

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-0115801

Owner: The David J. Joseph Company  
Address: 300 Pike Street, Cincinnati, OH 45202

Continuing Authority: Advantage Metals Recycling, LLC  
Address: 3005 Manchester Trafficway, Kansas City, MO 64129

Facility Name: Advantage Metals Recycling, LLC  
Facility Address: 3005 Manchester Trafficway, Kansas City, MO 64129

Legal Description: See page two  
Latitude/Longitude: See page two

Receiving Stream: Ditch to the Blue River (U)  
First Classified Stream and ID: Blue River (P) (00418) 2006 303(d) List  
USGS Basin & Sub-watershed No.: (10300101 – 010070)

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

**FACILITY DESCRIPTION**

All Outfalls – Stormwater only – SIC #5093 & #4953

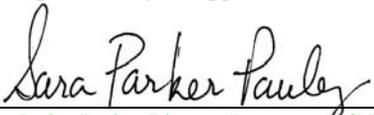
The use or operation of this facility does not require a CERTIFIED OPERATOR.

Stormwater originating from activities related to ferrous and non-ferrous metal stockpiling, shredding, and sorting as well as from a closed landfill.

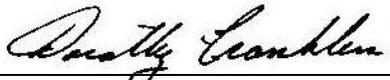
See page two for Outfall details

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

May 20, 2011  
Effective Date

  
Sara Parker Pauley, Director, Department of Natural Resources

May 19, 2016  
Expiration Date

  
Dorothy Franklin, Acting Director, Kansas City Regional Office

FACILITY DESCRIPTION (continued)

Outfall #001 – Stormwater only – SIC #4953 & #5093

Legal Description: NW ¼, NW ¼, Sec. 18, T49N, R32W, Jackson County

UTM Coordinates: X = 370758, Y = 4325899

Actual flow is dependent upon precipitation.

Outfall #002 – Stormwater only – SIC #5093

Legal Description: NW ¼, NW ¼, Sec. 18, T49N, R32W, Jackson County

UTM Coordinates: X = 370608, Y = 4325996

Actual flow is dependent upon precipitation

Outfall #003 – Stormwater only – SIC #4953 & #5093

Legal Description: NW ¼, NW ¼, Sec. 18, T49N, R32W, Jackson County

UTM Coordinates: X = 370792, Y = 4325960

Actual flow is dependent upon precipitation.

Outfall #004 – Stormwater only – SIC #5093

Legal Description: SW ¼, SW ¼, Sec. 7, T49N, R32W, Jackson County

UTM Coordinates: X = 370703, Y = 4326242

Actual flow is dependent upon precipitation.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 3 of 8	
					PERMIT NUMBER MO-0115801	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE (Note 1)	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfalls #001, #003, &amp; #004</u>						
Flow	MGD	*		*	Once/quarter**	24 hr. estimate
Precipitation (Note 2)	Inches	*		*	Daily Measurement	Total
Chemical Oxygen Demand	mg/L	120		90	Once/quarter**	grab
pH	SU	***		***	Once/quarter**	grab
Settleable Solids (Note 3)	mL/L/hr	1.5		1.0	Once/quarter**	grab
Total Dissolved Solids	mg/L	*		*	Once/quarter**	grab
Oil & Grease	mg/L	15		10	Once/quarter**	grab
Total Hardness	mg/L	*		*	Once/quarter**	grab
Iron, Total Recoverable	µg/L	*		*	Once/quarter**	grab
Copper, Total Recoverable	µg/L	*		*	Once/quarter**	grab
Lead, Total Recoverable	µg/L	*		*	Once/quarter**	grab
Mercury, Total Recoverable	µg/L	*		*	Once/quarter**	grab
Zinc, Total Recoverable	µg/L	*		*	Once/quarter**	grab
Cadmium, Total Recoverable	µg/L	*		*	Once/quarter**	grab
Aluminum, Total Recoverable	µg/L	*		*	Once/quarter**	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>OCTOBER 28, 2011</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
<b>B. STANDARD CONDITIONS</b>						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Part I</u> , STANDARD CONDITIONS DATED <u>October 1, 1980</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

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

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE (Note 1)	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfalls #001, #003, &amp; #004</u>						
Nitrates plus Nitrites as N	mg/L	*		*	Once/year*****	grab
Ammonia as N	mg/L	*		*	Once/year*****	grab
Phosphorus, Total Recoverable	mg/L	*		*	Once/year*****	grab
Total Organic Carbon	mg/L	*		*	Once/year*****	grab
Antimony, Total Recoverable	µg/L	*		*	Once/year*****	grab
Barium, Total Recoverable	µg/L	*		*	Once/year*****	grab
Boron, Total Recoverable	µg/L	*		*	Once/year*****	grab
Magnesium, Total Recoverable	µg/L	*		*	Once/year*****	grab
Manganese, Total Recoverable	µg/L	*		*	Once/year*****	grab

MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE OCTOBER 28, 2011. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

**B. STANDARD CONDITIONS**

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED Part I, STANDARD CONDITIONS DATED October 1, 1980, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

<b>A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</b>					PAGE NUMBER 5 of 8	
					PERMIT NUMBER MO-0115801	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE (Note 1)	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #002</u>						
Flow	MGD	*		*	Once/quarter**	24 hr. estimate
Chemical Oxygen Demand	mg/L	120		90	Once/quarter**	grab
pH	SU	***		***	Once/quarter**	grab
Settleable Solids (Note 3)	mL/L/hr	1.5		1.0	Once/quarter**	grab
Total Dissolved Solids	mg/L	*		*	Once/quarter**	grab
Oil & Grease	mg/L	15		10	Once/quarter**	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>OCTOBER 28, 2011</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
<b>B. STANDARD CONDITIONS</b>						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Part I</u> , STANDARD CONDITIONS DATED <u>October 1, 1980</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

MO 780-0010 (8/91)

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

- \* Monitoring requirement only.
- \*\* Sample once per quarter in the months that a discharge occurs (see table below for reporting details).

Sample discharge at least once for the months of:	Report is due:
January, February, March (1st Quarter)	April 28
April, May, June (2nd Quarter)	July 28
July, August, September (3rd Quarter)	October 28
October, November, December (4th Quarter)	January 28

- \*\*\* pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.5-9.0 pH units.
- \*\*\*\* Sample once per year in any month that a discharge occurs. Sampling results should be submitted with the third quarter discharge monitoring reports no later than October 28<sup>th</sup>.

Note 1 – Weekly average is the total mass or concentration of all daily discharges sampled during any calendar week divided by the number of daily discharges sampled or measured during that week. Average all samples that fall within a calendar week (Sunday through Saturday). (e.g. If you have three samples between Sunday and Saturday, add the three values together and divide by 3) If you have multiple samples that lie in separate calendar weeks, do not average data from separate weeks together.

Note 2 – Precipitation data may be obtained from the nearest rain gauge or weather monitoring station. Data need not be collected on a daily basis but, rather, may be obtained for the entire quarter once it has ended. Only the daily maximum and the monthly average for each month in the quarter should be reported but daily data should be kept on file for future reference.

Note 3 – Settleable Solids limits do not apply when the precipitation event exceeds the One Year – Twenty Four Hour precipitation event, which for Jackson County is expected to be 2.95 inches.

**C. BENCHMARKS**

1. This operating permit stipulates pollutant Benchmarks applicable to your discharge. The Benchmarks do not constitute direct numeric effluent limitations; a benchmark exceedance alone, therefore, is not an operating permit violation. Benchmark monitoring data are primarily for your use (and the Department’s use) to determine the overall effectiveness of your Storm Water Pollution Prevention Plan (SWPPP) (see D. SPECIAL CONDITIONS #6.) 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 Best Management Practices (BMPs) to determine what improvements or additional controls are needed to reduce that pollutant in your storm water discharge(s). Failure to improve BMPs and achieve compliance with the Benchmarks is an operating permit violation. Exceedances believed to be the result of legacy chemical uses at the facility are not exempted from this requirement. Permittees are encouraged to contact the Department to formulate a plan for investigation and clean-up if legacy chemical uses are suspected to be the cause of exceedances.
2. The following Benchmarks are considered necessary to protect water quality and shall not be exceeded. The BMPs at the facility should be designed to meet these benchmarks during rainfall events up to the 1-in-10 year, 24 hour rain event.

**Benchmarks Table**

<b>Parameter</b>	<b>Benchmark</b>
Iron, Total Recoverable	1000 µg/L
Copper, Total Recoverable	25 µg/L
Lead, Total Recoverable	131 µg/L
Mercury, Total Recoverable	2.4 µg/L
Zinc, Total Recoverable	205 µg/L
Cadmium, Total Recoverable	9.0 µg/L
Aluminum, Total Recoverable	750 µg/L

3. Quarterly Benchmark Reports – Submit a report, once per quarter, with the quarterly discharge monitoring reports, that indicates whether or not the benchmarks listed in section 2. above have been met. If stormwater sampled did not meet the benchmarks, the report must include a description of any BMP improvements or additional controls that have been implemented as per section 1. above.

**D. 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. Changes in Discharges of Toxic Substances

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

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
  - (1) One hundred micrograms per liter (100 µg/L);
  - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
  - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
  - (4) The level established in Part A of the permit by the Director.

D. SPECIAL CONDITIONS (continued)

- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
  - (c) That the effluent limit established in part A of the permit will be exceeded.
4. Report as no-discharge when a discharge does not occur during the report period.
5. Water Quality Standards
- (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
  - (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
    - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
    - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
    - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
    - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
    - (5) There shall be no significant human health hazard from incidental contact with the water;
    - (6) There shall be no acute toxicity to livestock or wildlife watering;
    - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
    - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
6. The permittee shall develop and implement a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must be prepared within 30 days and implemented within 90 days of permit issuance. The SWPPP must be kept on-site and should not be sent to DNR unless specifically requested. The SWPPP must be reviewed and updated, if needed, every five (5) years or as site conditions change. The permittee shall select, install, use, operate, and maintain the Best Management Practices prescribed in the SWPPP in accordance with the concepts and methods described in the following document:
- Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators, (Document number EPA 833-B-09-002) published by the United States Environmental Protection Agency (USEPA) in February 2009.
- The SWPPP must include the following:
- (a) A listing of specific Best Management Practices (BMPs) and a narrative explaining how BMPs will be implemented to control and minimize the amount of potential contaminants that may enter storm water. Minimum BMPs are listed in SPECIAL CONDITIONS #7 below.
  - (b) The SWPPP must include a schedule for twice/month site inspections and a brief written report. The inspections must include observation and evaluation of BMP effectiveness. Deficiencies must be corrected within seven (7) days and the actions taken to correct the deficiencies shall be included with the written report, including photographs. Any corrective measure that necessitates major construction may also need a construction permit. Inspection reports must be kept on site with the SWPPP and maintained for a period of five (5) years. These must be made available to DNR personnel upon request.
  - (c) A provision for designating an individual to be responsible for environmental matters.
  - (d) A provision for providing training to all personnel involved in material handling and storage, and housekeeping of maintenance and cleaning areas. Proof of training shall be submitted on request of DNR.
7. Permittee shall adhere to the following minimum Best Management Practices:
- (a) Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, or warehouse activities and thereby prevent the contamination of storm water from these substances.

D. SPECIAL CONDITIONS (continued)

- (b) Provide collection facilities and arrange for proper disposal of waste products including but not limited to petroleum waste products, and solvents.
  - (c) Store all paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) so that these materials are not exposed to storm water or provide other prescribed BMP's such as plastic lids and/or portable spill pans to prevent the commingling of storm water with container contents. Commingled water may not be discharged under this permit. Provide spill prevention control, and/or management sufficient to prevent any spills of these pollutants from entering waters of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater.
  - (d) Provide good housekeeping practices on the site to keep trash from entry into waters of the state.
  - (e) Provide sediment and erosion control sufficient to prevent or control sediment loss off of the property. This could include the use of straw bales, silt fences, or sediment basins, if needed, to comply with effluent limits.
8. 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.
9. All fueling facilities present on the site shall adhere to applicable federal and state regulations concerning underground storage, above ground storage, and dispensers, including spill prevention, control and counter measures.
10. Before releasing water that has accumulated in secondary containment areas it must be examined for hydrocarbon odor and presence of a sheen. If the presence of hydrocarbons is indicated, accumulated water must be treated to remove all hydrocarbons prior to release or pumped and hauled to an appropriate treatment facility. Records of the event, including the method of removal and disposal, must be maintained.
11. Substances, regulated by federal law under the Resource Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), that are transported, stored, or used for maintenance, cleaning or repair, shall be managed according to RCRA and CERCLA.

PERMIT TRANSFER

This permit may be transferred to a new owner by submitting an "Application for Transfer of Operating Permit" signed by the seller and buyer of the facility, along with the appropriate modification fee.

PERMIT RENEWAL REQUIREMENTS

Unless this permit is terminated, the permittee shall submit an application for the renewal of this permit no later than six (6) months prior to the permit's expiration date. Failure to apply for renewal may result in termination of this permit and enforcement action to compel compliance with this condition and the Missouri Clean Water Law.

TERMINATION

In order to terminate this permit, the permittee shall notify the department by submitting Form J, included with the State Operating Permit. The permittee shall complete Form J and mail it to the department at the address noted in the cover letter of this permit. Proper closure of any storage structure is required prior to permit termination. A closure plan shall be submitted to the department and approved prior to initiating closure activities.

DUTY OF COMPLIANCE

The permittee shall comply with all conditions of this permit. Any noncompliance with this permit constitutes a violation of Chapter 644, Missouri Clean Water Law, and 10 CSR 20-6. Noncompliance may result in enforcement action, termination of this authorization, or denial of the permittee's request for renewal.

**Missouri Department of Natural Resources**  
**FACT SHEET**  
**FOR THE PURPOSE OF RENEWAL**  
**OF**  
**MO-0115801**  
**ADVANTAGE METALS RECYCLING, LLC**

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

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

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

This Factsheet is for a Major , Minor , Industrial Facility ; Variance ; Master General Permit ; General Permit Covered Facility ; and/or permit with widespread public interest .

**Part I – Facility Information**

Facility Type: Metal recycling facility/closed landfill  
 Facility SIC Code(s): 5093 & 4953

**Facility Description:**

Stormwater originating from activities related to ferrous and non-ferrous metal stockpiling, shredding, and sorting as well as from a closed landfill.

Have any changes occurred at this facility or in the receiving water body that effects effluent limit derivation?  
 - No.

Application Date: 02/01/10  
 Expiration Date: 08/04/10  
 Last Inspection: 01/20/10 In Compliance ; Non-Compliance

The inspection in January placed this facility out of compliance for permit effluent limitation exceedances. The facility has taken numerous measures to address the quality of stormwater discharged including installation a storm water capture system capable of collecting a first-flush volume of 43,000 gallons.

**OUTFALL(S) TABLE:**

OUTFALL	DESIGN FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE	DISTANCE TO CLASSIFIED SEGMENT (MI)
#001	Dependent upon precipitation	BMP	Stormwater	0.89
#002	Dependent upon precipitation	BMP	Stormwater	0.82
#003	Dependent upon precipitation	BMP	Stormwater	0.88
#004	Dependent upon precipitation	BMP	Stormwater	0.95

**Outfall #001**

Stormwater from closed landfill and ferrous metal recycling areas.  
Legal Description: NW ¼, NW ¼, Sec. 18, T49N, R32W, Jackson County  
UTM Coordinates: X = 370758, Y = 4325899  
Receiving Stream: Ditch to the Blue River (U)  
First Classified Stream and ID: Blue River (P) (00418)  
USGS Basin & Sub-watershed No.: (10300101 – 010070)

**Outfall #002**

Stormwater from parking areas, customer waiting areas, and other areas formerly associated with industrial activity  
Legal Description: NW ¼, NW ¼, Sec. 18, T49N, R32W, Jackson County  
UTM Coordinates: X = 370608, Y = 4325996  
Receiving Stream: Ditch to the Blue River (U)  
First Classified Stream and ID: Blue River (P) (00418)  
USGS Basin & Sub-watershed No.: (10300101 – 010070)

**Outfall #003**

Stormwater from closed landfill and ferrous metal recycling areas.  
Legal Description: NW ¼, NW ¼, Sec. 18, T49N, R32W, Jackson County  
UTM Coordinates: X = 370792, Y = 4325960  
Receiving Stream: Ditch to the Blue River (U)  
First Classified Stream and ID: Blue River (P) (00418)  
USGS Basin & Sub-watershed No.: (10300101 – 010070)

**Outfall #004**

Stormwater from Non-Ferrous metal recycling areas  
Legal Description: SW ¼, SW ¼, Sec. 7, T49N, R32W, Jackson County  
UTM Coordinates: X = 370703, Y = 4326242  
Receiving Stream: Ditch to the Blue River (U)  
First Classified Stream and ID: Blue River (P) (00418)  
USGS Basin & Sub-watershed No.: (10300101 – 010070)

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

This facility was previously required to conduct quarterly monitoring for conventional pollutants at all outfalls and annual monitoring for metals and other pollutants at Outfalls #001 & #003 (those which receive runoff from the closed landfill area). All DMR data from the previous permit cycle were reviewed. Exceedances of effluent limitations for conventional pollutants are shown in the table below. Numeric effluent limitations were not given for metals in the previous permit. Upon review of DMR data, if a water quality standard exists for the beneficial uses designated for the receiving stream for any metal on the previous permit, and if that metal was detected in sampling events, a Benchmark was set at the applicable water quality standard (see PART V, Effluent Limits Determination below for further details on benchmarks). If DMR data showed that concentrations were consistently below quantification limits or well below water quality standards, monitoring for that metal was removed from the current permit renewal.

<b>Year</b>	<b>Outfall</b>	<b>COD</b>	<b>SS</b>	<b>O&amp;G</b>
2005	#001			
	#002		One	
	#003			
2006	#001	One	One	One
	#002		One	
	#003			
2007	#001	Two		Two
	#002			
	#003			Two
2008	#001	One	One	One
	#002	One		
	#003	One		One
2009	#001	Four	Two	One
	#002	Four	One	
	#003			Two
2010	#001	One		
	#002	One	One	
	#003			

Comments:

As shown above, this facility has had problems meeting effluent limitations for Chemical Oxygen Demand, Settleable Solids, and Oil & Grease in the previous permit cycle. To address these issues, the facility has completed a trenching system that directs stormwater from the ferrous metal portion of the facility to a series of baffled compartments to allow some settling and to remove oil & grease with absorbent booms. From this structure, water flows through a rip-rap lined channel to a newly constructed, lined sedimentation basin to further allow particles to settle out. In continuation of the facility’s efforts to improve the quality of water discharged from the site, a stormwater capture system was installed that captures the first 43,000 gallons of runoff from the ferrous metal storage areas. The collected storm water is held in a tank where primary settling occurs and is eventually fed into the facility’s hammer-mill as an alternative to using city water for cooling.

An investigation of this site’s hydrology was conducted in 2010 and Outfall #004 was identified as the point where storm water from the non-ferrous metal sorting area leaves the property. This outfall has been added to the current permit renewal with the same monitoring requirements as Outfalls #001 & #003. The facility is exploring BMPs, treatment options, and the possibility of constructing an outfall structure at this location.

Industrial activities and materials have been removed from the area that drains to Outfall #002; however, due to the history of noncompliance at this outfall, it has not been removed from the permit. If, during this permit cycle, the facility is able to demonstrate consistent compliance with the effluent limitations for a significant period of time, an application for permit modification may be submitted to remove this outfall from the permit.

**Part II – Operator Certification Requirements**

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

Check boxes below that are applicable to the facility;

- Owned or operated by or for:
  - Municipalities
  - Public Sewer District:
  - County
  - Public Water Supply Districts:
  - Private sewer company regulated by the Public Service Commission:
  - State or Federal agencies:

Each of the above entities are only applicable if they have a Population Equivalent greater than two hundred (200) and/or fifty (50) or more service connections.

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

**Part III – Receiving Stream Information**

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

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

- Missouri or Mississippi River [10 CSR 20-7.015(2)]:
- Lake or Reservoir [10 CSR 20-7.015(3)]:
- Losing [10 CSR 20-7.015(4)]:
- Metropolitan No-Discharge [10 CSR 20-7.015(5)]:
- Special Stream [10 CSR 20-7.015(6)]:
- Subsurface Water [10 CSR 20-7.015(7)]:
- All Other Waters [10 CSR 20-7.015(8)]:

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

**RECEIVING STREAM(S) TABLE:**

WATERBODY NAME	CLASS	WBID	DESIGNATED USES*	8-DIGIT HUC	EDU**
Ditch to the Blue River	U	NA	General Criteria	10300101	Central Plains/ Blackwater/ Lamine
Blue River	P	00418	LWW, AQL, IND, SCR, WBC-B***		

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

\*\* - Ecological Drainage Unit

\*\*\* - UAA has not been conducted.

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

RECEIVING STREAM (U, C, P)	LOW-FLOW VALUES (CFS)		
	1Q10	7Q10	30Q10
Blue River (P)	1.46	2.02	3.04

**MIXING CONSIDERATIONS:**

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

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

**RECEIVING STREAM MONITORING REQUIREMENTS:**

No receiving water monitoring requirements recommended at this time.

**Part IV – Rationale and Derivation of Effluent Limitations & Permit Conditions****ALTERNATIVE EVALUATIONS FOR NEW FACILITIES:**

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

Not Applicable ;

The facility does not discharge to a Losing Stream as defined by [10 CSR 20-2.010(36)] & [10 CSR 20-7.031(1)(N)], or is an existing facility.

**ANTI-BACKSLIDING:**

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

- 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.

**AREA-WIDE WASTE TREATMENT MANAGEMENT & CONTINUING AUTHORITY:**

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

**BIO-SOLIDS, SLUDGE, & SEWAGE SLUDGE:**

Bio-solids are solid materials resulting from wastewater treatment that meet federal and state criteria for beneficial uses (i.e. fertilizer). Sludge is any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility or any other such waste having similar characteristics and effect. Sewage sludge is solids, semi-solids, or liquid residue generated during the treatment of domestic sewage in a treatment works; including but not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works.

Not Applicable ;

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

**COMPLIANCE AND ENFORCEMENT:**

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

Not Applicable ;

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

**PRETREATMENT PROGRAM:**

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

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

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

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

Not Applicable ;

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

**REASONABLE POTENTIAL ANALYSIS (RPA):**

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

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

Not Applicable ;

A RPA was not conducted for this facility. The statistical calculations necessary to conduct a RPA can not be done for stormwater.

**REMOVAL EFFICIENCY:**

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

Not Applicable ;

Influent monitoring is not being required to determine percent removal.

**SANITARY SEWER OVERFLOWS (SSOs), BYPASSES, INFLOW & INFILTRATION (I&I) – PREVENTION/REDUCTION:**

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

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

Not Applicable ;

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

**SCHEDULE OF COMPLIANCE (SOC):**

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

Not Applicable ;

This permit does not contain a SOC.

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

In accordance with 40 CFR 122.44(k) *Best Management Practices (BMPs)* to control or abate the discharge of pollutants when: (1) Authorized under section 304(e) of the Clean Water Act (CWA) for the control of toxic pollutants and hazardous substances from ancillary industrial activities; (2) Authorized under section 402(p) of the CWA for the control of storm water discharges; (3) Numeric effluent limitations are infeasible; or (4) the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA.

In accordance with the EPA's *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (Document number EPA 833-B-09-002) [published by the United States Environmental Protection Agency (USEPA) in February 2009], BMPs are measures or practices used to reduce the amount of pollution entering (regarding this operating permit) waters of the state. BMPs may take the form of a process, activity, or physical structure.

Additionally in accordance with the Storm Water Management, a SWPPP is a series of steps and activities to (1) identify sources of pollution or contamination, and (2) select and carry out actions which prevent or control the pollution of storm water discharges.

Applicable ;

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

**VARIANCE:**

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

Not Applicable ;

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

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

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

Not Applicable ;

Wasteload allocations were not calculated.

**WLA MODELING:**

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

Not Applicable ;

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

**WATER QUALITY STANDARDS:**

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

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

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

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

Applicable ;

Under the federal Clean Water Act (CWA) §101(a)(3), requiring WET testing is reasonably appropriate for site-specific Missouri State Operating Permits for discharges to waters of the state issued under the National Pollutant Discharge Elimination System (NPDES). WET testing is also required by 40 CFR 122.44(d)(1). WET testing ensures that the provisions in the 10 CSR 20-6.010(8)(A)7. and the Water Quality Standards 10 CSR 20-7.031(3)(D),(F),(G),(I)2.A & B are being met. Under [10 CSR 20-6.010(8)(A)4], the Department may require other terms and conditions that it deems necessary to assure compliance with the Clean Water Act and related regulations of the Missouri Clean Water Commission. In addition the following MCWL apply: §§644.051.3 requires the Department to set permit conditions that comply with the MCWL and CWA; 644.051.4 specifically references toxicity as an item we must consider in writing permits (along with water quality-based effluent limits, pretreatment, etc...); and 644.051.5 is the basic authority to require testing conditions. WET test will be required by all facilities meeting the following criteria:

- Facility is a designated Major.
- Facility continuously or routinely exceeds its design flow.
- Facility (industrial) that alters its production process throughout the year.
- Facility handles large quantities of toxic substances, or substances that are toxic in large amounts.
- Facility has Water Quality-based Effluent Limitations for toxic substances (other than NH<sub>3</sub>)
- Facility is a municipality or domestic discharger with a Design Flow ≥ 22,500 gpd.
- Other – please justify.

Not Applicable ;

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

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

Section 303(d) of the federal Clean Water Act requires that each state identify waters that are not meeting water quality standards and for which adequate water pollution controls have not been required. Water quality standards protect such beneficial uses of water as whole body contact (such as swimming), maintaining fish and other aquatic life, and providing drinking water for people, livestock and wildlife. The 303(d) list helps state and federal agencies keep track of waters that are impaired but not addressed by normal water pollution control programs.

A TMDL is a calculation of the maximum amount of a given pollutant that a body of water can absorb before its water quality is affected. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan will be developed that shall include the TMDL calculation

Applicable ;

The Blue River is listed on the 2006 Missouri 303(d) List for Bacteria from Urban Non-Point Sources. The Blue River has a TMDL that was approved by the US EPA in 2001 for Chlordane.

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

## Part V – Effluent Limits Determination

### Outfalls #001, #003, & #004

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

#### EFFLUENT LIMITATIONS TABLE:

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	MGD	1	*		*	No	SAME
COD	MG/L	9	120		90	No	SAME
SETTLABLE SOLIDS	MG/L	1/9	1.5		1.0	No	SAME
pH	SU	1	6.5 – 9.0		6.5 – 9.0	YES	6.0 – 9.0
AMMONIA AS N	MG/L	9	*		*	No	SAME
OIL & GREASE	MG/L	1/2/9	15		10	No	SAME
PRECIPITATION	INCHES	9	*		*	No	SAME
TOTAL DISSOLVED SOLIDS	MG/L	9	*		*	No	SAME
TOTAL HARDNESS	MG/L	9	*		*	No	SAME
PHOSPHORUS	MG/L	9	*		*	No	SAME
TOTAL ORGANIC CARBON	MG/L	9	*		*	No	SAME
IRON, TR	µg/L	9	*		*	No	SAME
ALUMINUM, TR	µg/L	9	*		*	YES	**
MERCURY, TR	µg/L	9	*		*	No	SAME
ZINC, TR	µg/L	9	*		*	No	SAME
ANTIMONY, TR	µg/L	9	*		*	No	SAME
BARIUM, TR	µg/L	9	*		*	No	SAME
BORON, TR	µg/L	9	*		*	No	SAME
CADMIUM, TR	µg/L	9	*		*	No	SAME
MAGNESIUM, TR	µg/L	9	*		*	No	SAME
MANGANESE, TR	µg/L	9	*		*	No	SAME
NITRATES + NITRITES	MG/L	9	*		*	No	SAME
COPPER, TR	µg/L	9	*		*	No	SAME
LEAD, TR	µg/L	9	*		*	No	SAME
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

\* - Monitoring requirement only.

\*\* - Not included in previous operating permit

#### Basis for Limitations Codes:

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

#### OUTFALL #001 – DERIVATION AND DISCUSSION OF LIMITS:

- **Flow.** Monitoring only requirement 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 to determine an alternate location for flow monitoring.
- **Precipitation.** Monitoring only requirement.
- **Chemical Oxygen Demand (COD).** Effluent limitations of 120 mg/L as a Daily Maximum and 90 mg/L as a Monthly Average are applicable to this facility have been retained from the previous operating permit.
- **pH.** Effluent limitation range is from 6.5 to 9.0 Standard pH Units (SU), as per [10 CSR 20-7.031(4)(E)]. pH is not to be averaged.

- **Settleable Solids (SS).** Effluent limitations of 1.5 mL per L per hour as a Daily Maximum and 1.0 mL per L per hour as a Monthly Average are applicable and have been retained from the previous operating permit.
- **Total Dissolved Solids (TDS).** Monitoring requirement only has been retained from the previous operating permit.
- **Oil & Grease.** Conventional pollutant, effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum.
- **Total Ammonia Nitrogen.** Monitoring only requirement has been retained from the previous operating permit.
- **Total Organic Carbon.** Monitoring requirement only that's has been retained from the previous operating permit. Total Organic Carbon is a highly accurate measurement of the organic content of a water sample and is a general indicator of water pollution.
- **Phosphorus, Total Recoverable.** Monitoring only requirement has been retained from the previous operating permit.
- **Nitrate and Nitrite as N.** Monitoring only requirement has been retained from the previous operating permit.
- **Total Hardness.** Monitoring only requirement due to the fact that Metals toxicity varies by hardness.
- **Metals.** The previous state operating permit for this facility required annual monitoring for the following parameters. Annual monitoring has been retained so at the next permit renewal it can be determined if the reasonable potential to violate water quality standards exists.
  - Antimony, Total Recoverable
  - Barium, Total Recoverable
  - Boron, Total Recoverable
  - Magnesium, Total Recoverable
  - Manganese, Total Recoverable

The previous state operating permit for this facility required annual monitoring for the following parameters. The presence of these pollutants in discharge monitoring events warrants the increase of monitoring frequency to quarterly. Additionally, benchmarks have been set for these metals at the applicable water quality standards. An exceedances of a benchmark, in of itself, is not a violation of a final effluent limitation, but rather requires the facility to improve BMPs and possibly implement new controls to prevent future benchmark exceedances. Failure to properly respond to and correct benchmark exceedances is a permit violation.

**Benchmarks Table**

<b>Parameter</b>	<b>Benchmark</b>
Iron, Total Recoverable	1000 µg/L
Copper, Total Recoverable	25 µg/L
Lead, Total Recoverable	131 µg/L
Mercury, Total Recoverable	2.4 µg/L
Zinc, Total Recoverable	205 µg/L
Cadmium, Total Recoverable	9.0 µg/L
Aluminum, Total Recoverable*	750 µg/L

\* Aluminum was not included in the previous permit; however, since this facility receives and processes aluminum, it has been included as a quarterly monitored parameter with benchmarks that must be met.

- **Minimum Sampling and Reporting Frequency Requirements.**

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
PRECIPITATION	QUARTERLY	QUARTERLY
FLOW	QUARTERLY	QUARTERLY
OIL & GREASE	QUARTERLY	QUARTERLY
CHEMICAL OXYGEN DEMAND	QUARTERLY	QUARTERLY
SETTLABLE SOLIDS	QUARTERLY	QUARTERLY
TOTAL DISSOLVED SOLIDS	QUARTERLY	QUARTERLY
pH	QUARTERLY	QUARTERLY
HARDNESS	QUARTERLY	QUARTERLY
IRON, TR	QUARTERLY	QUARTERLY
COPPER, TR	QUARTERLY	QUARTERLY
ZINC, TR	QUARTERLY	QUARTERLY
LEAD, TR	QUARTERLY	QUARTERLY
MERCURY, TR	QUARTERLY	QUARTERLY
CADMIUM, TR	QUARTERLY	QUARTERLY
ALUMINUM, TR	QUARTERLY	QUARTERLY
ANTIMONY, TR	ANNUALLY	ANNUALLY
BARIUM, TR	ANNUALLY	ANNUALLY
BORON, TR	ANNUALLY	ANNUALLY
MAGNESIUM, TR	ANNUALLY	ANNUALLY
MANGANESE, TR	ANNUALLY	ANNUALLY
NITRATES PLUS NITRITES AS N	ANNUALLY	ANNUALLY
AMMONIA AS N	ANNUALLY	ANNUALLY
PHOSPHORUS, TR	ANNUALLY	ANNUALLY
TOTAL ORGANIC CARBON	ANNUALLY	ANNUALLY

**Parameters Removed From Outfalls #001 & #003.** Total Recoverable Arsenic, BETX, Total Recoverable Beryllium, Total Recoverable Chromium, Total Recoverable Cobalt, Fluoride, Total Recoverable Nickel, Total Recoverable Selenium, Total Recoverable Silver, Total Recoverable Thallium, Total Recoverable Vanadium. Discharge monitoring data for all of these parameters was consistently either below detection limits or just above detection limits. BETX previously had a permitted limits of 0.75mg/L; however this limit is arbitrary as there is not water quality standard for this combination parameter. The presence of these components will be detected either by Oil & Grease or Chemical Oxygen Demand monitoring, both of which have permit limitations in the current permit renewal.

**Outfall #002**

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

**EFFLUENT LIMITATIONS TABLE:**

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	MGD	1	*		*	NO	SAME
COD	MG/L	9	120		90	NO	SAME
SETTLABLE SOLIDS	MG/L	1/9	1.5		1.0	NO	SAME
PH	SU	1	6.5 – 9.0		6.5 – 9.0	YES	6.0 – 9.0
OIL & GREASE (MG/L)	MG/L	1/2/9	15		10	NO	SAME
TOTAL DISSOLVED SOLIDS	MG/L	9	*		*	NO	SAME
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

\* - Monitoring requirement only.

**Basis for Limitations Codes:**

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

**OUTFALL #002 – DERIVATION AND DISCUSSION OF LIMITS:**

- **Flow.** Monitoring only requirement 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 to determine an alternate location for flow monitoring.
- **Chemical Oxygen Demand (COD).** Effluent limitations of 120 mg/L as a Daily Maximum and 90 mg/L as a Monthly Average are applicable to this facility have been retained from the previous operating permit.
- **pH.** Effluent limitation range is from 6.5 to 9.0 Standard pH Units (SU), as per [10 CSR 20-7.031(4)(E)]. pH is not to be averaged.
- **Settleable Solids (SS).** Effluent limitations of 1.5 mL per L per hour as a Daily Maximum and 1.0 mL per L per hour as a Monthly Average are applicable and have been retained from the previous operating permit.
- **Total Dissolved Solids (TDS).** Monitoring requirement only has been retained from the previous operating permit.
- **Oil & Grease.** Conventional pollutant, effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum.
- **Minimum Sampling and Reporting Frequency Requirements.**

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
FLOW	QUARTERLY	QUARTERLY
OIL & GREASE	QUARTERLY	QUARTERLY
CHEMICAL OXYGEN DEMAND	QUARTERLY	QUARTERLY
SETTLABLE SOLIDS	QUARTERLY	QUARTERLY
TOTAL DISSOLVED SOLIDS	QUARTERLY	QUARTERLY
PH	QUARTERLY	QUARTERLY

## **Part VI – Administrative Requirements**

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

### **PUBLIC NOTICE:**

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

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

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

- The Public Notice period for this operating permit was from April 15, 2011 to May 16, 2011. No responses received or responses to the Public Notice of this operating permit do not warrant the modification of effluent limits and/or the terms and conditions of this permit.

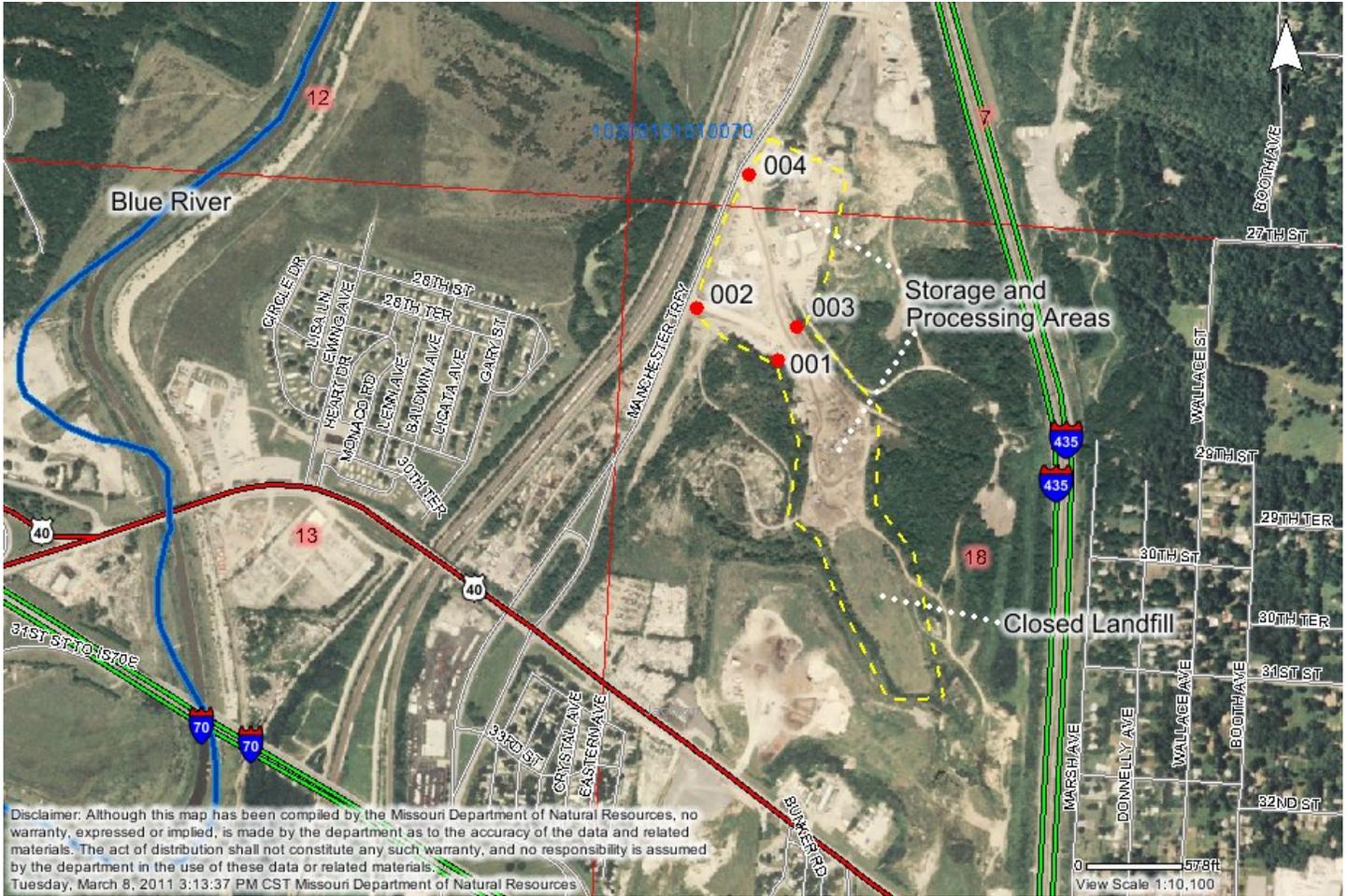
**DATE OF FACT SHEET:** MARCH 8, 2011

### **COMPLETED BY:**

**JIMMY COLES, ENVIRONMENTAL SPECIALIST  
MISSOURI DEPARTMENT OF NATURAL RESOURCES  
KANSAS CITY REGIONAL OFFICE  
NPDES PERMITS UNIT  
816-622-7051**

# Part VII – Appendix

## FACILITY AERIAL VIEW



Disclaimer: Although this map has been compiled by the Missouri Department of Natural Resources, no warranty, expressed or implied, is made by the department as to the accuracy of the data and related materials. The act of distribution shall not constitute any such warranty, and no responsibility is assumed by the department in the use of these data or related materials.  
Tuesday, March 8, 2011 3:13:37 PM CST Missouri Department of Natural Resources