES	A. LONG TERM AVRG. VALUE	B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			
<b>GC/MS FRACTION – VOLATILE COMPOUNDS (continued)</b>										
22V. Methylene Chloride (75-09-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
23V. 1,1,2,2 – Tetra-chloroethane (79-34-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
24V. Tetrachloroethylene (127-18-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
25V. Toluene (108-88-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
26V. 1,2 – Trans Dichloroethylene (156-60-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
27V. 1,1,1 – Tri-chloroethane (71-55-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
28V. 1,1,2 – Tri-chloroethane (79-00-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
29V. Trichloro – ethylene (79-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
30V. Trichloro – fluoromethane (75-69-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
31V. Vinyl Chloride (75-01-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							

<b>GC/MS FRACTION – ACID COMPOUNDS</b>										
1A. 2 – Chlorophenol (95-57-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
2A. 2,4 – Dichloro – phenol (120-83-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
3A. 2,4 – Dimethyl – phenol (105-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
4A. 4,6 – Dinitro – O-Cresol (534-52-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
5A. 2,4 – Dinitro – phenol (51-28-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
6A. 2-Nitrophenol (88-75-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
7A. 4-Nitrophenol (100-02-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
8A. P – Chloro – M Cresol (59-50-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
9A. Pentachloro – phenol (87-86-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
10A. Phenol (108-952)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
11A. 2,4,6 – Trichloro-phenol (88-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							
12A. 2 – methyl – 4,6 dinitrophenol (534-52-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>							

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS		5. INTAKE (optional)					
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. LONG TERM AVRG. VALUE (1) CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE (1) CONCENTRATION	B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS					
<b>GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS</b>														
1B. Acenaphthene (83-32-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
2B. Acenaphthylene (208-96-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
3B. Anthracene (120-12-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
4B. Benzidine (92-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
5B. Benzo (a) Anthracene (56-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
6B. Benzo (a) Pyrene (50-32-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
7B. 3,4 - Benzofluoranthene (205-99-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
8B. Benzo (ghi) Perylene (191-24-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
9B. Benzo (k) Fluoranthene (207-08-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
11B. Bis (2-Chloroethyl) Ether (111-44-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
12B. Bis (2-Chloroisopropyl) Ether (39638-32-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
15B. Butyl Benzyl Phthalate (85-68-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
16B. 2-Chloronaphthalene (91-58-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
18B. Chrysene (218-01-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
19B. Dibenzo (a,h) Anthracene (53-70-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
20B. 1,2 - Dichlorobenzene (95-50-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
21B. 1,3 - Dichlorobenzene (54-1-73-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>											

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)						
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. LONG TERM AVRG. VALUE	B. NO OF ANALYSES				
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			(1) CONCENTRATION	(2) MASS			
GCMS FRACTION -- BASE/NEUTRAL COMPOUNDS (continued)																
22B. 1, 4-Dichlorobenzene (106-46-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
23B. 3, 3'-Dichlorobenzidine (91-94-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
24B. Diethyl Phthalate (84-86-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
25B. Dimethyl Phthalate (131-11-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
26B. Di-N-butyl Phthalate (84-74-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
27B. 2,4-Dinitrotoluene (121-14-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
28B. 2,6-Dinitrotoluene (606-20-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
29B. Di-N-Octylphthalate (117-84-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
31B. Fluoranthene (206-44-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
32B. Fluorene (86-73-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
33B. Hexachlorobenzene (87-68-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
34B. Hexachlorobutadiene (87-68-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
35B. Hexachlorocyclopentadiene (77-47-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
36B. Hexachloroethane (67-72-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
37B. Indeno (1,2,3-c-d) Pyrene (193-39-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
38B. Isophorone (78-59-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
39B. Naphthalene (91-20-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
40B. Nitrobenzene (98-95-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													
41B. N-Nitrosodimethylamine (62-75-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>													

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)	
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		A. LONG TERM AVRG. VALUE (1) CONCENTRATION	B. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS		
<b>GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)</b>											
42B. N-Nitroso N-Propylamine (621-64-7)			✓								
43B. N-Nitrosodiphenylamine (86-30-6)			✓								
44B. Phenanthrene (85-01-8)			✓								
45B. Pyrene (129-00-0)			✓								
46B. 1,2,4-Tri chlorobenzene (120-82-1)			✓								
<b>GC/MS FRACTION - PESTICIDES</b>											
1P. Aldrin (309-00-2)			✓								
2P. α-BHC (319-84-6)			✓								
3P. β-BHC (319-84-6)			✓								
4P. γ-BHC (58-89-9)			✓								
5P. δ-BHC (319-86-8)			✓								
6P. Chlordane (57-74-9)			✓								
7P. 4,4'-DDT (50-29-3)			✓								
8P. 4,4'-DDE (72-55-9)			✓								
9P. 4,4'-DDD (72-54-8)			✓								
10P. Dieldrin (60-57-1)			✓								
11P. α-Endosulfan (115-29-7)			✓								
12P. β-Endosulfan (115-29-7)			✓								
13P. Endosulfan Sulfate (1031-07-8)			✓								
14P. Endrin (72-20-8)			✓								
15P. Endrin Aldehyde (7421-93-4)			✓								
16P. Heptachlor (76-44-8)			✓								



2.00 POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS  
 A. IS ANY POLLUTANT LISTED IN ITEM 1.30 A SUBSTANCE OR A COMPONENT OF A SUBSTANCE WHICH YOU DO OR EXPECT THAT YOU WILL OVER THE NEXT FIVE YEARS USE OR MANUFACTURE AS AN INTERMEDIATE OR FINAL PRODUCT OR BYPRODUCT?  
 YES (LIST ALL SUCH POLLUTANTS BELOW)  NO (GO TO B)

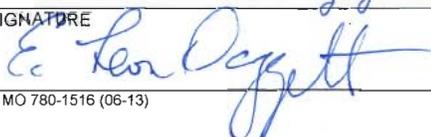
B. ARE YOUR OPERATIONS SUCH THAT YOUR RAW MATERIALS, PROCESSES OR PRODUCTS CAN REASONABLE BE EXPECTED TO VARY SO THAT YOUR DISCHARGES OF POLLUTANTS MAY DURING THE NEXT FIVE YEARS EXCEED TWO TIMES THE MAXIMUM VALUES REPORTED IN ITEM 1.30?  
 YES (COMPLETE C BELOW)  NO (GO TO SECTION 3.00)

C. IF YOU ANSWERED "YES" TO ITEM B, EXPLAIN BELOW AND DESCRIBE IN DETAIL THE SOURCES AND EXPECTED LEVELS OF SUCH POLLUTANTS THAT YOU ANTICIPATE WILL BE DISCHARGED FROM EACH OUTFALL OVER THE NEXT FIVE YEARS, TO THE BEST OF YOUR ABILITY AT THIS TIME. CONTINUE ON ADDITIONAL SHEETS IF YOU NEED MORE SPACE.

3.00 CONTRACT ANALYSIS INFORMATION  
 WERE ANY OF THE ANALYSES REPORTED IN 1.30 PERFORMED BY A CONTRACT LABORATORY OR CONSULTING FIRM?  
 YES (LIST THE NAME, ADDRESS, AND TELEPHONE NUMBER OF, AND ANALYZED BY, EACH SUCH LABORATORY OR FIRM BELOW)  
 NO (GO TO SECTION 4.00)

A. NAME	B. ADDRESS	C. TELEPHONE (area code and number)	D. POLLUTANTS ANALYZED (list)
Crystal Laboratories	1201 Camden Ave SW Canton, OH 44706	(330) 454-4222	Pentachlorophenol

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

NAME AND OFFICIAL TITLE (TYPE OR PRINT) E. Leon Daggett, Director	PHONE NUMBER (AREA CODE AND NUMBER) 816-325-7864
SIGNATURE 	DATE SIGNED 10/30/2015