

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-R203000

Owner:  
Address:

Continuing Authority:  
Address:

Facility Name:  
Facility Address:

Legal Description:  
UTM Coordinates:

Receiving Stream:  
First Classified Stream and ID:  
USGS Basin and Sub-watershed No.:

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

**FACILITY DESCRIPTION**

All Outfalls – SIC Codes 2514, 2522, 2542, 33XX, 34XX, 35XX, 36XX, 37XX, 38XX

Stormwater discharges from ferrous and nonferrous foundries, casting, extrusion, rolling, galvanizing and finishing, structural steel production, light metal fabrication, and electrical equipment manufacturing.

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 RSMo Section 621.250, 640.013, and 644.051.6; 10 CSR 20-1.020 and 20-6.020 of the Law.

September 1, 2014  
Effective Date

August 31, 2019  
Expiration Date

Sara Parker Pauley, Director, Department of Natural Resources

John Madros, Director, Water Protection Program

## APPLICABILITY

1. This Missouri State Operating Permit (permit) authorizes the discharge of stormwater to waters of the state of Missouri from multiple industries, including but not limited to facilities with the primary Standard Industrial Classification (SIC) codes:

<u>SIC Code</u>	<u>Activity</u>
2514	Metal Household Furniture
2522	Office Furniture, Except Wood
2542	Office and Store Fixtures, Partitions, Shelving, and Lockers, Except Wood
33xx	Primary Metal Industries
34xx	Fabricated Metal Products, Except Machinery and Transportation Equipment
35xx	Industrial and Commercial Machinery and Computer Equipment
36xx	Electronic and Other Electrical Equipment and Components, Except Computer Equipment
37xx	Transportation Equipment
38xx	Measuring, Analyzing, and Controlling Instruments; Photographic, Medical, and Optical Goods; Watches and Clocks

2. Coverage under this permit may be required for facilities that the Missouri Department of Natural Resources (department) determines are similar to facilities that are under the above SIC Codes.
3. This permit is applicable to facilities (associated with the above industries) with materials exposed to stormwater, which the department determines must obtain a permit. This permit authorizes the discharge of stormwater only.
4. If a facility has no materials exposed to stormwater, the facility may apply for No Exposure Certification in lieu of coverage under this permit. No Exposure means that all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products. An industrial site may qualify for No Exposure without a storm resistant shelter if the following are met: Drums, barrels, tanks, and similar containers are tightly sealed, provided those containers are not deteriorated and do not leak (sealed means banded or otherwise secured and without operational taps or valves); Adequately maintained vehicles are used in material handling; and all industrial materials consist of final products, other than products that would be mobilized by stormwater [10 CSR 20-6.200(1)(B)(16)].
5. This permit does not cover land disturbance activities. MO-RA must be obtained for coverage of land disturbance activities. MO-RA can be obtained through electronic permitting (epermitting) at [www.dnr.missouri.gov/env/wpp/epermit/help.htm](http://www.dnr.missouri.gov/env/wpp/epermit/help.htm).
6. This permit does not authorize stormwater discharges:
  - (a) Within 1,000 feet upstream of waters that have been identified as a losing stream, sinkhole, or other direct conduit to groundwater;
  - (b) Within 1,000 feet upstream of streams, lakes, or reservoirs with the designated use of drinking water supply;
  - (c) Within 1,000 feet upstream of streams, lakes, or reservoirs identified as critical habitat for endangered species;
  - (d) Within 1,000 feet upstream of waters that have been identified as an Outstanding State Resource Water<sup>1</sup>;
  - (e) Within 100 feet upstream of a Class W<sup>1</sup> or mitigated wetland, Class L<sup>2</sup> reservoir, Class P<sup>1</sup> stream, or Class C<sup>1</sup> stream;
  - (f) Within 2 miles upstream of biocriteria reference locations<sup>1</sup>;
- <sup>1</sup> Identified or described in 10 CSR 20-7. These regulations are available at many libraries and online at [www.sos.mo.gov/adrules/csr/current/10csr/10csr.asp](http://www.sos.mo.gov/adrules/csr/current/10csr/10csr.asp), or may be purchased from the department by calling the department's Water Protection Program.
7. This permit authorizes no-discharge facilities [as defined in 10 CSR 20-6.015(1)(B)7] to operate within the watershed of an Outstanding National Resource Water (ONRW)<sup>1</sup>, which includes the Ozark National Scenic Riverways and the Wild and Scenic Rivers System. This permit does not authorize a no-discharge facility to discharge stormwater. Any discharge from a no-discharge facility will be considered a violation of this permit unless a catastrophic or chronic storm event [as defined in 10 CSR 20-6.015(1)(B)] occurs. In the event of a catastrophic or chronic storm event, the no-discharge facility is authorized to release only the amount of stormwater required to prevent damage to the facility or to established Best Management Practices (BMPs).

APPLICABILITY (continued)

8. ONRW waters are protected against any degradation in quality as defined in 10 CSR 20-7.031(1)(S). This permit authorizes facilities to discharge stormwater within the watershed of an ONRW. However, if a stormwater discharge within the watershed of an ONRW exceeds any of the benchmarks set forth in this permit, the discharge is considered to cause degradation in water quality of the ONRW and the facility must take corrective action to meet the benchmarks. Failure to take corrective action to address a benchmark exceedance and failure to make tangible progress towards achieving compliance with the benchmarks is a permit violation. More detailed requirements concerning stormwater discharges are found in the Requirement section of this permit. If exceedances of benchmarks continue to occur, the department may require the facility to operate as a no-discharge facility under this permit or to apply for a site-specific permit.
9. The department may require any permittee (facility) authorized by a general permit to apply for a site-specific permit [10 CSR 20-6.010(13)(C)]. Cases where a site-specific permit may be required include, but are not limited to, the following:
  - (a) The discharge(s) is a significant contributor of pollution which impairs the beneficial uses of the receiving stream;
  - (b) The discharger is not in compliance with the conditions of the general permit;
  - (c) A Total Maximum Daily Load (TMDL) containing requirements applicable to the discharge(s) is approved.
10. Facilities that are located within the watershed of a 303(d) listed impaired water or a watershed with an approved TMDL will need to be evaluated on a case-by-case basis for inclusion under this permit. Missouri's 303(d) listed impaired waters or waters with approved TMDLs can be found at [www.dnr.mo.gov/env/wpp/waterquality/index.html](http://www.dnr.mo.gov/env/wpp/waterquality/index.html). Facilities that are found to be discharging the listed pollutant(s) of concern for any impaired water may be required to obtain a site-specific permit.
11. If a facility covered under a current general permit desires to apply for a site-specific permit, the facility may do so by contacting the department for application requirements and procedures.
12. Facilities covered under a current site-specific permit who desire to apply for inclusion under this general permit may contact the department for application requirements and procedures.

EXEMPTIONS

1. Facilities that discharge stormwater directly to a combined sewer system with a department approved Long Term Control Plan [10 CSR 20-7.015(10)] or to a publicly owned treatment works that has consented to receiving such a discharge are exempt from stormwater permit requirements.

**MONITORING REQUIREMENTS**

<b>ALL OUTFALLS</b>		<b>TABLE A-1 MONITORING REQUIREMENTS</b>				
The facility is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The benchmarks shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited, and monitored by the facility as specified below:						
DISCHARGE PARAMETER(S)	UNITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	SAMPLING FREQUENCY	SAMPLE TYPE
Aluminum, Total Recoverable	µg/L	*			once/quarter**	grab
Copper, Total Recoverable	µg/L	*			once/quarter**	grab
Iron, Total Recoverable	µg/L	*			once/quarter**	grab
Oil and Grease	mg/L	*			once/quarter**	grab
pH	SU	*			once/quarter**	grab
Total Suspended Solids	mg/L	*			once/quarter**	grab
Zinc, Total Recoverable	µg/L	*			once/quarter**	grab
MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY TO THE APPROPRIATE REGIONAL OFFICE. THE FIRST REPORT IS DUE <b>MONTH 28, 20XX</b> . IT IS A VIOLATION OF THIS PERMIT TO FAIL TO SAMPLE.						

\* Monitoring requirement only.

\*\* Quarterly sampling is required. If a discharge occurs during the reporting period, samples shall be collected and tested for the parameters listed in Table A-1. Report as no-discharge when a discharge does not occur during the reporting period. If multiple samples are collected and analyzed during a quarter, the multiple samples are not to be averaged.

<b>Reporting Schedule for Quarterly Sampling</b>	
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

1. Sampling and analysis of stormwater discharges for Aluminum, Copper, Iron, Oil and Grease, pH, Total Suspended Solids, and Zinc shall occur quarterly with reports due on the dates specified above. The department may also require sampling and reporting as a result of illegal discharges, compliance issues, complaint investigations, or evidence of off-site impacts from activities at the facility. If such an action is needed, the department will specify in writing the sampling requirements, including such information as location and extent. It is a violation of this permit to fail to comply with said written notification to sample.
2. This permit stipulates pollutant benchmarks applicable to the facility’s discharge. The benchmarks do not constitute direct numeric effluent limitations. Benchmark exceedances alone, therefore, are not a permit violation. The facility shall develop and implement a Stormwater Pollution Prevention Plan (SWPPP) as stated in the Requirement section of this permit. Benchmark monitoring data are primarily for the facility’s use (and department’s use) to determine the overall effectiveness of the SWPPP and to assist the facility in knowing when additional corrective action may be necessary to protect water quality. If a sample exceeds a benchmark, the facility must review the SWPPP and BMPs to determine what improvements or additional controls are needed to reduce that pollutant in the stormwater discharge(s). Failure to improve BMPs or take corrective action to address a benchmark exceedance and failure to make tangible progress towards achieving a benchmark is a permit violation. Exceedances believed to be the result of legacy chemical use at the facility are not exempted from this requirement. Facilities are encouraged to contact the department to formulate a plan for investigation and clean-up if legacy chemical use is suspected to be the cause of exceedances.

**MONITORING REQUIREMENTS** (continued)

3. Any time a benchmark exceedance occurs a Corrective Action Report (CAR) must be completed and documented in the SWPPP. A CAR is a document that records the efforts undertaken by the facility to improve BMPs to meet benchmarks in future samples. If the efforts taken by the facility are not sufficient and subsequent exceedances of a benchmark occur, the facility may demonstrate to the department that a benchmark value cannot be achieved. The demonstration must include rationale and supporting documentation (which would include multiple CARs) and must show that a benchmark value cannot be achieved through the application of BMPs representing available technology. Additionally, the demonstration must show that the benchmark is not feasible because no further pollutant reductions are technologically available or economically practicable in light of best industry practices. This demonstration must be presented to the department for review and approval.
4. The following benchmarks are considered necessary to protect water quality and should not be exceeded during discharges resulting from a precipitation event exceeding 0.1 inches during a 24-hour period. The BMPs at the facility should be designed to meet these benchmarks during rainfall events up to the 10-year, 24-hour rain event.

Parameter	Benchmark
Aluminum, Total Recoverable	750 µg/L
Copper, Total Recoverable	21.2 µg/L
Iron, Total Recoverable	1000 µg/L
Oil and Grease	10 mg/L
pH	6.5-9.0 Standard Units
Total Suspended Solids	100 mg/L
Zinc, Total Recoverable	176.7 µg/L

5. For flow-through BMPs, stormwater samples shall be collected once per quarter within the first 60 minutes of discharge occurring as a result of precipitation events of 0.1 inches or greater. Precipitation events include rainfall as well as run-off from the melting of frozen precipitation.
6. For retention BMPs, stormwater samples shall be collected once per quarter when a discharge occurs.
7. Stormwater samples shall be collected prior to leaving or at the property boundary or before the discharge enters waters of the state on the property.
8. If data becomes available that indicates existing water quality will be protected by alternative benchmarks specific to this industry, the department will propose to incorporate those benchmarks into this permit as part of a permit modification. Such data must be approved by the department as appropriate and representative before it can be considered.
9. The department may collect a sample of stormwater discharge during site inspection.
10. The results of all samples from a discharge that are collected and analyzed must be submitted to the department.

**STANDARD CONDITIONS**

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

**REQUIREMENTS**

1. When applying for coverage under this permit, the facility shall develop a SWPPP. The facility shall select, install, use, operate, and maintain the BMPs 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 (EPA) in February 2009 ([www.epa.gov/npdes/pubs/industrial\\_swppp\\_guide.pdf](http://www.epa.gov/npdes/pubs/industrial_swppp_guide.pdf)).

The selection of control measures that prevent or reduce the discharge of pollutants in stormwater shall be specified in the SWPPP. The SWPPP shall identify the BMPs that are reasonable and effective, taking into account environmental impacts and costs. This analysis must document why no discharge or no exposure options are not feasible at the facility. This 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) and 10 CSR 20-7.015(9)(A)5]. Failure to implement and maintain the chosen alternatives is a permit violation. Existing facilities with established SWPPPs and BMPs need not conduct an additional alternatives analysis unless new BMPs are established to address benchmark exceedances.

REQUIREMENTS (continued)

New Facilities:

- a) New facilities that are being issued coverage under this general permit for the first time, the SWPPP must be prepared within sixty (60) days and implemented within one hundred eighty (180) days of the permit issuance.
- b) Throughout coverage under this permit, the facility must perform ongoing SWPPP review and revision to incorporate any site condition changes.
- c) The SWPPP must be kept on-site and should not be sent to the department unless specifically requested.

Existing and Expanding Facilities:

- a) The facility was required to prepare a SWPPP for coverage under a previous version of this permit. The facility must review and update the SWPPP to assure that the selected BMPs continue to be appropriate and ensure implementation of all provisions of this permit by permit issuance.
- b) Throughout coverage under this permit, the facility must perform ongoing SWPPP review and revision to incorporate any site condition changes.
- c) The SWPPP must be kept on-site and should not be sent to the department unless specifically requested.

For all facilities the SWPPP must include the following:

- (a) An assessment of all stormwater discharges associated with the facility, facility activities, and facility materials. This assessment must include a list of potential contaminants and an annual estimate of amounts that will be used in the described activities.
- (b) A listing of BMPs and a narrative explaining how the BMPs will be implemented to control and minimize the amount of potential contaminants that enter stormwater.
- (c) A schedule for monthly site inspections and a brief written report, which includes the name of the inspector, the signature of the inspector, and the date. The inspections must include observation and analysis of BMP effectiveness, deficiencies, and corrective action that will be taken. Deficiencies must be corrected within seven (7) days and must be documented in the inspection report. The facility may submit a written request to the department justifying additional time, if necessary, to complete corrective action. The purpose of the SWPPP and the BMPs listed therein is to prevent pollution [10 CSR 20-2.010(56)] of waters of the state. A deficiency of a BMP means it was not effective in preventing pollution of waters of the state or meeting benchmarks of this permit. Corrective action means the facility took steps to eliminate the deficiency. Inspection reports must be kept on-site with the SWPPP and must be made available to the department 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, material storage, and housekeeping of areas having materials exposed to stormwater. Proof of training must be made available to the department upon request.
- (f) A provision for evaluating benchmarks established in this permit.

2. The following minimum BMPs must be implemented at all facilities:

- (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 on-site and arrange for proper disposal of waste products including, but not limited to, petroleum waste products, solid waste, de-icing/anti-icing products, and solvents.
- (c) Store all paints, solvents, petroleum products, 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 countermeasures to prevent any spill 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 prevent the contamination of groundwater.
- (d) Provide sediment and erosion control sufficient to prevent sediment loss off of the property, pollution of waters of the state, and to comply with the conditions of this permit, Missouri Clean Water Law, and the Clean Water Act (CWA). This may require the use of straw bales, silt fences, sediment basins, or other treatment structures.
- (e) Oil sands, slag, sand cores, and foundry sands may be stored in a way that leaves material exposed to precipitation if BMPs are in place that results in benchmarks being met.
- (f) Provide good housekeeping practices on-site to keep solid waste from entering waters of the state.

3. All fueling facilities present on-site shall adhere to applicable federal and state regulations, including spill prevention, control, and countermeasures concerning underground storage, above ground storage, and dispensers.

4. The discharge shall not contain floating solids or visible foam in other than trace amounts.

REQUIREMENTS (continued)

5. 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. The department may also require the submittal of a written report detailing measures taken to clean up the spill within 5 days of the spill. Such a report must include the type of material spilled, volume, date of spill, date clean-up was completed, clean-up method, and final disposal method. If the spill occurs outside of normal business hours, or if the permit holder cannot reach regional office staff for any reason, the permit holder is instructed to report the spill to the department's 24 hour Environmental Emergency Response hotline at (573) 634-2436. Leaving a message on a department staff member voice-mail does not satisfy this reporting requirement. This requirement is in addition to the Noncompliance Reporting requirement found in Standard Conditions Part I.
6. All outfalls must be clearly marked in the field.
7. It is a violation of the Missouri Clean Water Law to fail to pay fees associated with this permit (Section 644.055, RSMo). The fees table can be found at 10 CSR 20-6.011 Appendix A.
8. All conditions in this permit and those in Standard Conditions Part I must be complied with. At no time shall any discharge result in a violation of Water Quality Standards [10 CSR 20-7.031]. A facility will be required to obtain a site-specific permit if the department determines that a site-specific permit is necessary to protect water quality.
9. Water Quality Standards
  - (a) To the extent required by law, discharges to waters of the state shall not cause a violation of Missouri Water Quality Standards (10 CSR 20-7.031), including both specific and general criteria.
  - (b) General Criteria. The following 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 Solid Waste Law, Section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to Section 260.200-260.247, RSMo.
10. Changes in Discharges of Toxic Substances  
The facility shall notify the department as soon as it knows or has reason to believe:
  - (a) That an 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;
    - (3) Five hundred micrograms per liter (500 µg/L) for 2,5-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;
    - (6) The notification level established by the department in accordance with 40 CFR 122.44(f).
  - (b) That the facility has begun or is expected to begin to use or manufacture as an intermediate product, by-product, final product, or waste product any toxic pollutant which was not reported in the permit application.
  - (c) Toxic pollutants shall consist of, but are not limited to pollutants listed in 10 CSR 20-7.031 Table A or 40 CFR 122.21 Appendix D.

## REQUIREMENTS (continued)

11. 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)(A) and (B), and 307(a)(2) of the CWA, if the effluent standard or limitation issued or approved:
    - (1) Contains different conditions or is otherwise more stringent than any effluent limitation in this permit; or
    - (2) Controls any pollutant not limited in this permit.
  - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a wasteload allocation study, toxicity test, or other information indicates changes are necessary to assure compliance with Missouri Water Quality Standards (10 CSR 20-7.031).
  - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, an effluent limit derived from a TMDL is developed for the receiving waters, which would then be included in a list of waters of the state not fully achieving Missouri Water Quality Standards.
- The permit, as modified or reissued under this paragraph, shall also contain any other requirements of the CWA then applicable.

## PERMIT TRANSFER

This permit may be transferred to a new owner by submitting an “Application for Transfer of Operating Permit” ([www.dnr.missouri.gov/forms/780-1517-f.pdf](http://www.dnr.missouri.gov/forms/780-1517-f.pdf)) signed by the seller and buyer of the facility along with the appropriate modification fee.

## PERMIT TERMINATION

This permit may be terminated when activities covered by this permit have ceased and no significant materials [as defined by 10 CSR 20-6.200(C)(27)] remain on the property or if on the property, are stored in such a way as to have no potential for pollution. Proper closure of any storage structure is required prior to permit termination. In order to terminate this permit, the facility shall notify the department by submitting Form H ([www.dnr.missouri.gov/forms/780-1409-f.pdf](http://www.dnr.missouri.gov/forms/780-1409-f.pdf)).

## PERMIT RENEWAL

Unless this permit is terminated, the facility shall submit an application for the renewal of this permit ([www.dnr.missouri.gov/forms/780-0795-f.pdf](http://www.dnr.missouri.gov/forms/780-0795-f.pdf)) no later than thirty (30) days 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.

## DUTY OF COMPLIANCE

The facility shall comply with all conditions of this permit. Any noncompliance with this permit constitutes a violation of Chapter 644, Missouri Clean Water Law, 10 CSR 20-6, and 10 CSR 20-7. Noncompliance may result in enforcement action, termination of this permit, or denial of the facility’s request for renewal.

## Missouri Department of Natural Resources Fact Sheet MO-R203 Fab. Metal, Light Industrial

The Federal Water Pollution Control Act [Clean Water Act (CWA)] 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 CWA). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Missouri State Operating Permits (permit) are issued by the Missouri Department of Natural Resources (department) under an approved program, operated in accordance with federal and state laws (Federal CWA and Missouri Clean Water Law Section 644 as amended). Permits are issued for a period of five (5) years unless otherwise specified.

Per 40 CFR 124.56, 40 CFR 124.8, and 10 CSR 20-6.020(1)(A)(2), a Fact Sheet 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 permit. A Fact Sheet is not an enforceable part of a permit.

This Fact Sheet is for a:

- Master General Permit

### **Part I - Facility Information**

Facility Type: Industrial  
Facility SIC Code(s): 2514, 2522, 2542, 33XX, 34XX, 35XX, 36XX, 37XX, 38XX  
Facility Description: Stormwater discharges from ferrous and nonferrous foundries, casting, extrusion, rolling, galvanizing and finishing, structural steel production, light metal fabrication, and electrical equipment manufacturing.

#### **CLARIFICATION:**

Outstanding National Resource Waters - At permit renewal, the department will examine monitoring reports submitted by a facility located within the watershed of an Outstanding National Resource Water to determine if this permit is still appropriate for the facility. If degradation of water quality has occurred, the department may require the facility to begin operating as a no-discharge facility under this permit or to apply for a site-specific permit.

### **Part II – Receiving Stream Information**

Per 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 benchmarks established by this permit are intended to be protective of all streams that fall within the categories of receiving water body indicated below.

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

Per Missouri Effluent Regulations (10 CSR 20-7.015), the waters of the state are divided into seven (7) categories. Each category lists effluent limitations for specific parameters, which are presented in each outfall's Effluent Limitation Table and further discussed in the Derivation and Discussion of Limits section. This permit applies to facilities discharging to the following water body categories:

- Missouri or Mississippi River [10 CSR 20-7.015(2)]
- Lakes or Reservoirs [10 CSR 20-7.015(3)]
- Losing Streams [10 CSR 20-7.015(4)]
- Metropolitan No-Discharge Streams [10 CSR 20-7.015(5)]
- Special Streams [10 CSR 20-7.015(6)]
- Subsurface Waters [10 CSR 20-7.015(7)]
- All Other Waters [10 CSR 20-7.015(8)]

Missouri Water Quality Standards (10 CSR 20-7.031) 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 shall be maintained in accordance with 10 CSR 20-7.031(4). The benchmarks established by this permit are intended to be protective of all streams that fall within the categories of receiving water bodies indicated above. A general permit does not take into consideration site-specific conditions.

#### **RECEIVING STREAM MONITORING REQUIREMENTS:**

There are no receiving water monitoring requirements recommended at this time.

### **Part III - Rationale and Derivation of Effluent Limitations and Permit Conditions**

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

A provision in the Federal Regulations [CWA §303(d)(4); CWA §402(c); CFR122.44(I)] that requires a reissued permit to be as stringent as the previous permit with some exceptions.

- Applicable: Backsliding proposed in this permit conforms to the anti-backsliding provisions of Section 402(o) of the CWA and 40 CFR 122.44. The department has determined that technical mistakes were made in the previous permit [CWA 402(o)(2)(B)(ii)]. The Settleable Solids limit was removed because the Total Suspended Solids analysis is sufficient to assess the quantity of solids in the discharges. For Total Recoverable Aluminum, Copper, and Zinc and TSS, these values are consistently achieved in stormwater discharges by a variety of other industries with Stormwater Pollution Prevention Plans (SWPPPs) and are deemed protective of instream water quality. These values are also applied as benchmarks in EPA's Multi-Sector General Permit for facilities with one or more of the SIC codes in this permit.

#### **ANTIDegradation:**

Antidegradation policies ensure protection of water quality for a particular water body on a pollutant by pollutant basis to ensure Water Quality Standards are maintained to support beneficial uses such as fish and wildlife propagation and recreation on and in the water. This also includes special protection of waters designated as Outstanding National Resource Waters [10 CSR 20-7.031(3)(C)]. Antidegradation policies are adopted to minimize adverse effects on water. The department has determined that the best avenue forward for implementing the Antidegradation requirements into general permits is by requiring the appropriate development and maintenance of a SWPPP. The SWPPP must identify all BMPs that are reasonable and effective, taking into account environmental impacts and costs. This analysis must document why no discharge or no exposure options are not feasible at the facility. This selection and documentation of appropriate control measures will then serve as the analysis of alternatives and fulfill the requirements of the Antidegradation Rule and Implementation Procedure 10 CSR 20-7.031(3) and 10 CSR 20-7.015(9)(A)5.

Any facility seeking coverage under this permit, which undergoes expansion or discharges a new pollutant of concern, must update their SWPPP and select new BMPs that are reasonable and cost effective. New facilities seeking coverage under this permit are required to develop a SWPPP that includes this analysis and documentation of appropriate BMPs. Renewal of coverage for a facility requires a review of the SWPPP to assure that the selected BMPs continue to be appropriate.

- Applicable: The pollutants of concern in this permit are Aluminum, Copper, Iron, Oil and Grease, pH, Total Suspended Solids, and Zinc. Compliance with the effluent limits established in this permit for the protection of General Criteria, along with the evaluation and implementation of BMPs as documented in the SWPPP, meets the requirements of Missouri's Antidegradation Review [10 CSR 20-7.031(3) and Table A and 10 CSR 20-7.015(9)(A)5].

#### **PUBLIC NOTICE OF COVERAGE FOR AN INDIVIDUAL FACILITY:**

Public Notice of reissuance of coverage is not required unless the facility has been found to be in significant noncompliance [10 CSR 20-6.020(1)(C)(4)]. The need for an individual public notification process shall be determined and identified in the permit [10 CSR 20-6.020(1)(C)(5)].

- Applicable: Issuance of coverage to an individual Foundry under this permit for the first time shall be placed on Public Notice for 30 days in accordance with 10 CSR 20-6.020(1)(B) and (C)(2).

#### **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 a permit.

- Not Applicable: This permit does not contain a SOC.

#### **SET-BACKS:**

Set-backs are common elements of permits and are established to provide a margin of safety in order to protect the receiving stream from accidents, spills, unusual events, etc. They are also established to show what receiving streams the permit writer considered in drafting the permit.

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

In accordance with 40 CFR 122.44(3)(k) *Best Management Practices (BMPs)*, BMPs are implemented to control or abate the discharge of pollutants when: (1) Authorized under Section 304(e) of the 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](http://www.epa.gov/npdes/pubs/industrial_swppp_guide.pdf) ([www.epa.gov/npdes/pubs/industrial\\_swppp\\_guide.pdf](http://www.epa.gov/npdes/pubs/industrial_swppp_guide.pdf)) published by the EPA in February 2009 (Document number EPA 833-B-09-002), BMPs are measures or practices used to reduce the amount of pollution entering waters of the state. BMPs may take the form of a process, activity, or physical structure. EPA developed factsheets on the pollutants of concern for specific industries along with the BMPs to control and minimize stormwater ([cfpub1.epa.gov/npdes/stormwater/swsectors.cfm](http://cfpub1.epa.gov/npdes/stormwater/swsectors.cfm)). Along with EPA's factsheets, the International Stormwater BMP database ([www.bmpdatabase.org/index.htm](http://www.bmpdatabase.org/index.htm)) may provide guidance on BMPs appropriate for specific industries.

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 stormwater 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.

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

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: WLA are not required at this time, thus no calculations were completed.

**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 include in each NPDES permit conditions to achieve water quality established under Section 303 of the CWA, including state narrative criteria for water quality.

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

Per 10 CSR 20-7.031(1)(FF), a toxicity test conducted under specified laboratory conditions on specific indicator organism; and per 40 CFR §122.2, the aggregate toxic effect of an effluent measured directly by a toxicity 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 facility is not required to conduct a WET test.

## **Part IV – Benchmarks Determination**

Benchmark concentrations are not effluent limitations; benchmark exceedance, therefore, is not a permit violation. However, benchmark exceedance which causes degradation to an ONRW [10 CSR 20-7.031(3)(C)] may be in violation of water quality standards. Benchmark monitoring data is used to determine the overall effectiveness of control measures and to assist the facility in knowing when additional corrective action(s) may be necessary to comply with the technology based effluent limitations (TBEL). Failure to take corrective action is a violation of the permit.

### **BENCHMARK TABLE FOR EACH OUTFALL:**

PARAMETER	UNIT	BASIS FOR BENCHMARK	BENCHMARK	MODIFIED	PREVIOUS PERMIT LIMITATIONS
ALUMINUM, TOTAL RECOVERABLE	µg/L	9	750	YES	*
COPPER, TOTAL RECOVERABLE	µg/L	9	21.2	YES	26
IRON, TOTAL RECOVERABLE	µg/L	1, 9	1000	NO	
OIL AND GREASE	MG/L	1	10	NO	
PH	SU	1	6.5-9.0	NO	
SETTLABLE SOLIDS	ML/L/HR	9	**	YES	2.5
TOTAL SUSPENDED SOLIDS	MG/L	9	100	YES	50
ZINC, TOTAL RECOVERABLE	µg/L	9	176.7	YES	210

\* Parameter not established in previous permit

\*\* Parameter removed from permit

#### Basis for Limitations Codes:

- |  |                                    |
|--|------------------------------------|
| 1. State or Federal Regulation/Law     | 7. Antidegradation Policy          |
| 2. Water Quality Standards             | 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. Antidegradation Review              | 12. Dissolved Oxygen Policy        |

### **DERIVATION AND DISCUSSION OF BENCHMARKS:**

The CWA requires that all NPDES discharges to Waters of the U.S. contain technology-based or water-quality based effluent limitations, whichever is more stringent. When the EPA has not established industry specific technology based Effluent Limitation Guidelines, Missouri uses EPA's *Technical Support Document for Water Quality Based Toxics Control (TSD)* method for calculating site-specific water-quality based effluent limitations. The TSD method is based on assumptions and statistics that apply to continuous discharges, not intermittent stormwater discharges and thus do not apply to this permit. In this situation, it is the department's policy to consult the EPA's Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity.

- **Aluminum, Total Recoverable:** This permit establishes a benchmark of 750 µg/L. This value corresponds to Missouri's acute toxicity criteria for the protection of aquatic life found in 10 CSR 7.031. This value is also applied as a benchmark in EPA's Multi-Sector General Permit for facilities with one or more of the SIC codes in this permit.
- **Copper, Total Recoverable:** This permit establishes a benchmark of 21.2 µg/L. This benchmark is calculated using the acute protection of aquatic life formula established in 10 CSR 20-7.031 ( $e^{[0.9422 \cdot \ln(\text{Hardness}) - 1.700300]} \cdot 0.960$ ). Because the discharge is stormwater, and therefore of short duration, acute Water Quality Standards applied where available. A standard hardness of 162 mg/L was applied [10 CSR 20-7.031(1)(BB)]. This hardness value comes from ambient quality data gathered from gauging stations throughout the state. This pollutant is also sampled for in EPA's Multi-Sector General Permit.
- **Iron, Total Recoverable:** This permit establishes a benchmark of 1000 µg/L. This value corresponds to Missouri's chronic toxicity criteria for the protection of aquatic life found in 10 CSR 7.031. This value is also applied as a benchmark in EPA's Multi-Sector General Permit for facilities with one or more of the SIC codes in this permit.
- **Oil and Grease:** This permit establishes a benchmark of 10 mg/L, which has been determined to be feasible, affordable, and protective of water quality using best professional judgment. This value is consistently achieved in stormwater discharges by a variety of other industries with SWPPPs and is deemed protective of instream water quality. This value is also applied as a benchmark in EPA's Multi-Sector General Permit for facilities with one or more of the SIC codes in this permit.
- **pH:** pH is not to be averaged. Effluent limitation range is 6.5 – 9.0 Standard pH Units (SU) per 10 CSR 20-7.031(5)(E) and is established to protect Water Quality Standards in all receiving streams.

- **Total Suspended Solids:** This permit establishes a benchmark of 100 mg/L, which has been determined to be feasible, affordable, and protective of water quality using best professional judgment. This value is consistently achieved in stormwater discharges by a variety of other industries with SWPPPs and is deemed protective of instream water quality. This value is also applied as a benchmark in EPA's Multi-Sector General Permit for facilities with one or more of the SIC codes in this permit.
- **Zinc, Total Recoverable:** This permit establishes a benchmark of 176.7 µg/L. This benchmark is calculated using the acute protection of aquatic life formula established in 10 CSR 20-7.031 ( $e^{[0.8473 \cdot \ln(\text{Hardness}) + 0.884]} \cdot 0.98$ ). Because the discharge is stormwater, and therefore of short duration, acute Water Quality Standards applied where available. A standard hardness of 162 mg/L was applied [10 CSR 20-7.031(1)(BB)]. This hardness value comes from ambient quality data gathered from gauging stations throughout the state. This value is also applied as a benchmark in EPA's Multi-Sector General Permit for facilities with one or more of the SIC codes in this permit.

**SAMPLING FREQUENCY:**

Sampling frequency is established in accordance with department policy. Because of the variability of precipitation occurring in Missouri, it is the permit writer's best professional judgment that quarterly sampling (one sample for each season of the year) is the minimal amount of sampling necessary to obtain a representative set of data on a stormwater discharge. If no discharges occur during a sampling period, report as "no discharge."

For pollutants expressed in a daily maximum and a monthly average, only quarterly monitoring is required for these pollutants. Results from one quarterly sample may be submitted as both the daily maximum and the monthly average result. If for some reason the facility collects multiple samples during any month, the permit requires the facility to submit a monthly average.

## **Part V - Administrative Requirements**

On the basis of preliminary staff review and the application of applicable standards and regulations, the department, as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions contained herein and within the 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 or because of 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 facility must be notified of the denial in writing.

The department must give public notice of a pending permit or of a new or reissued Missouri State Operating Permit. The public comment period is a length of time not less than 30 days following the date of the public notice, during which interested persons may submit written comments about the proposed permit.

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

- The Public Notice period for this permit was from March 21, 2014, through April 21, 2014. Five letters were received during the 30 day public notice period. Three letters were received after the 30 day public notice period.

The comments from the eight letters and the departments' response to the comments are below:

#### **Comment 1:**

There are several inconsistencies regarding the applicability of benchmark values; clarification is needed.

#### **Response:**

The department has removed the inconsistencies highlighted in the comment letter and updated the wording within the permit to provide clarification on applicability of benchmark values.

#### **Comment 2:**

There is inconsistent guidance on facilities that need to conduct an Alternative Analysis of BMPs; clarification is needed.

#### **Response:**

The department appreciates this feedback. The Alternative Analysis wording was re-written to clarify Alternative Analysis requirements in the permit. Language in the permit now states "existing facilities with established SWPPPs and BMPs need not conduct an additional alternatives analysis unless new BMPs are established to address benchmark exceedances." Additional language in the factsheet now states "new facilities seeking coverage under this permit are required to develop a SWPPP that includes this analysis and documentation of appropriate BMPs. Renewal of coverage for a facility requires a review of the SWPPP to assure that the selected BMPs continue to be appropriate."

#### **Comment 3:**

The monthly inspection requirement in the permit is appropriate. The daily inspection of BMPs in the permit is excessive and should be removed from the permit.

#### **Response:**

The department agreed with this comment and the daily inspection of BMPs requirement has been removed from the permit. Monthly inspections are still required in the permit.

#### **Comment 4:**

The permit does not allow outdoor storage of oil sand and slag. Outdoor storage should be allowed, provided that appropriate BMPs are in place to control the discharge of pollutants of concern.

#### **Response:**

The department agreed with this comment and the oil sand and slag language in the permit has been modified. The permit now states "oil sands, slag, sand cores, and foundry sands may be stored in a way that leaves material exposed to precipitation if BMPs are in place that results in benchmarks being met."

Comment 5:

The extensive list of water bodies in the permit that have restrictions on stormwater discharges is overly broad and clarification is needed.

Response:

The majority of these restrictions were in the previous permit. The addition of Class W or mitigated wetlands and Class C streams is appropriate and reasonable and protects these waters against water quality degradation. No changes were made to the permit as a result of this comment.

Comment 6:

Benchmark values are too low, requiring extensive BMPs to meet the benchmarks. This could be costly. Additionally, if the facility can't meet the benchmarks, evaluating the effectiveness of the BMPs could be costly.

Response:

These benchmark values are found in Missouri State Operating Permits with similar SIC codes and in the EPA multi-sector permit and have been shown to be attainable. As a result, the department considers these benchmark values appropriate Technology-based values for the protection of water quality. No changes were made to the permit as a result of this comment.

Comment 7:

Quarterly sampling is excessive resulting in high cost to the facility.

Response:

The department believes that this type of facility has reasonable potential to impact waters of the state. Quarterly sampling is necessary and ensures seasonal variations in stormwater discharges are adequately characterized as it pertains to the ability of BMPs to meet established benchmark values. No changes were made to the permit as a result of this comment.

Comment 8:

The permit requires a sample be taken from each outfall. Facilities that have the same operations and site characteristics at multiple outfalls should be able to have a representative sample.

Response:

A Master General Permit must take into consideration conditions throughout the state of Missouri and is written in a conservative manor to encompass most scenarios and sites. Representative samples are determined on a site by site basis and is not within the scope of a Master General Permit. A site-specific permit is more of an appropriate permit for this consideration. No changes were made to the permit as a result of this comment.

**DATE OF FACT SHEET:** FEBRUARY 19, 2014

**COMPLETED BY:**

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