STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION

MISSOURI STATE OPERATING PERMIT

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

Permit No.	MO-0126322
Owner:	City of Springfield
Address:	P.O. Box 8368, Springfield, MO 65801
Continuing Authority:	City of Springfield
Address:	P.O. Box 8368, Springfield, MO 65801
Facility Name:	Springfield Municipal Separate Storm Sewer System
Facility Address:	840 Boonville Avenue, Springfield, MO 65801
Legal Description:	See Pages 2 – 3
UTM Coordinates:	See Pages 2 – 3
Receiving Stream:	See Pages 2 – 3
First Classified Stream and ID:	See Pages 2 – 3
USGS Basin & Sub-watershed No.:	See Pages 2 – 3

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

FACILITY DESCRIPTION

The City of Springfield (permittee) is the third largest city in the State of Missouri with a population of 169,176 according to the 2020 U.S. Census with an approximate area of 83 mi^2, and population density of 2,038 population/mi^2. The permittee owns and operates their Phase I Medium (based on the 1990 U.S. Census) Municipal Separate Storm Sewer System (MS4). The MS4 is comprised of man-made engineered components as well as natural systems that are designed or developed to reduce stormwater pollution runoff to the Maximum Extent Practicable within the permittee's jurisdiction. This permit also authorizes stormwater discharges from area-wide land disturbance activities conducted under the authority of the permittee.

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 Section 621.250 RSMo, Section 640.013 RSMo and Section 644.051.6 of the Law.

May 1, 2022
Effective Date

March 1, 2024
Modification Date

April 30, 2027
Expiration Date

John Hoke, Director, Water Protection Program

FACILITY DESCRIPTION (continued):

The following is a listing of representative major stormwater outfalls with the stormwater outfall's majority land use designation that discharge stormwater from the permittee's MS4 to waters of the state. For UTM Coordinates, X = easting coordinates and Y – northing coordinates. Part I of this NPDES permit covers all discharges from the permittee's outfalls for both major and non-major outfalls, unless regulated under a separate NPDES permit. Part II of this NPDES permit covers discharges for land disturbance projects performed by or under contract to the permittee, whether discharges associated with those projects are to the permittee's MS4, a third-party's MS4, or waters of the state.

OUTFALL 001 – Commercial

Legal Description	NW¼, SW¼, Sec. 7, T28N, R21W, Greene County
UTM Coordinates:	475492.49E, 4111056.65N 15S
Receiving Stream:	Ward Branch
First Classified Stream and ID:	North Fork Ward Branch (C) (3960)
USGS Basin & Sub-watershed:	110100020025

OUTFALL 002 – Commercial/Residential

Legal Description	SW¼, NE¼, Sec. 28, T29N, R22W, Greene County
UTM Coordinates:	469805.52E, 4116241.78N 15S
Receiving Stream:	Tributary to Wilsons Creek
First Classified Stream and ID:	Wilsons Creek (P) (2375) 303(d)
USGS Basin & Sub-watershed:	110100020301

OUTFALL 003 – Commercial/Residential

Legal Description	NW¼, NE¼, Sec. 18, T29N, R21W, Greene County
UTM Coordinates:	475990.18E, 4119831.30N 15S
Receiving Stream:	North Branch Jordan (C) (3960)
First Classified Stream and ID:	North Branch Jordan (C) (3960)
USGS Basin & Sub-watershed:	110100020020

OUTFALL 004 - Residential

Legal Description	SW¼, NE¼, Sec. 16, T29N, R22W, Greene County
UTM Coordinates:	469119.57E, 4119285.94N 15S
Receiving Stream:	North Branch Wilsons Creek
First Classified Stream and ID:	North Branch Wilsons Creek (P) (3811) 303(d) (Losing)
USGS Basin & Sub-watershed:	110100020301

OUTFALL 005 – Institutional/Commercial/Residential

Legal Description	SW¼, NE¼, Sec. 26, T29N, R22W, Greene County
UTM Coordinates:	473330.75E, 4116299.23N 15S
Receiving Stream:	Fassnight Creek
First Classified Stream and ID:	Fassnight Creek (P) (3370)
USGS Basin & Sub-watershed:	110100020301

OUTFALL 006 – Institutional/Commercial

Legal Description	SW¼, NW¼, Sec. 25, T29N, R22W, Greene County
UTM Coordinates:	473984.89E, 4116167.07N 15S
Receiving Stream:	Fassnight Creek
First Classified Stream and ID:	Fassnight Creek (P) (3370) (Losing)
USGS Basin & Sub-watershed:	110100020301

OUTFALL 007 – Residential

Legal Description	SW¼, NE¼, Sec. 16, T28N, R21W, Greene County
UTM Coordinates:	479076.79E, 4109646.68N 15S
Receiving Stream:	Galloway Creek
First Classified Stream and ID:	Galloway Creek (P) (3373)
USGS Basin & Sub-watershed:	110100020108

OUTFALL 008 – Industrial/Commercial

Legal Description	SE¼, NE¼, Sec. 22, T29N, R22W, Greene County
UTM Coordinates:	472266.36E, 4117867.89N 15S
Receiving Stream:	Jordan Creek
First Classified Stream and ID:	Jordan Creek (P) (3374) 303(d)
USGS Basin & Sub-watershed:	110100020301

OUTFALL 009 - Residential

Legal Description	SE¼, SE¼, Sec. 22, T29N, R22W, Greene County
UTM Coordinates:	471931.18E; 4116952.37N 15S
Receiving Stream:	Jordan Creek
First Classified Stream and ID:	Jordan Creek (P) (3374) 303(d)
USGS Basin & Sub-watershed:	110100020301

OUTFALL 010 - Residential

Legal Description	SW¼, NE¼, Sec. 02, T28N, R22W, Greene County
UTM Coordinates:	472532.66E, 4113380.3N 15S
Receiving Stream:	South Creek (Losing)
First Classified Stream and ID:	South Creek (P) (3369)
USGS Basin & Sub-watershed:	110100020301

PART I. MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PERMIT CONDITIONS

A. COVERAGE, AUTHORIZATION AND RESTRICTIONS

1. This National Pollution Discharge Elimination System (NPDES) permit authorizes stormwater discharge from the City of Springfield's (permittee) designated Phase I Municipal Separate Storm Sewer System (MS4) from stormwater outfalls located in or originating within the permittee's corporate boundary and owned and operated by the permittee to waters of the state.

2. The following non-stormwater discharges are authorized by this permit provided they are not identified by either the permittee or the Missouri Department of Natural Resources (department) as contributing significant amounts of pollutants to waters of the state. The permittee shall incorporate appropriate control measures in the Stormwater Management Program if any of the non-stormwater discharges listed below are identified as significant sources of pollutants.
   a. Water line and fire hydrant flushing;
   b. Landscape irrigation;
   c. Rising ground water;
   d. Uncontaminated ground water infiltration;
   e. Uncontaminated pumped ground water;
   f. Potable water sources;
   g. Foundation drains;
   h. Air conditioning condensate;
   i. Springs;
   j. Water from crawl space pumps;
   k. Footing drains;
   l. Lawn watering;
   m. Flows from riparian habitats and wetlands;
   n. Street wash water;
   o. Emergency fire-fighting activities;
   p. Individual residential car washing;
   q. Dechlorinated residential swimming pools.

3. This permit does not authorize non-stormwater discharges except where such discharges are:
   a. In compliance with a separate NPDES permit, or
   b. Identified by and in compliance with Part I, Section A.2 and Part II Section A.4 of this permit.

4. This permit does not serve as coverage for facilities or activities that require a separate NPDES permit.

5. In the event the regulated MS4 has an oil water separator which is used to exclusively treat stormwater; this permit authorizes the operation of oil water separators solely for the treatment of stormwater. The oil water separators must be appropriately operated and sized per manufacturer's or engineering specifications. The specifications and operating records must be made accessible to department staff upon request. Oil water separator sludge is considered used oil; sludge must be disposed of in accordance with 10 CSR 25-11.279.

6. This permit does not affect, remove, or replace any requirement of the Endangered Species Act; the National Historic Preservation Act; the Comprehensive Environmental Response, Compensation and Liability Act; or the Resource Conservation and Recovery Act. Determination of applicability to the above mentioned acts is the responsibility of the permittee. Additionally, this permit does not establish terms and conditions for runoff resulting from silvicultural activities listed in Section 402(l)(3)(a) of the Clean Water Act.

7. This permit does not transfer liability for a spill from the entity or entities responsible for the spill to the permittee or relieve the entity or entities responsible for a spill from applicable federal, state, or local requirements.

B. SPECIAL CONDITIONS

1. The permittee shall implement control measures and other management practices to reduce pollutants in stormwater discharge to the Maximum Extent Practicable (MEP) from the MS4 to waters of the state for the goal of attainment with Missouri's water quality standards. As part of the application, the permittee shall submit their written Stormwater Management Plan (SWMP) including any implementation schedules and items listed in parts D and Part E of this operating permit.

2. The permittee shall implement and enforce a comprehensive Stormwater Management Program per the requirements listed in this operating permit in accordance with the federal Clean Water Act (CWA) §402(p)(3)(B)(iii), appropriate federal regulations under 40 CFR 122.26, and with the Missouri Clean Water Law §644, RSMo, and its implementing regulations under 10 CSR 20-6.200.

3. The permittee shall ensure they have adequate legal authority via established or subsequently established statute, ordinance, contract(s), or other regulatory mechanisms consistent with federal and state regulations to provide full implementation of their Stormwater Management Program per Part I, Section D – STORMWATER MANAGEMENT PROGRAM, and other terms and conditions of this operating permit.

4. The full implementation of this operating permit and the department-approved SWMP, which includes implementation schedules developed by the permittee, shall constitute compliance with all applicable federal and state statutes and regulations in accordance with §644.051.16, RSMo, and the CWA section 402(k). However, the permit may be reopened and modified, or alternatively revoked and reissued, to ensure corrective action(s) are being implemented to reduce the discharge of pollutants to the MEP if the department determines that the permittee is causing or creating significant exceedances of Missouri's Water Quality Standards. If such action is determined appropriate by the department, a notification will be given to the permittee at a minimum of 30 days prior to the action being conducted.

5. Integrated Planning: It is the intent of both the permittee and the department that this permit does not constrain the permittee's efforts on identifying affordable and cost-effective solutions to address the most significant sources of pollution in accordance with the permittee's Integrated Plan, which prioritizes investments based on problem significance, community priorities, solution effectiveness, and affordability.

6. A Qualifying Local Program (QLP) is a formal recognition that a regulated MS4 has a department-approved local sediment and erosion control program that meets or exceeds the requirements listed in 10 CSR 20-6.200(7)(B) for construction and land disturbance activities occurring within the regulated MS4's jurisdiction. While a regulated MS4 has an approved QLP, construction and land disturbance activities in its jurisdiction for which the regulated MS4 has issued a land disturbance or equivalent permit do not require an NPDES operating permit from the Department. The City of Springfield is recognized as having a department-approved QLP. For construction site stormwater/land disturbance activities located within the authorized area of Springfield's MS4, a construction site operators' compliance with the local requirements for construction site stormwater and land disturbance and the Springfield-issued permit(s) constitutes compliance with Missouri's NPDES requirements per 40 CFR 122.44(s) and 10 CSR 20-6.200(7) for the discharge of stormwater.

C. TOTAL MAXIMUM DAILY LOAD

1. The permittee shall develop a Total Maximum Daily Load (TMDL) Assumptions and Requirements Attainment Plan (ARAP) if any area of the MS4 is identified in an EPA-approved or established TMDL with an applicable Wasteload Allocation (WLA). The permittee shall implement steps toward attainment of applicable WLA in accordance with 40 CFR 122.44(k)(2) and (3) as implemented through this permit. The TMDL ARAP shall be incorporated into the SWMP and include, at a minimum, the following:
   a. A process to identify potential sources of the pollutant(s), actions to be taken to address those sources within the permittee's MS4 discharging to the waterbody of concern, a prioritization of those actions, and a schedule including beginning and ending milestones by month and year. The schedule for the implementation of the TMDL ARAP is not limited to the term of this operating permit (i.e., 5 years) as attainment can take years or even multiple permit terms.
   b. Best Management Practices (BMPs) developed or designed with a purpose of reducing the pollutant(s) of concern. Each BMP shall contain a description of the BMP, the purpose of the BMP, and the expected result of the BMP.

c. Measurable goals shall be established for each BMP or group of BMPs. Each measurable goal shall contain a statement clearly indicating how it will determine the appropriateness of identified BMPs and progress toward the expected results of the BMP. Measurable goals shall be quantifiable; however, if it is not feasible to utilize a measurable goal that is quantifiable, then the permittee shall provide justification why utilizing a measurable goal is infeasible. If applicable, measurable goals shall also utilize interim and completion milestone dates, and a periodic frequency of measurement to document progress. It is recommended that interim and final milestone dates are established with a format of month and year. If the format of month and year cannot be utilized, the permittee shall ensure that schedules have the minimum format of 1st, 2nd, 3rd, 4th, and 5th year of the operating permit.
d. An iterative process to be utilized by the permittee that determines if the BMP is ineffective, the plan to address ineffective BMPs, and the general process used to replace or revise ineffective BMPs.

2. If the permittee is subject to Part I, Section C of this permit, then the permittee shall draft and submit the TMDL ARAP to the department as soon as practicable but no later than 30 months after the date EPA approves or establishes the TMDL or 30 months after the effective date of this operating permit, whichever is later. The initial TMDL ARAP is to be submitted to the department's Water Protection Program, MS4 Team at MS4@dnr.mo.gov or P.O. Box 176, Jefferson City, MO 65102. All other revisions are to be included in the permittee's Annual Report.

3. If the department approves the TMDL ARAP, it will be presumed that the TMDL ARAP is affordable by the permittee. However, if the department disapproves the TMDL ARAP and requires any additional or different controls or expenses, the department will conduct an affordability analysis in support of the disapproval unless waived by the permittee.

4. The deadline for the TMDL ARAP may be extended by request of the permittee and with written approval by the department.

5. If the TMDL ARAP has been submitted to the department but has not received approval, then the permittee is not required to implement any action listed in their TMDL ARAP and shall notify the department of this in their Annual Report.

6. If the permittee has received department approval, the permittee shall implement their TMDL ARAP in accordance to schedules established in the TMDL ARAP. Implementation of all TMDL ARAP control measures shall be documented and retained by the permittee with the permittee's SWMP, and made available to the department or EPA upon request.

7. If the permittee has an approved TMDL ARAP, then the permittee shall provide a summary of the controls that list the BMPs, the expected result of the BMPs, how the measurable goals are utilized to document the effectiveness of the BMPs, and the status of the measurable goals in the permittee's Annual Report.

8. The permittee may demonstrate that no additional controls are needed beyond the successful implementation of the minimum control measures (MCMs) listed in Part I, Section E MINIMUM CONTROL MEASURES of this permit, which includes modifications to BMPs or measurable goals, for the goal of attainment with the TMDL's assumptions and requirements. The demonstration is subject to department approval. If the permittee is to provide a demonstration that no additional controls are needed, they shall contact the Water Protection Program's MS4 Team to begin the process.

9. The permittee may submit an Integrated Plan as an approach for the implementation of the TMDL's assumptions and requirements. Review and rating of the portion of an Integrated Plan specific to the TMDL's assumptions and requirements is subject to the same requirements as the TMDL ARAP.

10. The permittee may revise their approved TMDL ARAP, and if revised, the permittee shall provide written notification to the department for substantive revisions. Substantive revisions are as follows:
a. Addition of new components, controls, or requirements to the TMDL ARAP;
b. Replacing or modifying ineffective or unfeasible BMPs or measurable goals in accordance to the permittee's iterative process;
c. Replacing or modifying time schedules;
d. Modifying the iterative process; and
e. Other rationales as determined appropriate by the permittee.

11. If the TMDL ARAP is revised in accordance with item 10 of this part, then the department shall review and rate the revised TMDL ARAP in accordance with item 3 of this part.

12. Exemptions to Part C:
a. If the EPA-approved or established TMDL indicates that this permittee does not cause or contribute to the impairment addressed by the TMDL, then the permittee is not required to develop and implement any action contained in Part C of this permit.
b. If the permittee is already subject to an existing TMDL and is under an existing agreement (e.g., Settlement Agreement, Abatement Order, etc.) with the department to address the TMDL's assumption and requirements, then the permittee is not required to develop and implement any action contain in Part C of this permit.

i. If such an agreement exists, then the permittee shall submit the status of implementation to the department with the Annual Report.

D. STORMWATER MANAGEMENT PROGRAM

1. The permittee shall implement a Stormwater Management Program and document the following terms and conditions in their SWMP for each of the MCMs located in Part I, Section E – MINIMUM CONTROL MEASURES:
   a. BMPs developed or designed with a purpose of reducing stormwater pollution. Each BMP shall contain a description of the BMP and the purpose or expected result of the BMP;
   b. Measurable goals shall be established for each BMP or in conjunction of multiple BMPs. Each measurable goal shall contain a statement clearly indicating how it will be established to determine the appropriateness of identified BMPs and progress toward the expected results of the BMP. Measurable goals shall be quantifiable unless it is not feasible to quantify. If the measurable goal is not to be quantifiable, then the permittee shall provide justification why it is not feasible to have a quantifiable measurable goal. If applicable, measurable goals shall also utilize interim and completion milestone dates, and a periodic frequency of measurement to document progress. It is recommended that interim and final milestone dates are established with a format of month and year. If the format of month and year cannot be utilized, the permittee shall ensure that schedules have the minimum format of 1st, 2nd, 3rd, 4th, and 5th year of the operating permit;
   c. The person(s) primarily responsible for the SWMP or for each MCM;
   d. An iterative process to be utilized by the permittee that documents how each BMP is evaluated and subject to replacement or modification. The permittee shall apply reasonable further progress by replacing or modifying ineffective BMPs with effective BMPs.

2. The permittee's SWMP shall be reviewed and rated by the department to ensure that the SWMP is implementing the terms and conditions of this permit, the applicable federal and state stormwater regulations, and Section §402(p)(3)(B)(iii) of the Clean Water Act. If the SWMP is approved by the department, it will be presumed affordable by the permittee. If the SWMP is found unsatisfactory by the department and requires any additional or different controls or expenses, the department shall conduct an affordability analysis in support of the unsatisfactory rating unless waived by the permittee. If approved, the SWMP submitted as part of the application for permit renewal shall become effective upon issuance of this permit.

3. The permittee may revise their SWMP during the life of this permit. All substantive revisions shall require written notification by the permittee to the department's MS4 Team as a stand-alone notification or included in the permittee's Annual Report. Substantive revisions are as follows:

   a. Addition of new components, controls, or requirements to the SWMP;
   b. Replacing or modifying ineffective or unfeasible BMPs or measurable goal in accordance to the permittee's iterative process;
   c. Replacing or modifying time schedules;
   d. Modifying the iterative process;
   e. The addition or removal of jurisdictional areas;
   f. Contact names per item 1.c of this part; and
   g. Other rationales as determined appropriate by the permittee.

4. If the SWMP is revised in accordance with item 3 of this part, then the department may review and rate the revised SWMP in accordance with item 2 of this part.

5. The permittee shall implement the Stormwater Management Program on all areas added to their jurisdiction as expeditiously as practicable, but no later than three (3) years from the addition of the new areas. If the full implementation of the Stormwater Management Program will not be completed within one (1) year of an area being added, then the permittee is required to submit status reports with their MS4 Annual Report.

E. MINIMUM CONTROL MEASURES (MCMs)

1. ***Public Education and Outreach of Stormwater Impacts***
   a. The permittee shall implement a public education and outreach program to inform the public about the impacts of stormwater discharges on waterbodies and steps the public can take to reduce pollutants in stormwater runoff. As part of the SWMP, the program shall include the following, at a minimum:
      i. A description of how the public is targeted based on the specific group's potential to have significant stormwater impacts;
      ii. A list of pollutants the program is developed to address, including at a minimum:
         1. Pollutants associated with the application of pesticides, herbicides, and fertilizers; and
         2. Pollutants associated with the management and disposal of used oil and toxic materials.
      iii. A description of education and outreach activities and materials specific to targeted audiences and pollutants;
      iv. A description of a program to promote, publicize, and facilitate public reporting of the presence of illicit discharges or water quality impacts associated with discharges from the MS4.

2. ***Public Involvement and Participation***
   a. The permittee shall implement a public involvement/participation program that shall at a minimum, include the following:
      i. Opportunities for public involvement in the development of the permittee's Stormwater Management Program, including a public comment period for the SWMP document and renewal application; and
      ii. Opportunities for public participation in implementation activities, such as volunteer stream clean-up events.

3. ***Illicit Discharge Detection and Elimination***
   a. The permittee shall develop, implement, and enforce a program to detect and eliminate illicit discharges, as defined in 10 CSR 20-6.200(1)I7, into the permittee's MS4. As part of the SWMP, the permittee's illicit discharge detection and elimination program shall include the following at a minimum to the extent allowable under state or local law:
      i. A storm sewer map showing the locations of all constructed outfalls and the names and locations of all receiving waters of the state that receive discharges from the permittee's MS4. The permittee shall describe the source of information they used for the map(s), and how the permittee plans to verify the outfall locations with field survey or field screening points. The permittee shall describe how the map was developed and how the map is regularly updated. The permittee shall make the map and map information available to the department upon request;
      ii. A plan to prohibit through ordinance, orders, or similar means illicit discharges into the permittee's MS4 and implement appropriate enforcement procedures and actions.
      iii. Inspection and investigation procedures for detecting and eliminating illicit discharges;
      iv. A program to conduct field screening at field screening points or major outfalls with the purpose of finding and eliminating illicit discharges and illegal dumping. The program shall include the following:
         1. A description of areas or locations that will be evaluated by field screening, including a description of how locations are established;
         2. A description of the number of locations that will be screened annually and how locations will be selected;
         3. A description of field screening procedures, including recording of visual observations and testing or sampling if flow is observed;
      v. Procedures to prevent, contain, and respond to spills that discharge or have potential to discharge into the MS4; and
      vi. A description of controls to limit infiltration of seepage from municipal sanitary sewers to the permittee's MS4.

4. ***Construction Site Stormwater Runoff Control***
   a. The permittee shall develop, implement, and enforce a program to reduce pollutants in stormwater runoff to their MS4 from construction activities on land disturbances sites that disturb one or more acres or disturb less than one acre when part of a larger common plan of development or sale that will disturb a cumulative total of one or more acres over the life of the project. As part of the SWMP, this program shall include the development and implementation of the following:
      i. Ordinances, orders, or similar means to require entities conducting land disturbance activities in accordance with Section E.4.a of this part to implement and maintain erosion and sediment control BMPs at construction sites, including sanctions designed to ensure compliance to the extent allowable under state or local law;
      ii. Requirements for construction site operators to control construction site waste that may cause adverse impacts to water quality, such as discarded building material, concrete truck washout, chemicals, litter, and sanitary waste;
      iii. Procedures for the permittee to review all construction site stormwater pollution prevention plans for sites one acre or greater;
      iv. Procedures for the permittee to receive and respond to public reporting of the discharge of pollutants from construction sites in coordination with the permittee's public education and outreach program;
      v. Procedures for the permittee to inspect construction sites and enforce control measures, including prioritization of site inspections;
      vi. A plan designed to ensure compliance with the permittee's erosion and sediment control ordinances, orders, or similar means, including sanctions and enforcement mechanisms the permittee will use to ensure compliance and procedures for when certain sanctions will be used. Possible sanctions include non-monetary penalties (such as stop work orders), fines, bonding requirements, and/or permit denials for non-compliance; and
      vii. A description of appropriate educational and training measures for construction site operators.

5. ***Post-Construction Stormwater Management in New Development and Redevelopment***
   a. The permittee shall develop, implement, and enforce a program to address the quality of long-term stormwater runoff from new development and redevelopment projects that disturb one or more acres or disturb less than one acre when part of a larger common plan of development or sale that will disturb a cumulative total of one or more acres over the life of the project. This program shall ensure that stormwater controls are in place that have been designed and implemented to prevent or minimize water quality impacts. This program, at a minimum, shall include:
      i. Ordinances or other regulatory mechanisms to address post-construction runoff from new development and redevelopment projects to the extent allowable under state or local law. The permittee shall include a copy of the relevant sections within the SWMP;
      ii. A plan to ensure adequate long-term operation and maintenance of selected BMPs, including types of agreements between the permittee and other parties (e.g., post-development landowners, regional authorities, etc.);

iii. Strategies developed with the purpose to minimize water quality impacts, minimize the creation of stormwater pollution, and/or utilize BMPs that remove or reduce stormwater pollution that include a combination of structural and/or non-structural BMPs appropriate for the permittee's community. In developing these strategies, the permittee shall consider:
   1. The assessment of site characteristics at the beginning of the development design phase to ensure adequate planning for stormwater program compliance;
   2. The development and implementation of a stormwater design criteria manual to contain standard sustainable site design criteria and BMP selection and design criteria to reduce water quality impacts;
   3. Buffer criteria for streams, karst topography, and other environmentally sensitive areas (e.g., wetlands, floodplains, etc.);
   4. Provisions for preservation of undisturbed natural areas, trees, and steep slopes, when feasible; and
   5. The development of floodplain management controls to minimize pollution with floodplain management controls.

iv. Inspect or require the inspection of post-construction BMPs that function to remove or reduce pollution of stormwater and ensure that all BMPs are implemented and effective.

6. ***Pollution Prevention and Good Housekeeping for Municipal Operations***

a. The permittee shall develop and implement an operation and maintenance program for municipal operations owned or operated by the permittee. This program shall, at a minimum, include the following:

i. An employee training program to prevent and reduce stormwater pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance. The permittee shall describe any existing, available material the permittee plans to use, such as those available from EPA, the state, or other organizations. The permittee shall describe how this plan will coordinate with all other MCMs, monitoring, and TMDL implementations where applicable;

ii. A list of all municipal operations that are impacted by this operation and maintenance program. The permittee shall also include a list of industrial facilities that the permittee owns or operates that are subject to NDPES permits for discharges of stormwater associated with industrial activity that discharge to the permittee's MS4. The permittee shall include the permit number or a copy of the No Exposure Exemption Certification (if applicable) for each facility. NPDES permitted facilities not owned or operated by the permittee are not required to be part of the list;

iii. Maintenance BMPs, maintenance schedules, and long-term inspection procedures for structural controls to reduce floatables and other pollutants in discharges from the MS4;

iv. Controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, and salt/sand storage locations and snow disposal areas the permittee operates. The permittee shall, at a minimum, conduct the following:
   1. Store and cover deicing chemicals and implement deicing practices to reduce the discharge of pollutants to the MS4;
   2. Street sweepings or similar activities on all curb and gutter streets, and ensure the proper disposal of the street sweepings;
   3. Street design, construction, and maintenance practices that reduce the discharge of pollutants to the MS4; and
   4. Routinely clean grated inlets, roadway stormwater inlets, and catch basins;

v. Storage of all paints, solvents, petroleum products, and petroleum waste products (except fuels) under the control of the permittee shall not be exposed to stormwater. Sufficient practices of spill prevention, control, and/or management shall be provided 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 also prevent the contamination of groundwater.

vi. A plan to reduce pollutants in discharges from the permittee's MS4 associated with the application of pesticides, herbicides, and fertilizers. The plan shall include controls such as educational activities, permits, certifications, and other measures determined appropriate by the permittee for commercial applicators and distributors and controls for application in public right-of-way and at municipal facilities.

7. ***Industrial and High Risk Runoff***

a. The permittee shall implement a program to monitor and control pollutants in stormwater discharges to the MS4 from industrial and high risk runoff facilities. The program shall include, at a minimum, the following:

i. Identify all of the activities below that discharge into the MS4:
   1. Municipal landfills;
   2. Hazardous waste treatment, storage, and disposal facilities;
   3. Industries subject to reporting requirements pursuant to Title III Section 313 of the Superfund Amendments and Reauthorization Act of 1986; and
   4. Industrial facilities that the permittee determines are contributing a substantial loading of pollutants to the MS4.

ii. Identify priorities and procedures for inspections and establishing and enforcing control measures for such discharges; and

iii. A monitoring program for stormwater discharges associated with the facilities listed under items 7.a.i 1-4.

8. ***Flood Control Projects***
   a. The permittee shall consider the impacts on the water quality, including adverse physical and hydrological changes, of receiving water bodies in the design of new flood management projects, consider controls that can be used to minimize impacts, and provide a description of procedures; and
   b. The permittee shall evaluate existing structural flood control devices to determine if retrofitting the device to provide additional pollutant removal from stormwater is feasible. The permittee shall establish a schedule for implementing retrofits of flood control devices owned and operated by the permittee that have been determined to be feasible.

9. ***Monitoring***
   a. Representative monitoring shall be conducted by the permittee on representative outfalls, internal sampling stations, or instream monitoring locations with the purpose of characterizing the quality of stormwater discharging from the permittee's MS4. The monitoring program shall include the following:
      i. Stormwater samples shall be collected from stormwater discharges from three (3) storm events annually occurring at least one (1) month apart;
      ii. The permittee shall conduct storm event representative sampling at a minimum of six separate locations to be described in the permittee's SWMP. The department may allow changes to the monitoring locations upon notification to the department by the permittee in accordance with Part D, item 3 of this permit;
      iii. Parameters to be sampled shall include the following at a minimum. The department may allow changes to the parameters upon notification by the permittee in accordance with Part D, item 3 of this permit:
         1. Total Suspended Solids;
         2. Specific Conductivity;
         3. Chemical Oxygen Demand;
         4. Biochemical Oxygen Demand;
         5. Oil and Grease;
         6. E. coli;
         7. pH;
         8. Total Kjeldahl Nitrogen;
         9. Nitrate + Nitrite;
         10. Dissolved Phosphorus;
         11. Total Phosphorus; and
         12. Additional limited quantitative data required by the department for determining permit conditions. The department may also request additional parameters along with sampling conditions, such as locations, season of sample collection, form of precipitation, and other parameters to ensure representativeness. If the department requires additional parameters to be provided, then the department will submit an official written request at least one year prior to the expiration date of this permit.
         13. Storm event data records shall be maintained of all analytical results, the date and duration (in hours) of the storm event(s) sampled, rainfall measurements or estimates (in inches) of the storm event which generated the runoff that was sampled, and the duration (in hours) between the storm event(s) sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event.
   b. Biological Assessments. The permittee shall continue to conduct macroinvertebrate assessments of two urban streams for a minimum of one year during the life of this permit. Assessments shall be conducted twice within the same year (fall and spring), using the department's protocol. Consult with department staff at the Environmental Services Program for updated protocol on biological assessments and data reviews. The streams that are candidates for assessments and a rationale for the selection of two streams for assessments shall be included in the SWMP. The results of the assessments shall be included in the annual report.
   c. Analysis and collection of samples shall be conducted in accordance with methods specified in 40 CFR 136. Where an approved Part 136 method does not exist, any available method may be used unless a particular method or criteria for method sections (such as sensitivity) has been specified in this permit.

F. REPORTING AND RECORDKEEPING

1. The permittee shall submit an annual report to the department by October [2]8th of each year. The report shall cover the permittee's fiscal year (July 1 – June 30) and be submitted the immediate following October. Depending on permit issuance, the first report required by this permit may be partial. The report shall:
   a. Provide a list of names and contact information for staff who ensure the successful implementation for each MCM;
   b. Provide a general summary of each MCM. The summary shall include:
      i. Overall compliance with permit conditions and SWMP;
      ii. List of BMPs used to implement the MCM;
      iii. A description of assessment used to determine the appropriateness of the BMPs;
      iv. A description of the iterative process used to replace or modify any BMP or measurable goal, if applicable;
      v. Status of the Measurable Goals for each BMP or the completion date for any measurable goal completed during the reporting period;

vi. An explanation for any measurable goal scheduled for completion during the reporting period that was not completed. Any modified goals or deadlines shall be listed;
vii. A brief summary of stormwater activities planned for the next reporting cycle and implementation schedule, if feasible;
viii. Any planned changes to the Stormwater Management Program or SWMP document, which may include any changes to the MCMs including changes to BMPs, measurable goals, or the iterative process;
ix. Summary of monitoring required by this permit by their specific MCM, which shall include a justification for any required monitoring that was not completed. The monitoring results shall be reported in a table format with the analytical result. The summary shall also include a general discussion of the results with respect to MEP and, if applicable, TMDL parameters; and
x. A summary of the permittee's TMDL ARAP, if applicable.

2. The permittee shall retain records of any monitoring information used to complete their renewal application for this operating permit, implementation of any part of this operating permit, and implementation of any part of the permittee's SWMP for a period of at least three (3) years from the date of the sample, measurement, or analysis. This period may be extended by official request from the department at any time. Monitoring data shall include, if applicable, the below information:
   a. All calibrations and maintenance records;
   b. All original strip chart recordings for continuous monitoring instrumentation;
   c. The date, location, and time of sampling or measurement;
   d. The individual(s) who performed the sampling or measurement;
   e. The date(s) analyses were performed;
   f. The individual(s) who performed the analyses;
   g. The analytical technique or method used; and
   h. The results of such analyses.

3. The permittee shall retain records of all activities requiring recordkeeping by the SWMP, a copy of the NPDES permit, a copy of all ordinances, policies, and formal procedures for all MCMs and records of all data used to complete the renewal application for this period for a period of at least three (3) years from the date of the report or renewal application. This period may be extended by official request of the department at any time.

4. The permittee shall retain the most recent version of their SWMP at a reasonable location accessible to the department.

5. The permittee shall submit the items under this part of this permit, including a copy of the permit, SWMP, or application upon written request by the public.

G. APPLICATION REQUIREMENTS FOR RENEWAL OF MS4 OPERATING PERMIT

1. The permittee shall submit an application for renewal of permit at least 180 days prior to the expiration date of this permit to the department's MS4 permitting coordinator. The permittee shall provide the following information, at a minimum, in their application for renewal:
   a. Name and mailing address of the permittee;
   b. Name(s), address, telephone number, and email address of the permittee's main contact for their MS4 program or for each MCM;
   c. General description of the permittee's activities that subject the permittee to MS4 requirements;
   d. Proposed, if any, program modifications and justification for changes to BMPs, measurable goals, or the iterative process required under the SWMP or MCMs;
   e. Proposed, if any, modification and justification for changes to activities the permittee is conducting toward attainment of applicable WLA under EPA established or approved TMDLs;
   f. Map(s) and locational data for all stormwater outfalls from the permittee's MS4 to waters of the state. Maps and locational data shall be divided into new stormwater outfalls, if applicable, and existing stormwater outfalls and list the receiving stream;
   g. Map(s) documenting service or jurisdictional boundary of the MS4, projected changes in land use, population densities, or projected future growth;
   h. If any entity, which includes co-permittees or other governmental agencies, are implementing or conducting activities to satisfy the terms and conditions of the permit or SWMP. If applicable, the permittee shall submit:
      i. Name and mailing address of the outside entity;
      ii. Name(s), address, telephone number and email address of the person(s) conducting the activities for the outside entity or co-permittee; and
      iii. Description of what the outside entity or co-permittee is conducting in satisfaction of the permit or SWMP;
   i. The permittee proposed SWMP including TMDL implementation; and
   j. A description of any service or jurisdictional area expansion subject to the permittee's Stormwater Management Program. The change in area can be documented via the map under this part, section 1.g above but must be clearly labeled.

2. If the department creates and approves an application form for renewal for Phase I MS4s, then the permittee will complete and submit the renewal application form in satisfaction of this part, item 1 of this permit. If the renewal application form for Phase I MS4s permits is not completed and approved by the department within four years of the effective date of this permit, then the permittee is not required to use the renewal application form; however, the permittee may volunteer to use the renewal application, which will suffice for Part G of this operating permit.

PART II. AREA-WIDE LAND DISTURBANCE STORMWATER PERMIT CONDITIONS

A. COVERAGE AND AUTHORIZED DISCHARGES

1. The area-wide land disturbance program is for land disturbance projects performed by or under contract to the permittee, whether discharges associated with those projects are to the permittee's MS4, a third-party MS4, or waters of the state. The requirements of Part II are for the City's construction sites, not the City's MS4 stormwater program.

2. This permit authorizes the discharge of stormwater and certain non-stormwater discharges from land disturbance sites that disturb one or more acres or disturb less than one acre when part of a larger common plan of development or sale that will disturb a cumulative total of one or more acres over the life of the project.

3. This permit authorizes stormwater discharges from land disturbance support activities (e.g., equipment staging yards, material storage areas, excavated material disposal areas, borrow areas, concrete, or asphalt batch plants) provided appropriate stormwater controls are designed, installed, and maintained and the following conditions are met and addressed in the Stormwater Pollution Prevention Plan (SWPPP). The permittee is responsible for compliance with this permit for any stormwater discharges from construction support activity.
   a. The support activity is directly related to the construction site required to have permit coverage for stormwater discharges;
   b. The support activity is not a commercial operation;
   c. The support activity does not continue to operate beyond the completion of the construction activity at the project it supports;
   d. The support activity is stormwater discharges and certain non-stormwater discharges authorized in A.4. Support activities which discharge process water shall apply for separate coverage. For example, a concrete batch plant discharging process water shall be covered under a MOG49.

4. This permit authorizes non-stormwater discharges as listed in Part 1 Section A.2. This permit also authorizes non-stormwater discharges from the following activities provided that these discharges are treated by appropriate BMPs and addressed in the permittee's specific SWPPP required by this permit, where applicable:
   a. Water used to control dust;
   b. Pavement wash waters associated with permitted land disturbance activity, provided spills or leaks of toxic or hazardous substances have not occurred (unless all spill material has been removed) and where soaps, solvents, and detergents are not used. (Directing pavement wash waters directly into any water of the state, storm inlet, or stormwater conveyance, unless the conveyance is connected to an effective control or BMP, is prohibited); and
   c. Dewatering activities if, to the best of the permittee's knowledge, there are no contaminants other than sediment present in the discharge, and the discharge is treated by appropriate BM.

B. PERMIT RESTRICTIONS AND LIMITATION.

1. Any non-stormwater discharges, discharged from any site covered by Part II of this permit, other than those explicitly authorized in Part I, Section A.2 and Part II, Section A.4 of this permit are prohibited under this permit.

2. This permit does not authorize the discharge of process wastewaters, treated or otherwise, including water used to wash machinery, equipment, buildings, or wastewater from washout of concrete.

3. This permit does not authorize the placement of fill material into any stream or wetland, alteration of a stream channel, or obstruction of stream flow unless the appropriate Clean Water Act (CWA) Section 404 permitting authority provides approval for such actions or determines such actions are exempt from Section 404 jurisdiction. Additionally, this permit does not authorize placement of fill in floodplains unless approved or determined exempt by appropriate federal and/or state floodplain development authorities.

C. EXEMPTIONS

1. The following activities are exempt from Area-Wide Land Disturbance Stormwater Requirements of this permit:
   a. Facilities that discharge all stormwater runoff directly to a combined sewer system;
   b. Land disturbance activities that disturb less than one (1) acre of total land area which are not part of a common plan or sale where water quality standards are not exceeded are exempt from department stormwater permit requirements.

c. Linear, strip, or ribbon construction or maintenance operations meeting one (1) of the following criteria are exempt from department stormwater permit requirements:
   i. Grading of existing dirt or gravel roads which does not increase the runoff coefficient and the addition of an impermeable surface over an existing dirt or gravel road;
   ii. Cleaning or routine maintenance of roadside ditches, sewers, waterlines, pipelines, utility lines, or similar facilities;
   iii. Trenches two (2) feet in width or less; or
   iv. Emergency repair or replacement of existing facilities as long as BMPs are employed during the emergency repair.
d. Oil and gas related activities as listed in 40 CFR 122.26(a)(2)(ii);
e. Land disturbances covered under a separate Missouri State Operating Permit.

D. REQUIREMENTS

1. This area-wide land disturbance program is to ensure the design, installation, and maintenance of effective erosion and sediment controls to minimize the discharge of pollutants by:
   a. Controlling stormwater volume and velocity within the site to minimize soil erosion and pollutant discharges;
   b. Controlling stormwater discharges, including both peak flow rates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and stream bank erosion and scour in the immediate vicinity of discharge points;
   c. Minimizing the amount of soil exposed during construction activity;
   d. Minimizing the disturbance of steep slopes;
   e. Addressing factors such as the amount, frequency, intensity, and duration of precipitation; the nature of resulting stormwater runoff; and soil characteristics, including the range of soil particle size expected to be present on the site to minimize sediment discharges from the site;
   f. Providing and maintaining natural buffers around surface waters as detailed below in F.7.
   g. Directing stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration and filtering, unless infeasible;
   h. Minimizing soil compaction and reserve topsoil where practicable; and
   i. Capture or treat a 2-year, 24-hour storm event. This is not applicable to in-stream projects covered by a CWA Section 404 Permit.

2. A 2-year, 24-hour storm event shall be determined for the project location using the National Oceanic and Atmospheric Administration's National Weather Service Atlas 14 which can be located at https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html.

3. Each site shall post a copy of the public notification sign in a location that is visible to the public. The sign must remain posted at the site until the construction activity at that site has achieved final stabilization.

E. STORMWATER POLLUTION PREVENTION PLAN (SWPPP) MANAGEMENT

1. The primary requirement of this part of the permit is the development and implementation of a SWPPP which incorporates site specific practices to best minimize the soil exposure, soil erosion, and the discharge of pollutants, including solids for each site covered under this permit.

   The purpose of the SWPPP is to ensure the design, implementation, management, and maintenance of BMPs in order to prevent sediment and other pollutants in stormwater discharges associated with the land disturbance activities [40 CFR 122.44 (k)(4)] from entering waters of the state above established general and narrative criteria; compliance with Missouri Water Quality Standards; and compliance with the terms and conditions of this permit.
   a. **The SWPPP must be developed and implemented prior to conducting any land disturbance activities and must be specific to the land disturbance activities at the site.**
   b. The permittee shall fully implement the provisions of the SWPPP required under this permit as a condition of this permit throughout the term of the land disturbance project.
   c. The SWPPP is a living document and shall be updated any time site conditions warrant adjustments to the project or BMPs.
   d. Either an electronic copy or a paper copy of the SWPPP, and any required reports, must be accessible to anyone on-site at all times when land disturbance operations are in process or other operational activities that may affect the maintenance or integrity of the BMP structures and made available as specified under Part III. Section A, Condition 2 of this permit. The SWPPP shall be readily available upon request and should not be sent to the department unless specifically requested.

2. A SWPPP must be developed, implemented, and maintained at the site or electronically accessible by on-site personnel. Failure to implement and maintain the BMPs chosen, which can be revised and updated, is a permit violation. The chosen BMPs will be the most reasonable and cost effective while also ensuring the highest quality water discharged attainable for the facility. Facilities with established SWPPPs and BMPs shall evaluate BMPs on a regular basis and change the BMPs as needed if there are BMP deficiencies.

3. The SWPPP must:
   a. List and describe the location of all outfalls;
   b. List any allowable non-stormwater discharges occurring on site and where these discharges occur;

c. Incorporate required practices identified below;
d. Incorporate sediment and erosion control practices specific to site conditions;
e. Discuss whether or not a CWA Section 404 Permit is required for the project;
f. Discuss whether the discharges are in the watershed of a water impaired for sediment;
g. Name the person(s) responsible for inspection, operation, and maintenance of BMPs. The SWPPP shall list the names and describe the role of all owners/primary operators (such as general contractor, project manager) responsible for environmental or sediment and erosion control at the land disturbance site.

4. The SWPPP briefly must describe the nature of the land disturbance activity, including:
   a. The function of the project (e.g., redevelopment of site, new city building, etc.);
   b. The intended sequence and timing of activities that disturb the soils at the site;
   c. Estimates of the total area expected to be disturbed by excavation, grading, or other land disturbance support activities including off-site borrow and fill areas;

5. In order to identify the site, the SWPPP shall include site information including size in acres. The SWPPP shall have sufficient information to be of practical use to contractors and site construction workers to guide the installation and maintenance of BMPs.

6. The function of the SWPPP and the BMPs listed therein is to prevent or minimize pollution to waters of the state. A deficiency of a BMP means it was not effective in preventing or minimizing pollution of waters of the state. The permittee shall select, install, use, operate, and maintain appropriate BMPs for the permitted site.

   All BMPs must be described and justified in the SWPPP. The permittee may retain the SWPPP, inspection reports, and all other associated documents (including a copy of this permit) electronically pursuant to RSMo 432.255. The documents must be made available to all interested persons in either paper or electronic format as required by this permit and the permittee must remit a copy (electronic or otherwise) of the SWPPP and inspection reports to the department upon request.

7. The SWPPP must contain a legible site map, multiple maps if necessary, identifying:
   a. Site boundaries of the property;
   b. Locations of all waters of the state (including wetlands) within the site and half a mile downstream of the site's outfalls;
   c. Location of all outfalls;
   d. Direction(s) of stormwater flow and approximate slopes before and after grading activities;
   e. Areas of soil disturbance and areas that will not be disturbed;
   f. Location of structural and non-structural BMPs, including natural buffer areas, identified in the SWPPP;
   g. Locations where stabilization practices are expected to occur;
   h. Locations of on-site and off-site material, waste, borrow or equipment storage areas and stockpiles;
   i. Designated points where vehicles will exit the site;
   j. Slopes for disturbed areas, define the sloped areas for all phases of the project. The disturbance of steep slopes shall be minimized
   k. Location of stormwater inlets and conveyances including ditches, pipes, man-made conduits, and swales; and
   l. Areas where final stabilization has been achieved.

8. An individual shall be designated by the permittee as the environmental lead. This environmental lead shall have demonstrable knowledge in erosion, sediment, and stormwater control principles as well as knowledge of the permit and the site's SWPPP. The environmental lead shall ensure all personnel and contractors understand any requirements of this permit may be affected by the work they are doing. The environmental lead or designated inspector(s) knowledgeable in erosion, sediment, and stormwater control principles shall inspect all structures that function to prevent or minimize pollution of waters of the state.

9. Throughout coverage under this permit, the permittee shall amend and update the SWPPP as appropriate during the term of the land disturbance activity(s). All SWPPP modifications shall be signed and dated. The permittee shall amend the SWPPP to incorporate any significant site condition changes which impact the nature and condition of stormwater discharges. At a minimum, these changes include whenever the:
   a. Location, design, operation, or maintenance of BMPs is changed;
   b. Design of the construction project is changed that could significantly affect the quality of the stormwater discharges;
   c. Drainage course changes (this shall also be clearly marked on the site map);
   d. Permittee's inspections indicate deficiencies in the SWPPP or any BMP;
   e. Department notifies the permittee in writing of deficiencies in the SWPPP;
   f. SWPPP is determined to be ineffective in minimizing or controlling erosion and sedimentation (e.g., there is visual evidence of excessive site erosion or sediment deposits in streams, lakes, or downstream waterways, sediment or other wastes offsite); and/or
   g. Department determines violations of water quality standards may occur or have occurred at a site covered by the land disturbance portion of this permit.

10. Site Inspections: The environmental lead, or a designated inspector, shall conduct regularly scheduled inspections. These inspections shall be conducted by a qualified person, one who is responsible for environmental matters at the site, or a person trained by and directly supervised by the person responsible for environmental matters at the site. Site inspections shall include, at a minimum, the following:

a. For disturbed areas that have not achieved final stabilization, all installed BMPs and other pollution control measures shall be inspected to ensure they are properly installed, appear to be operational, and are working as intended to minimize the discharge of pollutants.
b. For areas on site that have achieved either temporary or final stabilization, while at the same time active construction continues on other areas, ensure that all stabilization measures are properly installed, appear to be operational, and are working as intended to minimize the discharge of pollutants.
c. Inspect all material, waste, borrow, and equipment storage and maintenance areas that are covered by this permit. Inspect for conditions that could lead to spills, leaks, or other accumulations of pollutants on the site.
d. Inspect all areas where stormwater typically flows within the site, including drainage ways designed to divert, convey, and/or treat stormwater.
e. All stormwater outfalls shall be inspected for evidence of erosion, sediment deposition, or impacts to the receiving stream. If a discharge is occurring during an inspection, the inspector must observe and document the visual quality of the discharge, and take note of the characteristics of the stormwater discharge, including turbidity, color; odor; floating, settled, or suspended solids; foam; oil sheen; and other indicators of stormwater pollutants.
f. When practicable the receiving stream shall also be inspected for a minimum of 50 feet downstream of the outfall.
g. The perimeter of the site shall be inspected for evidence of BMP failure to ensure concentrated flow does not develop a new outfall.
h. The SWPPP must explain how the environmental lead will be notified when stormwater runoff occurs.

11. Inspection Frequency: All BMPs must be inspected in accordance to one of the schedules listed below. The inspection frequency shall be documented in the SWPPP, and any changes to the frequency of inspections, including switching between the options listed below, must be documented on the inspection form:
    a. At least once every seven (7) calendar days and within 48 hours after any storm event equal to or greater than a 2-year, 24-hour storm has ceased during a normal work day or within 72 hours if the rain event ceases during a non-work day such as a weekend or holiday; or
    b. Once every 14 calendar days and within 24 hours of the occurrence of a storm event of 0.25 inches of precipitation or greater, or the occurrence of runoff from snowmelt. To determine if a storm event of 0.25 inches or greater has occurred on the site, the permittee shall either keep a properly maintained rain gauge on site or obtain the storm event information from a weather station near the site location.
        i. Inspections are only required during the project's normal working hours.
        ii. An inspection must be conducted within 24 hours of a storm event which has produced 0.25 inches. The inspection shall be conducted within 24 hours of the event end or within 72 hours if the rain event ceases during a non-work day such as a weekend or holiday.
        iii. If it is elected to inspect every 14 calendar days, there is a storm event at the site that continues for multiple days, and each day of the storm produces 0.25 inches or more of rain, the permittee shall conduct an inspection within 24 hours of the end of the storm or within 72 hours if the rain event ceases during a non-work day such as a weekend or holiday.
    c. On-site areas that have achieved stabilization, while at the same time active construction continues on other areas, may reduce inspection frequency to monthly, for those stabilized areas, if the following conditions exist:
        i. For areas where disturbed portions have undergone temporary stabilization, inspections shall occur at least once a month while stabilized and when re-disturbed shall follow either frequency outlined in (a), or (b) above.
        ii. On-site areas that have achieved final stabilization must be inspected at least once per month until the site is finalized in accordance with G.1.

12. Site Inspection Reports: A log of each inspection and/or copy of the inspection report shall be kept readily accessible and must be made available upon request by the department. Electronic logs are acceptable as long as reports can be provided within 24 hours. If inspection reports are kept off site, the SWPPP must indicate where they are stored. The inspection report shall be signed by the environmental lead or designated inspector (electronically or otherwise).
    The inspection report is to include the following minimum information:
    a. Inspector's name and title.
    b. Date and time of inspection.
    c. Observations relative to the effectiveness of all BMPs and stabilization measures. The following must be documented:
        i. Whether BMPs are installed, operational, and working as intended;
        ii. Whether any new or modified stormwater controls are needed;
        iii. Facilities examined for conditions that could lead to spill or leak;
        iv. Outfalls examined for visual signs of erosion or sedimentation at outfalls. Excessive erosion or sedimentation may be due to BMP failure or insufficiency. Response to observations should be addressed in the inspection report.
    d. Corrective actions taken or necessary to correct the observed problem.
    e. Listing of areas where land disturbance operations have permanently or temporarily stopped.

13. Any structural or maintenance deficiencies for BMPs or stabilization measures shall be documented and corrected as soon as possible but no more than seven (7) calendar days after the inspection.
    a. Corrective action documentation shall be stored with the associated site inspection report.
    b. Immediately take all reasonable steps to address the condition, including cleaning up any contaminated surfaces so the material will not discharge in subsequent storm events.
    c. If weather conditions or other issues prevent correction of BMPs within seven calendar days, the reasons for the delay must be documented (this may include pictures) and there must be a narrative explaining why the work cannot be accomplished

within the seven day time period. The permittee shall correct the problem as soon as weather conditions or issues allow.

14. This permit does not affect, remove, or replace any requirement of applicable federal and state regulations concerning underground storage, above ground storage, and dispensers for fueling facilities.

15. This permit does not affect, remove, or replace any requirement of the Missouri Hazardous Waste Laws and Regulations.

16. Store all paints, solvents, petroleum products, petroleum waste products, and storage containers (such as drums, cans, or cartons) so they 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 contain the spill. 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.

17. Implement measures intended to prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicles and equipment to thereby prevent the contamination of stormwater from these substances. This may include prevention measures such as, but not limited to, utilizing drip pans under vehicles and equipment stored outdoors, covering fueling areas, using dry clean-up methods, use of absorbents, and cleaning pavement surfaces to remove oil and grease.

18. Spills, Overflows, and Other Unauthorized Discharges.
    a. Should an unauthorized discharge cause or permit any contaminants, other than sediment, or hazardous substance to discharge or enter waters of the state, the unauthorized discharge must be reported to the appropriate Regional Office as soon as practicable but no more than 24 hours after the discovery of the discharge. If the spill or overflow needs to be reported after normal business hours or on the weekend, the facility must call the department's Environmental Emergency Response hotline at (573) 634-2436. Leaving a message on a department staff member voice-mail does not satisfy this reporting requirement.
    b. A record of all such spills shall be retained with the SWPPP and made available to the department upon request.
    c. Other spills must be cleaned up as soon as possible to prevent entrainment in stormwater but are not required to be reported to the department.

F. BMP REQUIREMENTS

1. The information, practices, and BMP requirements in this section shall be implemented on individual land disturbance sites and, where noted, provided for in the SWPPP.

2. Existing vegetation and trees shall be preserved where practicable. The permittee is encouraged to preserve topsoil where practicable. Trees designated for preservation should have a protective barrier outside of the dripline.

3. The permittee shall select appropriate BMPs for use at the site and list them in the SWPPP. When selecting effective BMPs, the permittee shall consider stormwater volume and velocity and shall incorporate more than one BMP and sequential treatment devices where the use of a single BMP is ineffective to prevent or minimize sediment or other pollutants from leaving the site. Permittee should consider a schedule for performing erosion control measures when selecting BMPs

4. The SWPPP shall include a description of both structural and non-structural BMPs that will be used at the site.
    a. The SWPPP shall provide the following general information for each BMP which will be used one or more times at the site:
        i. Physical description of the BMP;
        ii. Site conditions that must be met for effective use of the BMP;
        iii. BMP installation/construction procedures, including typical drawings; and
        iv. Operation and maintenance procedures and schedules for the BMP.
    b. The SWPPP shall provide the following information for each specific instance where a BMP is to be installed:
        i. Whether the BMP is temporary or permanent;
        ii. When the BMP will be installed in relation to each phase of the land disturbance procedures to complete the project; and
        iii. Site conditions that must be met before removal of the BMP if the BMP is not a permanent BMP.

5. Structural BMP Installation: The permittee shall ensure all BMPs are properly installed and operational at the locations and relative times specified in the SWPPP.
    a. Perimeter control BMPs for runoff from disturbed areas shall be installed or existing vegetative areas marked for preservation before general site clearing is started. Note this requirement does not apply to earth disturbances related to initial site clearing and establishing entry, exit, or access of the site, which may require that stormwater controls be installed immediately after the earth disturbance.
    b. For phased projects, BMPs shall be properly installed as necessary prior to construction activities.
    c. Stormwater discharges which leave the site from disturbed areas shall pass through an appropriate impediment to sediment movement such as a sedimentation basin, sediment traps (including vegetative buffers), or silt fences prior to leaving the land disturbance site.
    d. If vegetative stabilization measures are being implemented, stabilization efforts are considered "installed" when all activities

necessary to seed or plant the area are completed. Vegetative stabilization is not considered "operational" until the vegetation is established.

6. Install sediment controls along any perimeter areas of the site that are downgradient from any exposed soil or other disturbed areas. Prevent stormwater from circumventing the edge of the perimeter control. For sites where perimeter controls are infeasible, other practices shall be implemented to minimize discharges to perimeter areas of the site.

7. For surface waters of the state, defined in Section 644.016.1(27) RSMo, located on or adjacent to the site, the permittee must maintain a riparian buffer or structural equivalent in accordance with at least one of the following options. The selection and location must be described in the SWPPP.
   a. Provide and maintain a 50-foot undisturbed natural buffer; or
   b. Provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by erosion and sediment controls that achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer; or
   c. If infeasible to provide and maintain an undisturbed natural buffer of any size, implement erosion and sediment controls to achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.
   d. The permittee is not required to comply with (a), (b), or (c) above if one or more of the following exceptions apply and documentation is provided in the SWPPP:
      i. As authorized per CWA Section 404 Department of the Army permit and its associated Section 401 Water Quality Certification from the department.
      ii. If there is no discharge of stormwater to waters of the state through the area between the disturbed portions of the site and waters of the state located within 50 feet of the site. This includes situations where the permittee has implemented permanent control measures that will prevent such discharges, such as a berm or other barrier.
      iii. Where no natural buffer exists due to preexisting development disturbances that occurred prior to the initiation of planning for the current development of the site. Where some natural buffer exists but portions of the area within 50 feet of the waters of the state are occupied by preexisting development disturbances the permittee is required to comply with a, b, or c, above.
      iv. For linear projects where site constraints make it infeasible to implement a buffer or equivalent provided the permittee limit disturbances within 50 feet of any waters of the state and/or the permittee provides supplemental erosion and sediment controls to treat stormwater discharges from earth disturbances within 50 feet of the water of the state. The permittee must also document in the SWPPP the rationale for why it is infeasible for the permittee to implement a, b, or c, and describe any buffer width retained and supplemental BMPs installed.
   e. Where the permittee is retaining a buffer of any size, the buffer should be measured perpendicularly from any of the following points, whichever is further landward from the water:
      i. The ordinary high water mark of the water body, defined as the line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, and/or the presence of litter and debris; or
      ii. The edge of the stream or river bank, bluff, or cliff, whichever is applicable.

8. Manage stockpiles or land clearing debris piles composed, in whole or in part, of sediment and/or soil.
   a. Locate the piles outside of any natural buffers zones, established under the condition above, and away from any stormwater conveyances, drain inlets, and areas where stormwater flow is concentrated;
   b. Install a sediment barrier along all downgradient perimeter areas;
   c. Prevent stormwater flows from causing erosion of stockpiles, for example, by diverting flows around them.
   d. Rinsing, sweeping, or otherwise placing any soil, sediment, debris, or stockpiled product which has accumulated on pavement or other impervious surfaces into any stormwater conveyance, storm drain inlet, or water of the state is prohibited.

9. The site shall include BMPs for pollution prevention measures and shall be noted in the SWPPP. At minimum such measures must be designed, installed, implemented, and maintained to:
   a. Minimize the discharge of pollutants from equipment and vehicle rinsing; no detergents, additives, or soaps of any kind shall be used. Rinse waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
   b. Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials present on the site to precipitation and to stormwater;
   c. Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures, including, but not limited to, the installation of containment berms and use of drip pans at petroleum product and liquid storage tanks and containers; and

10. The site shall include a sedimentation basin for each drainage area with ten or more acres disturbed at one time.
    a. The sedimentation basin shall be sized, at a minimum, to treat a local 2-year, 24-hour storm.
    b. Sediment basins shall not be constructed in any waters of the state or natural buffer zones.
    c. Erosion controls and velocity dissipation devices (e.g. check dams, riprap, and vegetated buffers) to prevent erosion at inlets, outlets, and discharge points shall be utilized.
    d. Until final stabilization has been achieved, sediment basins and impoundments shall utilize outlet structures or floating

skimmers that withdraw water from the surface when discharging. Dewatering activities that are not withdrawing water from the surface shall be managed by other appropriate controls in accordance with Section 11.

i. Under frozen conditions, it may be considered infeasible to withdraw water from the surface and an exception can be made for that specific period as long as discharges that may contain sediment and other pollutants are managed by appropriate controls. If determined infeasible due to frozen conditions, documentation must be provided in the SWPPP to support the determination, including the specific conditions or time period when this exception applies.

e. Accumulated sediment shall not exceed 50% of total volume or as prescribed in the design, whichever is less. Note in the SWPPP the locations for disposal of the material removed from sediment basins.

f. The SWPPP shall require the basin be maintained until final stabilization of the disturbed area served by the basin.

g. Where use of a sediment basin is infeasible, the SWPPP shall evaluate and specify other similarly effective BMPs to be employed to control erosion and sediment. These similarly effective BMPs shall be selected from appropriate BMP guidance documents authorized by this permit. The BMPs must provide equivalent water quality protection to achieve compliance with this permit. The SWPPP shall require both temporary and permanent sedimentation basins to have a stabilized spillway to minimize the potential for erosion of the spillway or basin embankment.

11. Discharges from dewatering activities shall be managed by appropriate controls. The SWPPP shall include a description of any anticipated dewatering methods and specific BMPs designed to treat dewatering water. Appropriate controls include, but are not limited to, sediment socks, dewatering tanks, tube settlers, weir tanks, filtration systems (e.g. bag or sand filters), and passive treatment systems that are designed to remove or retain sediment. Utilize erosion controls and velocity dissipation devices (e.g. check dams, riprap, vegetated buffers) to prevent erosion at dewatering discharge points. Water with an oil sheen or visible floating solids and foam shall not be discharged.

12. For soil disturbing activities on site that have ceased, either temporarily or permanently, the permittee shall initiate stabilization immediately in accordance with the options below:
    a. Where activities have been permanently ceased, final stabilization must be initiated immediately and completed within 14 calendar days.
    b. For any areas of soil disturbance where activities have been temporarily ceased and will not resume for a period exceeding 14 calendar days, the permittee shall construct BMPs to establish interim stabilization or well-established and maintained sediment controls. Interim stabilization or sediment controls must be initiated immediately and completed within 14 calendar days.
    c. Extension to the 14-day completion period for stabilization may be made due to weather and equipment malfunctions. In these circumstances, the justification for the extension to the 14-day completion period shall be documented in the SWPPP. The discontinuation or continuation of the extension may be determined by review of department staff when on site.
    d. If the slope of the area is greater than 3:1 (three feet horizontal to one foot vertical) the permittee shall establish interim stabilization within seven days of ceasing operations on that part of the sit The following activities would constitute the immediate initiation of stabilization:
        i. Prepping the soil for vegetative or non-vegetative stabilization as long as seeding, planting, and/or installation of non-vegetative stabilization products takes place as soon as practicable;
        ii. Applying mulch or other non-vegetative product to the exposed areas;
        iii. Seeding or planting the exposed areas;
        iv. Finalizing arrangements to have stabilization product fully installed in compliance with the deadlines for completing stabilization.
    f. If vegetative stabilization measures are being implemented, stabilization is considered “installed” when all activities necessary to seed or plant the area are completed. Installed does not mean established.
    g. If non-vegetative stabilization measures are being implemented, stabilization is considered “installed” when all such measures are implemented or applied. Non-vegetative stabilization shall prevent erosion and shall be chosen for site conditions, such as slope and flow of stormwater.
    h. Final stabilization is not considered achieved until vegetation has grown and established to meet the requirements below.

13. Prior to removal of BMPs, ceasing site inspections, and removing from the quarterly report, final stabilization must be achieved. Final stabilization shall be achieved as soon as possible once land disturbance activities have ceased. Document in the SWPPP the type of stabilization and the date final stabilization is achieved.
    a. The project is considered to have achieved final stabilization when perennial vegetation (not consisting solely of volunteer vegetation), pavement, buildings, or structures using permanent materials (i.e., riprap, gravel, etc.) cover all areas that have been disturbed. With respect to areas that have been vegetated, vegetation must be at least 70% coverage of 100% of the vegetated areas on site. Vegetation must be evenly distributed.
    b. Disturbed areas on agricultural land are considered to have achieved final stabilization when they are restored to their preconstruction agricultural use. If former agricultural land is changing to non-agricultural use, this is no longer considered agricultural land and shall follow condition (a).
    c. If the intended function of a specific area of the site necessitates that it remain disturbed, final stabilization is considered achieved if all of the following are met:
        i. Only the minimum area needed remains disturbed (i.e., dirt access roads, motocross tracks, utility pole pads, areas being used for storage of vehicles, equipment, materials). Other areas must meet the criteria above.

ii. Permanent structural BMPs (rock checks, berms, grading, etc.) or non-vegetative stabilization measures are implemented and designed to prevent sediment and other pollutants from entering waters of the state.
iii. Inspection requirements in Part II, Section E met and documented in the SWPPP.

d. Winter weather and frozen conditions do not excuse any of the above final stabilization requirements. If vegetation is required for stabilization the permittee must maintain BMPs throughout winter weather and frozen conditions until thawing and vegetation meets final stabilization criteria above. Document stabilization attempts during frozen conditions in the SWPPP. Consider future freezing when removing vegetation and plan accordingly with implementation of temporary stabilization techniques before the ground becomes frozen

14. All BMPs shall be maintained and remain in effective operating condition during the entire duration of the project, with repairs made within the timeframes specified elsewhere in this permit, until final stabilization has been achieved. BMPs for land disturbance [10 CSR 20-6.200(1)(D)2] are a schedule of activities, practices, or procedures that reduces the amount of soil available for transport or a device that reduces the amount of suspended solids in runoff before discharge to waters of the state. BMPs are divided into two main categories: structural or non-structural; and they are also classified as temporary or permanent.
    a. Ensure BMPs are protected from activities that would reduce their effectiveness.
    b. Remove any sediment per the BMP manufacturer's instructions or before it has accumulated to one-half of the above-ground height of any BMP that collects sediment (i.e. silt fences, sediment traps, etc.)
    c. Temporary BMPs may be added and removed as necessary with updates to the SWPPP as specified in the requirements below.
    d. The project is considered to achieve final stabilization when Part II, Section F, Condition 13 is met.

15. Installation of BMPs necessary to prevent soil erosion and sedimentation at the downgradient project boundary (e.g. buffers, perimeter controls, exit point controls, storm drain inlet protection) must be complete prior to the start of all phases of construction. By the time construction activity in any given portion of the site begins, downgradient BMPs must be installed and operational to control discharges from the initial site clearing, grading, excavating, and other earth-disturbing activities. Additional BMPs shall be installed as necessary throughout the life of the project. Following the installation of these initial BMPs, all BMPs needed to control discharges shall be installed and made operational prior to subsequent earth disturbing activities.

16. Minimize sediment trackout from the site and sediment transport onto roadways.
    a. Restrict vehicle traffic to designated exit points.
    b. Use appropriate stabilization techniques or BMPs at all points that exit onto paved roads or areas outside of the site.
    c. Use additional controls to remove sediment from vehicle and equipment tires prior to exit from facility where necessary.
    d. Any sediment or debris that is tracked out past the exit pad or is deposited on a roadway after a precipitation event shall be removed the shorter of either daily or before a rain event. Sediment or debris tracked out on pavement or other impervious surfaces shall not be disposed of into any stormwater conveyance, storm drain inlet, or water of the state.
    e. Stormwater inlets susceptible to receiving sediment or other pollutants from the permitted land disturbance site shall have curb inlet protection. This may include inlets off the active area where track out from vehicles and equipment could impact the stormwater runoff to those inlets.

17. Concrete washout facilities shall be used to contain concrete waste from the activities onsite, unless the washout of trucks and equipment is managed properly at an offsite location. The washout facility shall be managed to prevent solid and/or liquid waste from entering waters of the States by the following:
    a. Direct the wash water into leak-proof containers or pits designed so that no overflows can occur due to inadequate sizing or precipitation;
    b. Locate washout activities away from waters of the state, stormwater inlets and/or stormwater conveyances when practical;
    c. Washout facilities shall be cleaned, or new facilities must be constructed and ready for use, once the washout is 75% full;
    d. Designate the washout area(s) and conduct such activities only in these areas.
    e. Ensure contractors are aware of the location, such as by marking the area(s) on the map or signage visible to the truck and/or equipment operators.

18. Good housekeeping practices shall be maintained at all times to keep waste from entering waters of the state.
    a. Provide solid and hazardous waste management practices, including providing trash containers, regular site cleanup for proper disposal of solid waste such as scrap building material, product/material shipping waste, food/beverage containers, spent structural BMPs;
    b. Provide containers and methods for proper disposal of waste paints, solvents, and cleaning compounds.
    c. Manage sanitary waste. Portable toilets shall be positioned so that they are secure and will not be tipped or knocked over and so that they are located away from waters of the state and stormwater inlets and stormwater conveyances.
    d. Ensure the storage of construction materials be kept away from drainage courses, stormwater conveyances, storm drain inlets, and low areas.

G. SITE FINALIZATION

1. Until a site is finalized, the permittee must comply with all conditions in the permit, including continuation of site inspections and reporting quarterly to the department. To finalize the site and remove from this permit coverage, the site shall meet the following requirements:
   a. For any areas that (1) were disturbed during construction, (2) are not covered over by permanent structures, and (3) over which the permittee had control during the construction activities, the requirements for final vegetative or non-vegetative stabilization in Part II, Section F, Condition 13;
   b. The permittee has removed and properly disposed of all construction materials, waste, and waste handling devices and has removed all equipment and vehicles that were used during construction, unless intended for long-term beyond construction phase;
   c. The permittee has removed all temporary BMPs that were installed and maintained during construction, except those that are intended for long-term use or those that are biodegradable; and
   d. The permittee has removed all potential pollutants and pollutant-generating activities associated with construction, unless needed for long-term use following the construction activities.

2. A site may be removed from permit coverage if:
   a. There has been a transfer of control of all areas of the site for which the current permittee is responsible under this permit to another operator, and that operator has obtained coverage under an individual or alternative general NPDES permit with land disturbance conditions; or
   b. Active sites obtain coverage under an individual or alternative general NPDES permit, with land disturbance conditions.
   c. The permittee removes the site from the quarterly report list of active land disturbance sites.

H. REPORTING AND RECORD KEEPING REQUIREMENTS

1. The permittee is not required to sample stormwater under Part II of this permit. The department may require sampling and reporting as a result of illegal discharges, compliance issues related to water quality concerns or BMP effectiveness, or evidence of off-site impacts from activities at a site.
   If such an action is needed, the department will specify in writing the sampling requirements, including such information as location and extent. If the permittee refuses to perform sampling when required, the department may require the facility to modify the permit with sampling requirements.

2. The NPDES Electronic Reporting Rule, 40 CFR Part 127, reporting of any report required by the permit shall be submitted via an electronic system to ensure timely, complete, accurate, and nationally consistent set of data for the NPDES program. The Electronic Discharge Monitoring Report (eDMR) system is currently the only department-approved reporting method for this permit unless specified elsewhere in this permit, or a waiver is granted by the department. The facility must register in the department's eDMR system through the Missouri Gateway for Environmental Management (MoGEM) before the first report is due.

3. Quarterly Reports: Permittees shall prepare a quarterly report with a list of active land disturbance sites including any off-site borrow or depositional areas associated with the construction project and submit the following information electronically as an attachment to the eDMR system until such a time when the current or a new system is available to allow direct input of the dat
   a. The name of the project;
   b. The location of the project (including the county);
   c. The name of the primary receiving water(s) for each project;
   d. A description of the project;
   e. The number of acres disturbed;
   f. The percent of completion of the project;
   g. The projected date of completion.

   The quarterly report(s) shall be maintained by the permittee and readily available for review by the department at the address provided on the application as well as submitted quarterly via the department's eDMR system. The permittee shall submit quarterly reports according to Table A.

Table A	**Schedule for Quarterly Reporting**
Activity 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

4. The permittee shall retain copies of this permit, the SWPPP and all amendments for the site named in the State Operating Permit, results of any monitoring and analysis, and all site inspection records required by this permit.
   a. The records shall be accessible during normal business hours and retained for a period of at least three (3) years after a

project is completely stabilized, and the project is reported as 100% complete to the department on the quarterly reports.

b. The permittee shall provide a copy (electronic or otherwise) of the SWPPP to the department, USEPA, or any local agency or government representative if they request a copy in the performance of their official duties within 24 hours of the request (or next working day), unless given more time by the representative.

c. The permittee shall provide a copy of the SWPPP to those who are responsible for installation, operation, or maintenance of any BMP. The permittee, their representative, and/or the contractor(s) responsible for installation, operation and maintenance of the BMPs shall have a current copy of the SWPPP with them when on the project site.

III. STANDARD PERMIT CONDITIONS (For both MS4 and Area-Wide Land Disturbance Programs)

A. STANDARD PERMIT CONDITIONS

1. Duty to Comply: The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Missouri CWL and the Federal CWA and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or for denial of a permit renewal.
   a. It is a violation of the Missouri Clean Water Law for failure to pay fees associated with this permit, [§644.055, RSMo].

2. Duty to Provide Information: The permittee shall furnish to the department, within a reasonable time, any information which the department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the department upon request, copies of records required to be kept by this permit.

3. Proper Operation and Maintenance: The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit.

   Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This condition requires the operation of backup or auxiliary facilities or similar systems installed by a permittee only when necessary to achieve compliance with the conditions of this permit.

4. Advanced Notice: The permit holder shall give advanced notice to the department of any planned changes which may result in noncompliance with the terms and conditions of this permit.

5. Other Information: Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the department, it shall promptly submit such facts or information.

6. Inspection and Entry**:** The permit holder shall allow the department or an authorized representative (including an authorized contractor as a representative to EPA or the department) upon the presentation of credentials and other documents as may be required by law to:
   a. Enter the permit holder's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
   b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
   c. Inspect any facility, equipment (including monitoring and control equipment), practices, or operation regulated or required under this permit; and
   d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the federal CWA and/or Missouri's CWL, any substance or parameter at any location.

7. Monitoring Methods: Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless another method is required under 40 CFR subchapters N or O or unless specified in this permit or an approved Quality Assurance Project Plan.

8. Need to Halt or Reduce Activity Not a Defense: It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

9. Permit Actions: This permit may be modified, revoked, reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or notification of planned changes or anticipated noncompliance does not stay any term or condition of this permit.

10. Modification, Revocation, and Reopening: If this permit is reopened, modified, or revoked pursuant to this Section, the permittee retains all rights under Chapter 536 and 644 Revised Statutes of Missouri upon the department's reissuance of the permit as well as all other forms of administrative, judicial, and equitable relief available under law

11. Signatory Requirement:
    a. Renewal applications, applications to modify this operating permit, and annual reports shall be signed and certified with the following certification: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."
    b. All permit applications, reports required by the permit, or information requested by the department shall be signed and certified. (See 40 CFR 122.22 and 10 CSR 20-6.010)
    c. The Federal Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit (including monitoring reports or reports of compliance or non-compliance) shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six (6) months per violation, or by both.
    d. The Missouri Clean Water Law provides that any person who knowingly makes any false statement, representation or certification in any application, record, report, plan, or other document filed or required to be maintained pursuant to sections 644.006 to 644.141 shall, upon conviction, be punished by a fine of not more than ten thousand dollars, or by imprisonment for not more than six months, or by both.

12. Property Rights: This permit does not convey any property rights of any sort or any exclusive privilege.

13. Duty to Reapply: If the permittee wishes to continue an activity regulated by this permit after the permit expiration date, the permittee must apply for and obtain a renewed permit. The renewal application shall be submitted at least 180 days prior to expiration of this permit unless the department allows a later deadline not to exceed the expiration of this permit.

B. NOTICE OF RIGHT TO APPEAL

If you were adversely affected by this decision, you may be entitled to pursue an appeal before the administrative hearing commission (AHC) pursuant to 621.250 and 644.051.6 RSMo. To appeal, you must file a petition with the AHC within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC. Any appeal should be directed to:

Administrative Hearing Commission
U.S. Post Office Building, Third Floor
131 West High Street, P.O. Box 1557
Jefferson City, MO 65102-1557
Phone: 573-751-2422
Fax: 573-751-5018
Website: https://ahc.mo.gov

MISSOURI DEPARTMENT OF NATURAL RESOURCES
2023 MODIFICATION STATEMENT OF BASIS FOR
MO-0126322
SPRINGFIELD PHASE I MEDIUM
MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) &
AREA-WIDE LAND DISTURBANCE

This Statement of Basis (Statement) gives pertinent information regarding modification(s) to the above listed operating permit. A Statement is not an enforceable part of a Missouri State Operating Permit. Changes found here supersede previous fact sheet determinations. The permit was revised as appropriate to reflect changes enumerated in this modification.

PART I. FACILITY INFORMATION AND PART II. MODIFICATION RATIONALE

The city is approved for having a Qualifying Local Program. See permit page 5, PART I. B.6 SPECIAL CONDITIONS, and original fact sheet for additional information. This operating permit is hereby modified to add approval for a sediment and erosion control Qualifying Local Program.

QUALIFYING LOCAL PROGRAM:
Applicable federal regulations allow for the National Pollution Discharge Elimination System permitting authorities to administer a Qualified Local Program or QLP. A QLP would allow the department to cease issuing land disturbance permits in regulated MS4 areas, which will reduce double permitting for construction sites. QLP regulations are found at 40 CFR 122.44(s) and 10 CSR 20-6.200(7) for the discharge of stormwater. Springfield has a department-approved QLP for the sediment and erosion control program.

PART III. ADMINISTRATIVE REQUIREMENTS

On the basis of preliminary staff review, and utilizing current applicable regulations, the department, as administrative agent for the Missouri Clean Water Commission, proposes to issue this permit subject to specified schedules, and special conditions. The changes contained herein require a public notice comment period per 10 CSR 20-6.020. 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. 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. 40 CFR 122.62 says when a permit is modified, only the conditions subject to modification are reopened. Therefore, the department will only respond to comments pertaining to changes noted in this Modification Statement of Basis section. All sections of the fact sheet after this page are not being modified technically during this permit action, therefore are maintained, unless explicitly superseded above.

- ✓ The Public Notice period for this operating permit started December 15, 2023 and ended January 15, 2024. No comments were received.

DATE OF STATEMENT SHEET: NOVEMBER 17, 2023

COMPLETED BY:
SARAH WRIGHT, ENVIRONMENTAL PROGRAM SPECIALIST
STORMWATER COORDINATOR
MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
OPERATING PERMITS SECTION – STORMWATER AND CERTIFICATION UNIT
(573) 526-1139
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MISSOURI DEPARTMENT OF NATURAL RESOURCES
FACT SHEET
FOR THE PURPOSE OF RENEWAL
OF
MO-0126322
SPRINGFIELD PHASE I MEDIUM
MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) &
AREA-WIDE LAND DISTURBANCE

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

A fact sheet gives pertinent information regarding the applicable regulations, rationale for the development of the NPDES Missouri State Operating Permit (operating permit), and the public participation process for operating permit listed below. A fact sheet is not an enforceable part of an operating permit.

Part I – Facility Information

Facility Type MS4:	Industrial; Stormwater Urban stormwater Runoff/ Land Disturbance
Facility SIC Code(s):	9511, 1629
Facility NAICS Code:	924110
Application Date:	September 29, 2021
Expiration Date:	March 31, 2022

Facility Description:
The City of Springfield (permittee) is the 3rd largest city in the State of Missouri with a population of 169,176 according to the 2020 U.S. Census with an approximate area of 83 mi^2, and a population density of 2,038 population/mi^2. The permittee owns and operates their medium MS4. Medium MS4s are MS4s located in an incorporated place with a population of one hundred thousand (100,000) or more but less than two hundred fifty thousand (250,000) based on the 1990 United States census.

A MS4 is defined as a conveyance or system of conveyances including roads and highways with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, paved or unpaved channels, or storm drains designed and utilized for routing stormwater, which: (1) does not include any waters of the state (as defined in Missouri's Water Quality Standards [10 CSR 20-7.031] and its implementing tables), (2) is owned and operated by the permittee, (3) is not part or portion of a combined sewer system, and (4) is not part of a publicly owned treatment works. The permittee's MS4 collects and routes stormwater from industrial, commercial, and residential areas located within the permittee's municipal boundary and discharges the stormwater to waters of the state.

The area-wide land disturbance program is for land disturbance projects performed by or under contract to the permittee, whether discharges associated with those projects are to the permittee's MS4, a third-party MS4, or waters of the state. Area wide land disturbance refers to construction or land disturbance activity (e.g., clearing, grubbing, excavating, grading, filling, and other activities that result in the destruction of the root zone and/or land disturbance activity that is reasonably certain to cause pollution to waters of the state).

Stormwater Outfalls:
Outfalls listed under the Facility Description in the operating permit are representative major stormwater outfalls only; however, the NPDES operating permit covers all discharges from the permittee's outfalls into waters of the state. The permittee is required by the operating permit to have a map of all constructed MS4 stormwater outfalls that discharge to waters of the state. It was determined that only representative outfalls would be listed in the permit rather than listing all MS4 outfalls, which would otherwise add extra pages to the permit and require the operating permit to be modified anytime changes are made to any of the outfalls.

Land disturbance outfalls are locations where stormwater exits the permitted site property, including pipes, ditches, swales, channels, or other conduits that transport stormwater discharges associated with the construction activity.

Facility Performance History:
A review of the department's files indicates that the City was audited for its MS4 permit MO0126322 by the US Environmental Protection Agency (EPA) in June of 2017 and was issued a Letter of Warning. Springfield responded in 2017 to EPA's concerns. The department conducted an oversight inspection in January of 2018 and found that portion of the permit in compliance. Springfield's MS4 Annual Reports are current.
The last inspections of the MOR1000005 permit for area wide land disturbance, were conducted in 2014. Both inspections resulted in a Notice of Violation and were returned to compliance.

Part II – Receiving Stream Information

The permittee's Phase I MS4 discharges stormwater into Missouri waterbodies that have designated uses in accordance with 10 CSR 20-7.031(2) and since November 6, 2013, the Missouri Use Designated Dataset (MUDD). Below is the list of waterbodies with designated uses that receive stormwater runoff from the permittee's Phase I MS4. The waterbodies listed below may have multiple stormwater discharges or only one MS4 outfall discharging to it.

	DESIGNATED USES*									
Waterbody Name	**WBID**	**AQL**	**CLF**	**DWS**	**IRR**	**LWW**	**SCR**	**WBCA**	**WBCB**	**HHP**
James River	2362	X	X		X	X	X	X		X
Ward Branch	2374	X			X	X	X		X	X
Wilson Creek	2375	X			X	X	X		X	X
South Creek	3369	X			X	X	X		X	X
Fassnight Creek	3370	X			X	X	X		X	X
Workman Branch	3371	X			X	X	X		X	X
Tributary to Workman Creek	3372	X			X	X	X		X	X
Galloway Creek	3373	X			X	X	X		X	X
Jordan Creek	3374	X			X	X	X		X	X
Tributary to North Branch Wilson Creek	3375	X			X	X	X		X	
Fassnight Creek	3427	X			X	X	X			X
Tributary to North Branch Wilson Creek	3745	X			X	X	X		X	X
North Branch Wilson Creek	3811	X			X	X	X		X	X
8-20-13 MUDD V1.0	3960	X			X	X	X		X	X

* Uses are as follows:

10 CSR 20-7.031(1)(C)1.:
AQL = Protection of aquatic life (Current narrative use(s) are defined to ensure the protection and propagation of fish shellfish and wildlife, which is further subcategorized as: WWH = Warm Water Habitat; CDF = Cold-water fishery (Current language uses cold-water habitat.); CLF = Cool-water fishery (Current language uses cool-water habitat); EAH = Ephemeral Aquatic Habitat; MAH = Modified Aquatic Habitat; LAH = Limited Aquatic Habitat. This permit uses AQL effluent limitations in 10 CSR 20-7.031 Table A for all habitat designations unless otherwise specified.)

10 CSR 20-7.031(1)(C)2.: Recreation in and on the water
WBC = Whole Body Contact recreation where the entire body is capable of being submerged;
WBC-A = Whole body contact recreation that supports swimming uses and has public access;
WBC-B = Whole body contact recreation that supports swimming; and
SCR = Secondary Contact Recreation (like fishing, wading, and boating).

10 CSR 20-7.031(1)(C)3. to 7.:
HHP (formerly HHF) = Human Health Protection as it relates to the consumption of fish;
IRR = Irrigation for use on crops utilized for human or livestock consumption;
LWW = Livestock and wildlife watering (Current language uses LWP = Livestock and Wildlife Protection);
DWS = Drinking Water Supply; and
IND = Industrial water supply

10 CSR 20-7.031(1)(C)8-11.: Wetlands (10 CSR 20-7.031 Table A currently does not have corresponding habitat use criteria for these defined uses)
WSA = Storm- and flood-water storage and attenuation; WHP = Habitat for resident and migratory wildlife species;
WRC = Recreational, cultural, educational, scientific, and natural aesthetic values and uses; WHC = Hydrologic cycle maintenance.

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

Per Missouri Effluent Regulations (10 CSR 20-7.015), the waters of the state are divided into seven (7) categories. This permit, including both the MS4 and Land Disturbance parts, 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)]
- ✓ All Other Waters [10 CSR 20-7.015(8)]

Part III – Rationale for General Terms and Conditions

ADDITIONAL FEDERAL ACTS

In accordance with 40 CFR 122.49(b) and (c) the operating permit cites the Endangered Species Act (ESA) and the National Historic Preservation Act (NHPA) and places the permittee on notice that the operating permit does not affect, remove or replace the requirements or compliance determination of these acts. It is the responsibility of the permittee to determine if activities conducted within their MS4 or stormwater discharging from their MS4 are in compliance with the ESA and NHPA.

Assistance in determining applicability to ESA conditions and requirements can be found in the U.S. Fish and Wildlife Service (FWS) Endangered Species webpage, which is located at: http://www.fws.gov/endangered/. Additionally, the FWS Information for Planning and Conservation (IPaC) web-based project planning tool that streamlines the environmental review process is highly recommended and is located at: http://ecos.fws.gov/ipac/.

Assistance in determining applicability to NHPA conditions and requirements can be found in the department's State Historic Preservation Office Section 106 Review, which is located at: https://mostateparks.com/page/84371/state-historic-preservation-office. Additionally, the Advisory Council on Historic Preservation Citizen Guide to Section 106 Review, which explains the process, is located at: http://www.achp.gov/citizensguide.html.

In addition to the ESA and NHPA, this operating permit does not affect, replace or remove the requirements and compliance determinations with respect to substances not otherwise covered under a NPDES permit and is regulated by federal law under the Resource Conservation and Recovery Act or the Comprehensive Environmental Response, Compensation, and Liability Act.

However, the permittee is required to implement a program to identify and control pollutants in stormwater discharges to the MS4 from any municipal or industrial facility that the permittee has determined is contributing a substantial pollutant load into their MS4, which includes industries subject to reporting requirements under the Superfund Amendments and Reauthorization Act (SARA). Please see the section on SARA below for justification.

ANTI-BACKSLIDING:

Anti-backsliding is a provision in federal statute and regulations CWA §303(d)(4); CWA §402(o); 40 CFR 122.44(l) that requires a reissued permit to be as stringent as the previous permit with some exceptions. The permit complies with Anti-backsliding regulations.

ANTIDEGRADATION:

Antidegradation consists of policies designed to ensure protection of water quality for a particular waterbody where the water quality exceeds levels necessary to protect fish and wildlife propagation and recreation on and in the water. This also includes special protection of waters designated as outstanding natural resource waters. Antidegradation plans are adopted by each state to minimize adverse effects on water.

The department has determined that the appropriate avenue forward for implementing the Antidegradation requirements for the permittee is requiring the successful implementation of the permittee's Stormwater Management Program. The permit directs the permittees to develop and implement effective Best Management Practices (BMPs), develop and implement self-evaluating measurable goals, and develop and implement an iterative process (how BMPs are determined ineffective and the steps needed to replace or revise the BMPs). This approach is applicable to newly added jurisdictional areas of the permittee. This process ensures that the permittee applies Reasonable Further Progress, which subsequently ensures that the MS4s are reducing pollutants in stormwater runoff to the Maximum Extent Practicable (MEP). 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 at 10 CSR 20-7.031(3) and 10 CSR 20-7.015(9)(A)5.

The permit requires any expansion to the permittee's boundary served by their MS4 to be covered by their Stormwater Management Program, updated in their SWMP and is subject to the terms and conditions of the SWMP and permit. Renewal of coverage for this facility requires a review of the SWMP by the department to assure that the selected BMPs continue to be appropriate.

Under the Area Wide Land Disturbance section, the main pollutant of concern for land disturbance activities is sediment. Compliance with the technology-based limitations established in this permit for the protection of Missouri Water Quality Standards 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), 10 CSR 20-7.031 Table A, and 10 CSR 20-7.015(9)(A)5].

APPLICATION REQUIREMENTS:
Federal regulations under 40 CFR 122.26(d) and state regulations under 10 CSR 20-6.200(4) establish application requirements for Phase I MS4s; however, these regulations were not to be required for each round of renewals – rather for the initial application to receive a Phase I MS4 operating permit. This is supported in the August 9, 1996, Federal Register Volume 61, No. 155 – Interpretative Policy Memorandum on Reapplication Requirements for Municipal Separate Storm Sewer Systems (Phase I Reapplication), which states, "The scope of the initial permit application requirement was comprehensive and regulated MS4s invested considerable resources to develop these applications. The initial applications have laid the foundation for the long-term implementation of MS4 stormwater management programs. EPA believes reapplications should focus on maintenance and improvement of these programs." In addition, Phase I Reapplication states, "The MS4 application requirements at 40 CFR 122.26(d)(1) and (2) apply to the first round permit application required of large and medium MS4s. The permit application deadlines in 40 CFR 122.26(e)(3) and (4) clearly reflect the "one time" nature of the Part I and II application requirements for large and medium MS4s. EPA has not promulgated regulations applicable to reapplication for MS4s. Requirements to demonstrate adequate legal authority, perform source identification (e.g., identify major outfalls and facility inventory), characterize data, and develop a stormwater management program should have been addressed in the initial application phase. Therefore, to request the same information again, where it has already been provided and has not changed, would be needlessly redundant. Thus, as a practical matter, most first-time permit application requirements are unnecessary for purposes of second round MS4 permit applications."

In the absence of regulations that are specific to reapplications requirements for Phase I Applications, EPA gives some suggested requirements based on 40 CFR 122.21(f) as well as the allowance of flexibility of the NPDES authority to require conditions the NPDES authority deems appropriate.

AREA-WIDE LAND DISTURBANCE REQUIREMENTS:
The area-wide land disturbance section includes support activities. Those support activities for land disturbance projects performed or under contract to the permittee are to be included in the acreage calculations, whether the support activities are located adjacent to, on-site, or off-site from the main land disturbance construction area.

If the proposed project encounters and will potentially affect a species of concern, please report it to the Missouri Department of Conservation (MDC) and the FWS. For more information about requirements of the Endangered Species Act, please visit the following links:

1. To determine the potential for species of concern within or near a project, please visit the FWS IPaC web-based planning tool at http://ecos.fws.gov/ipac/.
2. If there are listed species in the county or township, check to see if critical habitat has been designated and if that area overlaps or is near the project area. Critical habitat designations and associated requirements may also be found at 50 CFR Parts 17 and 226. For additional information, use the map view tool at http://criticalhabitat.fws.gov/crithab/ to find data specific to the state and county.

The MDC internet site for the Natural Heritage Review may be very helpful and can be found at the following link, https://naturalheritagereview.mdc.mo.gov/.

BEST MANAGEMENT PRACTICES (BMPS):
"Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the state. BMPs also include treatment requirements, operating procedures, and practices to control runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage areas." 10 CSR 20-6.200(1)(D)1.

- BMPs can be temporary or permanent, and include structural items or non-structural practices or activities including schedules of activities, prohibitions of practices, maintenance procedures, structural controls, local ordinances, information distribution, and other management practices to prevent or reduce the discharge of pollutants.
- BMPs encompass both the enforceable terms and conditions of this permit as well as particular activities and practices selected by the permittee that will be undertaken to meet the permit requirements but that are not themselves enforceable.
- A deficiency of a BMP means it was ineffective at providing the necessary protections for which it was designed.
- Corrective action describes the steps the facility took to eliminate the deficiency

During a short time period, construction sites can contribute more sediment to streams than can be deposited naturally during several decades. The resulting siltation and contribution of other pollutants from construction sites can cause physical, chemical, and biological harm to Missouri's waters. Land disturbance activities, such as clearing and grading the land surface, increases the potential for sediment discharges.

All BMPs on construction sites shall be maintained and remain in effective operating condition during the entire duration of the project, with repairs made within the timeframes specified elsewhere in this permit, until final stabilization has been achieved. BMPs for land disturbance [10 CSR 20-6.200(1)(D)2] are a schedule of activities, practices, or procedures that reduces the amount of soil available for transport or a device that reduces the amount of suspended solids in runoff before discharge to waters of the state. BMPs are divided into two main categories: structural or non-structural; and they are also classified as temporary or permanent

BEST PROFESSIONAL JUDGEMENT (BPJ):
The permit writer used professional best judgement as a high quality technical opinion developed by a permit writer after considerations of all reasonably available and pertinent data or information that forms the basis for the terms and conditions of a NPDES permit.

Previous iterations of operating permits for the permittee followed the typical layout of Phase I operating permits based on the application requirements of 40 CFR 122.26(d) with the direction that the NPDES authority (i.e., the department) was to draft an operating permit based on information received in the permittee's application, which as noted above was incorrectly applied as a majority of the regulations specific to Phase I MS4s in 40 CFR 122.26(d) were to be only applied on the initial application. In contrast, when Phase II was promulgated, EPA established BMPs applicable to Phase II MS4s via the Minimum Control Measures (MCMs) under 40 CFR 122.34(b). BMPs are Technology-based Effluent Limits (TBELs), which then subjects the BMPs to BPJ case-by-case determinations.

As an act of convenience with the understanding to provide consistency between Phase I and Phase II MS4s in the State of Missouri, this permit follows the MCMs of Phase II format; however, due to requirements under 40 CFR 122.26(d) and how the permittee implements them, there are additional MCMs for Phase I. Thus, the Phase I and II MCMs are consistently named, but not all of the conditions between Phase I and II MCMs are the same. This is due to the fact that Phase II regulations establish MCMs with some specific requirements. Phase I requirements require the permittee to create and build upon a stormwater program based on the application requirements, which can cause a Phase I to implement conditions that are not similar to the requirements under Phase II.

However, the approach of having Phase I MCMs appear as Phase II MCMs allows the permit writer to provide more clear requirements, which is beneficial to the permittee, and allows the permit writer to define portions of 40 CFR 122.26(d) as truly being that of an application vs. a term and condition of the permit. This approach subsequently allows both the permittee and the department to understand the difference between the MCMs, and how compliance and non-compliance are determined.

COMPLIANCE AND ENFORCEMENT:
Enforcement is the action taken by the Water Protection Program (WPP) to bring an entity into compliance with the Missouri CWL, 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. For entities covered under a NPDES permit, failure to comply with any applicable NPDES permit requirement also constitutes a violation of the Missouri CWL and its implementing regulations.

COVERAGE:
In accordance with 40 CFR 122.26(a)(1)(iv) and 40 CFR 122.26(a)(3)(i), the permittee is required to obtain a NPDES operating permit for the discharge of stormwater from their MS4. The MS4 is a medium Phase I in accordance with 40 CFR 122.26(b)(7)(i). The permit was drafted to provide coverage for all of the permittee's stormwater discharges from the MS4 into waters of the state.

Land disturbance, sometimes called construction activities, are actions which cause disturbance of the root layer or soil; these include clearing, grading, and excavating of the land. 40 CFR 122.26(b)(14) and 10 CSR 20-6.200(3) requires permit coverage for these activities. Coverage is not required for facilities when only providing maintenance of original line and grade, hydraulic capacity, or to continue the original purpose of the facility. This permit provides coverage for land disturbance activities. These activities have SWPPP requirements and may be combined with the standard site SWPPP. Land disturbance BMPs should be designed to control the expected peak discharges. The University of Missouri has design storm events for the 25 year 24 hour storm; these can be found at: http://ag3.agebb.missouri.edu/design_storm/comparison_reports/20191117_25yr_24hr_comparison_table.htm; to calculate peak discharges, the website https://www.lmnoeng.com/Hydrology/rational.php has the rational equation to calculate expected discharge volume from the peak storm events.

INTEGRATED PLANNING:
As noted in the June 5, 2012 EPA memorandum, "*Integrated Municipal Stormwater and Wastewater Planning Approach Framework*" EPA has increasingly embraced integrated planning approaches to municipal wastewater and stormwater management. EPA further committed to work with states and communities to implement and utilize these approaches in its October 27, 2011 memorandum "*Achieving Water Quality through Municipal Stormwater and Wastewater Plans*." In 2012, EPA developed an integrated planning framework that offers a voluntary opportunity for a municipality to develop an integrated plan to meet multiple CWA requirements.

The Water Infrastructure and Improvement Act (WIIA) (HR 7279), enacted on January 14, 2019, added a new Section 402(s) to the CWA to amend the CWA to include the 2012 Integrated Municipal Stormwater and Wastewater Planning Approach Framework.

WIIA provides greater certainty that integrated planning provides a comprehensive path a municipality can take voluntarily to meet CWA requirements. The new amendments require NPDES permitting authorities to inform municipalities that they can develop voluntarily an integrated plan that may be incorporated into permits, consent decrees, or administrative orders.

Integrated planning assists MS4 communities on their critical paths to achieving the human health and water quality objectives of the Clean Water Act by identifying efficiencies in implementing requirements that arise from distinct wastewater and stormwater programs, including how best to prioritize capital investments. Integrated planning can also facilitate the use of sustainable and comprehensive solutions, including green infrastructure, that protect human health, improve water quality, manage stormwater as a resource, and support other economic benefits and quality of life attributes that enhance the vitality of communities.

ITERATIVE PROCESS:
The iterative process is a documented process consisting of action items and analysis that is to be conducted by the permittee to ensure that BMPs are effective and that the permittee is meeting the MEP standard. The process starts with the evaluation of a BMP with its designated measurable goal, which is the reason quantifiable measurable goals greatly assist in the iterative process. If the BMP is found effective, then the permittee with regards to the BMP continues as normal until the next round of evaluation. If the BMP is found to be ineffective, then the permittee is required to conduct analysis to determine if the ineffective BMP is truly ineffective or if the measurable goal was ill-chosen or unattainable due to no fault of the BMP.

If the measurable goal was ill-chosen or unattainable, then the permittee would need to conduct analysis to determine a more appropriate measurable goal, preferably quantifiable. If the measurable goal wasn't ill-chosen or unattainable, then the permittee is to conduct analysis, research, or review to determine a replacement BMP that is to be effective at reaching the existing measurable goal. However, if the replacement BMP requires a new measurable goal, preferably quantifiable, then it is advantageous for the permittee to develop an appropriate measurable goal for the BMP. The replacement of the ineffective BMP with an effective BMP provides the permittee with reasonable further progress.

This process should occur as an annual evaluation; however, it would be naïve to believe that all BMPs can be evaluated annually. Thus, the operating permit requires that BMPs be evaluated every 5 years (i.e., the life of the permit).

MAXIMUM EXTENT PRACTICABLE (MEP) STANDARD:
Prior to 1987, municipal stormwater was subject to the same controls as other point sources like industrial and domestic discharges, which was section 301(b) of the CWA. However, in 1987, "Congress retained the existing, stricter controls for industrial stormwater discharges but prescribed new controls for municipal stormwater discharges," *NRDC v. EPA, 966 f.2D 1292, 9th Cir. 1992 (NRDC v. EPA)*. This "new control" was established in section 402(p)(3)(B)(iii) of the CWA, which states, "*Permits for discharges from municipal storm sewers – shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, designs and engineering methods, and such other provisions as the Administrator or State determines appropriate for the controls of such pollutants*."

The argument for "new controls" contained in the case of NRDC v. EPA was subsequently supported in the case of *Defenders of Wildlife v. Browner,* in which it was concluded that section 402(p)(3)(B) of the CWA "replaces" the requirements of 301(b) of the CWA with the MEP standard for MS4 discharges, and that it creates a "lesser standard" than section 301(b) of the CWA establishes on other types of discharges. Thus, MEP is a technology-based standard established by Congress in Section 402(p)(3)(B)(iii) of the CWA.

Compliance with MEP is realized with the successful implementation of the MCMs in accordance with the terms and conditions of the operating permit. Successful implementation of the MCMs is realized with the implementation of effective BMPs, which is determined with appropriate measurable goals. When BMPs are found to be ineffective, then the permittee is subject to the Iterative Process. This cyclical process demonstrates Reasonable Further Progress. While this completes the permittee's side to MEP, MEP isn't fully realized until the review of the permittee's SWMP has been conducted and they receive a satisfactory rating.

MEP does not apply to the Area Wide Land Disturbance portions of this permit.

MEASURABLE GOALS:
Measurable goals are designed objectives or goals that quantify the progress of program implementation and performance of BMPs. They are objective markers or milestones that the permittee uses to track the progress and effectiveness of BMPs in reducing pollutants to the MEP. At a minimum, measurable goal should contain descriptions of actions that will be taken to implement each BMP, what is anticipated to be achieved by each goal, and the frequency and dates for such actions to be taken. BMPs and measurable goals are the mechanisms that are used to establish a clear and specific baseline against which future progress at reducing pollutants to the MEP can be measured.

There are a number of different ways the permittee can establish measurable goals. It is recommended that the below categories are used when developing goals:

- **Tracking implementation over time** – Where a BMP is continually implemented over the permit term, a measurable goal can be developed to track how often, or where, this BMP is implemented.
- **Measuring progress in implementing the BMP** – Some BMPS are developed over time, and a measurable goal can be used to track this progress until the BMP implementation is completed.
- **Tracking total numbers of BMPs implemented** – Measurable goals can be used to track BMP implementation numerically (e.g., the number of wet detention basins in place or the number of people changing their behavior due to the receipt of educational materials).
- **Tracking program/BMP effectiveness** – Measurable goals can be developed to evaluate BMP effectiveness, for example, by evaluating a structural BMP's effectiveness at reducing pollutant loading, or evaluating a public education campaign's effectiveness at reaching and informing the target audience to determine whether it reduces pollutants to the MEP. A measurable goal can also be a BMP design objective or performance standard.
- **Tracking environmental improvement** – The ultimate goal of the NPDES stormwater program is environmental improvement, which can be a measurable goal. Achievement of environmental improvement can be assessed and documented by ascertaining whether state water quality standards are being attained, or by tracking trends or improvements in water quality (chemical, physical, and biological) and other indicators, such as the hydraulic or habitat condition of the waterbody or watershed.

Additionally, it is recommended that measurable goals include, where appropriate, the following items:

- The activity, or BMP, to be completed;
- A schedule or date of completion; and
- A quantifiable target to measure progress toward achieving the activity or BMP.

Measurable goals that include these items (not necessarily all three) are easy quantifiable, which leads to being easily tracked, and ultimately leading to a clear demonstration of reducing pollutants to the MEP. In order to help in the selection of measurable goals that will work for the co-permittee, it is recommended that the below criteria be used in selecting measurable goals:

- **Consider the objective for each minimum measure** – BMPs should work toward one or more common objectives related to stormwater quality improvement and reducing pollutants to the MEP. Objectives should be based on what is known about existing pollutant sources and problems in the watershed and what is required by the minimum measure.
- **Review the programs that are already in place for each minimum measure** – Use a self-audit/self-analysis. Coordination with other agencies, non-profit groups, citizen groups, etc. to identify existing initiatives that can be used as part of the stormwater management program.
- **Corresponding BMP –** BMPs that can be utilized for more than one MCM and work toward meeting each minimum measure. These BMPs should address the minimum measures objective identified above and meet the regulatory requirement in the minimum measure. Likewise, when a BMP can be utilized for more than one MCM, the measurable goal can also be used on more than one minimum measure.
- **Milestones for implementation –** Measurable goals should include a timeframe and a quantity to measure, if possible. To assist in this, it is beneficial to consider the following questions:
    - When will BMP be implemented?
    - What and when can institutional, funding, and legal issues, if any, be resolved before implementation can occur?
    - How will progress of implementation be tracked? (Spreadsheets or databases are very useful in tracking progress.)
    - How can the BMP be measured to demonstrate pollutants are being reduced to the MEP? Changes in behavior, number of BMPs implemented, or documented improvements in water quality are results that can demonstrate this.
- **Evaluation and Effectiveness of each BMP** – It is also beneficial to ascertain what effects individual and collective BMPs have on water quality and associated indicators. Instream monitoring, such as physical, chemical, and biological monitoring is ideal because it allows the permittee to determine if the BMP is improving water quality resulting from management efforts. Intermediate goals can provide documentation of progress toward the measurable goal. Ultimately, the evaluation method that is used by the MS4 permit holder for each BMP should lead to a determination of the environmental benefits of each minimum measure and overall effectiveness of the SWMP in reducing pollutants to the MEP.

MINIMUM CONTROL MEASURES (MCMS):

In accordance with 40 CFR 122.26(d)(2)(iv) and 10 CSR 20-6.200(4)(B)4, the permittee is to implement a set of programs and plans for the duration of the permit that reduces pollutants to the MEP. As noted above under the rational for BPJ, the management program under 40 CFR 122.26(d)(2)(iv) and 10 CSR 20-6.200(4)(B)4 have been established with the approach and format of 40 CFR 122.34(b). Additionally, the below MCMs are implemented and built upon through the permittee's stormwater program. Below is a description of each of the MCMs:

The terms and conditions of the permit were determined appropriate in accordance with 40 CFR 122.26(d)(2)(iv) and 10 CSR 20-6.200(4)(A), and via BPJ from 40 CFR 122.34(b)(1) for Public Education and Outreach; 40 CFR 122.34(b)(2) for Public Participation and Involvement; 40 CFR 122.34(b)(3) for Illicit Discharge Detection and Elimination; 40 CFR 122.34(b)(4) for Construction Site Stormwater Runoff Control; 40 CFR 122.34(b)(5) for Post-Construction Stormwater Management in New Development and Redevelopment; and 40 CFR 122.34(b)(6) for Pollution Prevention and Good Housekeeping for Municipal Operations.

In addition, to the listed six common MCMs typically reserved for Phase II, the permittee implements three additional MCMs. MCM #7 – Industrial and High Risk Runoff is in accordance with 40 CFR 122.26(d)(2)(iv)(C)(1) and (2). MCM #8 – Flood Control Projects is in accordance with 40 CFR 122.26(d)(2)(A)(4). MCM #9 – Monitoring is in accordance with 40 CFR 122.26(d)(2)(iv)(iii)(A) and the Biological Assessment is based on the previous operating permit and BPJ. The state regulations were not included above as they are identical to federal regulations.

NON-STORMWATER DISCHARGES:
This operating permit allows for non-stormwater discharges from the permittee's MS4 if the permittee or department determined these sources are not substantial contributors of pollutants. In accordance with 40 CFR 122.26(d)(2)(iv)(B)(1) the following category of non-stormwater discharges or flows are to be addressed by the permittee where such discharges are identified by the permittee as sources of pollutants to waters of the state. Thus, the permittee is the primary source of determination regarding if the below category of non-stormwater discharges or flows are sources of pollutants. The department may make such determinations in the future if it is believed the permittee is not conducting serious determinations. The categories of non-stormwater discharges are as follows: Water line and fire hydrant flushing; landscape irrigation; rising groundwater; uncontaminated groundwater; infiltration; uncontaminated pumped ground water; potable water sources; foundation drains; air conditioning condensate; springs; water from crawl space pumps; footing drains; lawn watering; flows from riparian habitats and wetlands; street wash water; emergency fire-fighting activities; individual residential car washing; and dechlorinated residential swimming pools.

OIL/WATER SEPARATORS (OWS)
OWS tank systems are frequently found at industrial sites where process water and stormwater may contain oils and greases, oily wastewaters, or other immiscible liquids requiring separation. Per 10 CSR 26-2.010(2)(B), all oil water separator tanks must be operated according to manufacturer's specifications and authorized in NPDES permits per 10 CSR 26-2.010(2) or may be regulated as a petroleum tank.

This permit authorizes the operation of OWS for the treatment of stormwater without the requirement to obtain a separate permit. If the OWS treats water other than precipitation which has run across the property (for example: wash water, effluent from shop drains, drips, spills, etc.) the facility must obtain an MOG14 or site specific permit to cover the discharges.

PERMIT SHIELD
Missouri statute, §644.051.16, RSMo, states "The department shall implement permit shield provisions equivalent to the permit shield provisions implemented by the U.S. Environmental Protection Agency pursuant to the Clean Water Act, Section 402(k), 33 U.S.C. Section 1342(k), and its implementing regulations, for permits issued pursuant to chapter 644."

CWA section 402(k) states "Compliance with a permit issued pursuant to this section shall be deemed compliance, for purposes of sections 1319 and 1365 of this title, with sections 1311, 1312, 1316, 1317, and 1343 of this title, except any standard imposed under section 1317 of this title for a toxic pollutant injurious to human health. Until December 31, 1974, in any case where a permit for discharge has been applied for pursuant to this section, but final administrative disposition of such application has not been made, such discharge shall not be a violation of (1) section 1311, 1316, or 1342 of this title, or (2) section 407 of this title, unless the Administrator or other plaintiff proves that final administrative disposition of such application has not been made because of the failure of the applicant to furnish information reasonably required or requested in order to process the application. For the 180-day period beginning on October 18, 1972, in the case of any point source discharging any pollutant or combination of pollutants immediately prior to such date which source is not subject to section 407 of this title, the discharge by such source shall not be a violation of this chapter if such a source applies for a permit for discharge pursuant to this section within such 180-day period."

The permittee is therefore shielded from new regulations or existing regulations that were subsequently determined appropriate. If the new or existing regulation is determined necessary for the permittee or for water quality, then the department will work with the permittee to determine if a change to the permittee's SWMP or operating permit is appropriate.

PESTICIDE RULE:
The department has developed a Pesticide General Permit MO-G870000 for point source discharges resulting from the application of pesticides to waters of the state. This permit has been developed as a result of federal requirements under NPDES.

The general permit authorizes the discharge of pesticides that leave a residue in water when such applications are made into, over or near waters of the United States. The department has determined that entities most likely affected by this permit include public health entities, including mosquito or other vector control districts and commercial applicators that service this sector. Others potentially affected by this permit include resource and land management entities such as public and private entities managing public land, park areas and university campuses, as well as utilities maintaining easements and right-of-ways, golf courses and other large residential developments which maintain a large grounds area. In addition, permits may be required for applications involving pesticide use for agricultural related activities when pesticides are applied to crops grown in or near a water of the United States. The department is collaborating closely with the Missouri Department of Agriculture, which already administers the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) along with the Missouri Pesticide Use Act. The permittee is subject to the pesticide rule. To determine if a

permit is required, please visit the department's website.
The thresholds listed in Table 1 of the pesticide general permit will assist in determining if a permit is required. If a permit is required, the permittee shall apply for either the Pesticide General Permit or a site-specific pesticide permit from the department.

SECONDARY CONTAINMENT
Prior to release of stormwater in secondary containments, it must be observed for the presence of petroleum sheen and odor. Steps must be taken if petroleum sheen or odor are observed to remove the petroleum from the stormwater prior to release. All secondary containment valves must remain closed when not actively draining stormwater. Release of stormwater from secondary containment must be controlled so as not to cause physical impacts, such as forming rills, transporting solids, or scouring vegetation. If the stormwater is contaminated, the MS4 operator has the option of pumping out the secondary containment and taking it to an accepting wastewater treatment facility for treatment. Causing a sheen to be released to the environment is a violation of this permit and general water quality standards at 10 CSR 20-7.031(4)(B).

QUALIFYING LOCAL PROGRAM:
Applicable federal regulations allow for the National Pollution Discharge Elimination System permitting authorities to administer a Qualified Local Program or QLP. A QLP would allow the department to cease issuing land disturbance permits in regulated MS4 areas, which will reduce double permitting for construction sites. QLP regulations are found at 40 CFR 122.44(s) and 10 CSR 20-6.200(7) for the discharge of stormwater.

STORMWATER MANAGEMENT PROGRAM AND PLAN:
The Stormwater Management Program is a comprehensive and documented program to manage the quality of stormwater discharges from the MS4. The Stormwater Management Plan (SWMP) is the document explaining the implementation of the Stormwater Management Program describing a schedule of MS4 program activities including prohibitions of practices, implementation of required practices, development of standards for urban growth, maintenance procedures, education, trainings, inspections and other management practices to prevent or reduce the pollution of waters of the state.

This permit in accordance with 10 CSR 20-6.200 and 40 CFR Parts 9, 122, 123 and 124 requires the permittee to develop and implement a SWMP. The SWMP also includes, but is not limited to, BMPs, pertinent local regulations, policies, procedures, interim milestones, measurable goals, measures of success, responsible persons/positions for each of the measurable goals, and any applicable TMDL assumptions and requirements.

STORMWATER MANAGEMENT PROGRAM ORDINANCES:
In accordance with 40 CFR 122.26(d)(2)(i), the permittee is required to have legal authority established by statute, ordinance, or series of contracts to control the contribution of pollutants to their MS4 from stormwater discharges associated with industrial activity and the quality of stormwater discharged from industrial sites, prohibit illicit discharges to the MS4, control the discharge of storm sewer spills, dumping or disposal of materials other than stormwater, require compliance with conditions of their ordinances, permits, contracts or orders, and carry out all inspections, surveillance and monitoring procedures necessary to determine compliance and noncompliance with permit conditions including the prohibition on illicit discharges to the MS4.
In accordance with 40 CFR 122.26(d)(iv)(D) and 40 CFR 122.26(d)(2)(iv)(A)(2), the permittee must address construction site stormwater runoff control to require erosion and sediment controls at construction sites, as well as sanctions designed to ensure compliance; and address new development and significant redevelopment in their SWMPs through controls to reduce pollutants in stormwater discharges after construction is completed

STORMWATER MANAGEMENT PROGRAM REPORTING & REPORT FREQUENCY:
In accordance with 10 CSR 20-6.200(4)(B)10, large and medium MS4s are to submit an annual report by the anniversary of the date of the issuance of the permit for the system. In agreement with the permittee, the permit establishes that the annual report shall be due October 28th of each year for the reporting period of July 1st to June 30th.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
In accordance with 40 CFR 122.44(3)(k), 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.

Additionally, in accordance with 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. A SWPPP shall be developed and implemented for each permitted site for land disturbance activity 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.

SURFACE WATER BUFFER ZONES
For land disturbance sites, in order to design controls that match the sediment removal efficiency of a 50-foot buffer, you first need to know what this efficiency is for your site. The sediment removal efficiencies of natural buffers vary according to a number of site-specific factors, including precipitation, soil type, land cover, slope length, width, steepness, and the types of erosion and sediment controls used to reduce the discharge of sediment prior to the buffer. For additional information;
https://www.epa.gov/sites/default/files/2017-02/documents/2017_cgp_final_appendix_g_-_buffer_reqs_508.pdf

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA):
In accordance with 40 CFR 122.26(d)(2)(iv)(C) and 10 CSR 20-6.200(4)(B)4.C., the permittee is required to provide a description of a program to monitor and control pollutants in stormwater discharges to the MS4 from municipal landfills, hazardous waste treatment, disposal and recovery facilities, industrial facilities that are subject to Section 313 of Title III of SARA.

WATER QUALITY STANDARDS:
Under the CWA section 402(p), the U.S. Congress established two different standards for the regulation of stormwater discharges, which one was for industrial activities and the other for municipal stormwater discharges from MS4s. Stormwater discharges associated with industrial activities are required to comply with NPDES permits containing technology-based effluent limitations or more stringent water quality based effluent limitations as set forth in CWA section 301. However, in contrast, stormwater discharges from MS4s are to be regulated by permit that require controls to reduce the discharge of pollutants to the maximum extent practicable (MEP).

The MEP language contained in the CWA section 402(p)(3)(B)(iii) represents a different technology-based standard which requires a governmental entity (e.g., municipality) to pursue sound pollutant control techniques that are both technically and economically feasible. More importantly, MEP and the CWA do not prescribe water quality-based requirements for municipal stormwater. Water quality-based requirements differ from technology-based requirements, in that water quality-based requirements are set on ambient water quality of receiving water body and applicable water quality standards; however, technology-based standards focus upon the water quality achievable by a particular or comprehensive plan of pollution control measures or technologies.

However, to say that water quality does not apply to MS4s is incorrect due to the fact that if MS4 is subject to a TMDL, the permittee can be required to address that TMDL using BMPs under an iterative, adaptive management approach to implementation. Though, this is not to be an indication that numeric limitation(s) based on a Wasteload Allocation are applicable to a MS4 permittee upon subjection to a TMDL.

Area Wide Land Disturbance: 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.

Specific Criteria Considerations:
An evaluation of discharges associated with land disturbance activities has been conducted to determine if any pollutants discharged under the land disturbance section of this permit would have reasonable potential to cause or contribute toward an excursion of specific water quality criterion. Pollutants discharged from authorized land disturbance activities are not commonly associated with pollutants listed as specific criteria in the Missouri Water Quality Standards; therefore, reasonable potential to cause an excursion of a specific criterion does not exist.

General Criteria Considerations:
In accordance with 40 CFR 122.44(d)(1), effluent limitations shall be placed into the permit for those pollutants which have been determined to cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality. The rule further states that pollutants which have been determined to cause, have the reasonable potential to cause, or contribute to an excursion above a narrative criterion within an applicable state water quality standard, the permit shall contain a numeric effluent limitation to protect that narrative criterion. It should also be noted that Section 644.076.1, RSMo states that it shall be unlawful for any person to cause or permit any discharge of water contaminants from any water contaminant or point source located in Missouri that is in violation of sections 644.006 to 644.141 of the Missouri CWL or any standard, rule or regulation promulgated by the commission.

The permit writer evaluated general and narrative water quality reasonable potential for this facility. Per the permit writer's professional best judgment, based on available data and full and accurate information on the land disturbance process, activities in compliance with this permit do not demonstrate reasonable potential for excursions from the general or narrative water quality criteria.

303(d) LIST, TOTAL MAXIMUM DAILY LOAD (TMDL)

Section 303(d) of the CWA requires that each state identify waters that are not meeting water quality standards. 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 typical water pollution control programs. Federal regulations require permitting authorities to develop TMDLs to address impaired waters listed per Section 303(d) of the CWA. 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 impaired.

Representative stormwater outfalls, numbers 002, 004, 003, 008, and 009, as established in the operating permit, discharge to streams that are listed for impairments, as follows:

Stream Name	Pollutant	Corresponding Outfall	Source (DNR records)
Wilson Creek	Aquatic Macroinvertebrate Bioassessments/Unknown	002	Non-point source
North Branch Wilson Creek	Zinc (Sediment)	004	Urban Non-Point Source
Jordan Creek	Polycyclic aromatic hydrocarbons (Sediment)	003, 008, 009	Non-point source

The operating permit only requires action from the permittee when the receiving stream has an approved or established TMDL. However, the operating permit does not remove any agreement, consent decree, or other legally binding documents that may have been required upon the permittee.

In addition to the impairments, the permittee is subject to the December 2004 James River TMDL; Pollutant: Nutrients. However, the TMDL does not contain a WLA for the permittee. Regarding the Wilson Creek and Jordan Creek TMDLs, the permittee filed suit against EPA on September 30, 2011, in the U.S. District Court for Western District of Missouri, Southern District, challenging EPA's establishment of TMDL for Wilson, Jordan and Pearson Creeks in and near Springfield. The permittee's suit noted lack of statutory authority, arbitrary and capricious action, and violation of requirements for notice and comment rulemaking as the reason for their challenge. Settlement discussions between the permittee and EPA began shortly after the complaint was filed. EPA subsequently filed a motion for voluntary remand of the challenged TMDLs, and on February 20, 2013, a court order vacated the challenged TMDLs and remanded the matter to EPA for reconsideration.

PART IV – RAINFALL VALUES FOR MISSOURI

Knowledge of the 2-year, 24-hour storm event is used in this permit for two main reasons:
1) The design, installation, and maintenance of effective erosion and sediment controls to minimize the discharge of pollutants. These erosion and sediment controls must be designed to capture or treat a 2-year, 24-hour storm event. This includes BMPs and, depending on the acreage of the drainage area, sediment basins.
2) If the seven-day inspection frequency is utilized, an inspection must occur within 48 hours after any storm event equal to or greater than a 2-year, 24 hour storm has ceased.
A 2-year, 24-hour storm event may be determined in two different ways. For site-specific 2-year, 24-hour storm event information utilize the National Oceanic and Atmospheric Administration's National Weather Service Atlas 14 (NOAA Atlas 14) which is located at https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html. This is the most accurate and preferred method for determining the 2-year, 24-hour storm event. In general, this will be the least stringent method. For more information visit; https://www.weather.gov/media/owp/oh/hdsc/docs/Atlas14_Volume8.pdf.

Part V – Administrative Requirements

COST ANALYSIS FOR COMPLIANCE

The operating permit for the permittee establishes the minimum requirements to ensure compliance with applicable federal and state rules and regulations for their regulated Phase I MS4. The operating permit requires the permittee to successfully implement their SWMP based on MCMs to ensure for MEP. The permit requires the permittee to submit their BMPs, measurable goals, and iterative process for implementation of the MCMs, which will be deemed affordable by the department unless the permittee indicates that the terms and conditions of the operating permit are not affordable. Upon notification of that the terms and conditions of the operating permit are not affordable, the department will conduct an official Cost Analysis.

The department has determined that the cost for developing a plan to address TMDL assumptions and requirements is low burden and should require no tax or utility fee increase for MS4 residents. However, the department will revisit the specific cost analysis for compliance upon the effective date of a new TMDL and its implementation plan considerations, where applicable. If the department requires changes to the SWMP for any situation, the department will conduct a Cost Analysis unless waived by the permittee.

EPERMITTING FOR LAND DISTURBANCE

In order to report the quarterly report you will need to utilize the department's online ePermitting system. In order to access this, you will need to register an account with the Missouri Gateway for Environmental Management (MoGEM). The following user guides will assist you with this process.

MoGEM Website:https://dnr.mo.gov/data-e-services/missouri-gateway-environmental-management-mogem
ePermitting Website: https://dnr.mo.gov/data-e-services/water/electronic-permitting-epermitting
How to Register: https://dnr.mo.gov/document-search/registering-new-user-account-within-missouri-gateway-environmental-management-mogem-portal
ePermitting User Guides: (found on ePermitting website)

- How to Add a Facility: https://dnr.mo.gov/document-search/epermitting-chapter-2-home-facility-search-associate-new-facility
- How to Apply for a Permit: https://dnr.mo.gov/document-search/epermitting-chapter-3-create-new-permit.

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 of this operating permit started March 11, 2022 and ended April 11, 2022. One letter was received, the following summarizes the comments and responses:

Comment 1: Page 5 – Item 5 – A comment was made via email on 3/9/22 on the pre-public notice version and was not addressed. Based on the CSR reference, this sentence seems to be referring to an OWS tank that is a wastewater treatment tank system that is part of a wastewater treatment facility. Revise using the language from the MS4 Phase II permit.

Comment 2: Page 16 – Item 18 – It's still not clear as written what would or would not need to be reported to the Regional Office. Per phone call on 3/9/22, this is not intended to require reporting of a dewatering discharge without BMPs, for example. It is intended to be contaminants like oil, and not sediment. The word hazardous substance has been added but the word contaminant could include sediment. For example, Page 13 item c. states "no contaminants other than sediment…" Could the same wording be used in Item 18, if that is the intent? Also, does "…discharge or enter waters of the state" mean that an unauthorized discharge needs to be reported if it discharges from the site but does not enter waters of the state?

Response: The words "other than sediment" have been added. Item 18.c explains that other spills shall "be cleanup to prevent entrainment in stormwater but are not required to be reported to the
department." This scenario is as you described, a spill contained on a site, which has not reached water of the state.

Comment 3: Per Part D. Section 2, if approved, the SWMP submitted as part of the application for permit renewal shall become effective upon issuance of this permit. Please let us know the status of the department's review of the City's SWMP submitted as part of our MS4 permit application

Response: The City's SWMP was reviewed as part of the application to ensure it implements the terms and conditions of the permit. The SWMP was approved, and the approval letter for the City's SWMP will be issued with the final permit.

DATE OF FACT SHEET: FEBRUARY 17, 2022

COMPLETED BY:
SARAH WRIGHT, ENVIRONMENTAL PROGRAM SPECIALIST
STORMWATER COORDINATOR
MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
OPERATING PERMITS SECTION – STORMWATER AND CERTIFICATION UNIT
(573) 526-1139
Sarah.wright@dnr.mo.gov, MS4@dnr.mo.gov

February 8, 2023

Sarah Wright
Water Protection Program – Operating Permits Section
Missouri Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102

RE: Springfield Qualifying Local Program for Land Disturbance

Dear Ms. Wright:

The City of Springfield would like to request designation as a Qualifying Local Program (QLP) for Land Disturbance per 10 CSR 20-6.200(7) set to be a final published regulation on February 28, 2023. Please find attached the information required in the application procedure provided by the Department. We appreciate your work to make this an option for MS4 communities. If any additional information is needed to approve our QLP application, please contact me at clamb@springfieldmo.gov or 417-864-1996. We look forward to working with the Department on our QLP designation.

Sincerely,

Carrie Lamb
Water Quality Compliance Officer

CC: Errin Kemper, Director
Ron Petering, Assistant Director
Zach Martin, Principal Engineer

Application for Missouri Qualified Local Program for Land Disturbance

Name of the MS4: City of Springfield

Permit Number: MO0126322

Name of Contact Person: Carrie Lamb, Water Quality Compliance Officer, Water Quality Management & Protection Division

Contact Information: clamb@springfieldmo.gov; 417-864-1996

Mailing Address: P.O. Box 8368, Springfield, MO 65801

Links to Construction Stormwater Ordinances: City Code Chapter 96 Article III. – Land Disturbance Activity - https://library.municode.com/mo/springfield/codes/code_of_ordinances?nodeId=PTIICO_CH96STWA_ARTIIILADIAC

City Code Chapter 96 Article III Sec. 96-44 and 96-45 specify when a land disturbance permit is required and is consistent with the code of state regulations. The stormwater pollution prevention plan (SWPPP) definition in Sec. 96-41 and SWPPP requirements in Sec. 96-48 require the plan and BMPs to be in accordance with the Missouri State Operating Permit for construction or land disturbance activity (MORA permit). The article also provides authority for SWPPP review and approval, site inspections, and enforcement.

Site Plan and Stormwater Pollution Prevention Plan Review and Approval Procedures

The City's land disturbance program is administered by the Water Quality Management & Protection (WQM&P) Division of the Department of Environmental Services. Land disturbance permitting review and approval procedures performed by the WQM&P Division are integrated into the City's overall development review process. A checklist is available to assist applicants in the permitting process (Attachment A). Applicants typically attend a pre-development review meeting with staff from multiple City departments to discuss their proposed intentions for development of a site. Comments are given as to whether a land disturbance permit will be needed based on the area of disturbance proposed. The application process is composed of submittal of an erosion sediment control site plan and SWPPP for review and approval for sites disturbing 1 acre or greater. For land disturbance related to a development project, submittal occurs via the e-City and e-Plans systems. For stand-alone land disturbance activity not related to a development project, submittal may occur via email to the designated WQM&P staff contact.

A SWPPP template is provided for use by the applicant that is consistent with the requirements in the State's MORA permit. It is available at https://www.springfieldmo.gov/3507/Land-Disturbance-Permit. BMP details developed by the WQM&P Division are also available for use by SWPPP preparers at https://www.springfieldmo.gov/2122/Best-Management-Practices/. A checklist (Attachment B) is used by WQM&P staff for the SWPPP review and comments are sent to the SWPPP preparer. Additional rounds of review are completed until all comments have been addressed. Once the erosion sediment control site plan and SWPPP are approved, the applicant may proceed through the remaining steps of the permitting process, which include permit fee payment and initial BMP inspection. The initial BMP inspection is performed by WQM&P staff using a checklist (Attachment C).

The permitting process is streamlined for residential lots less than 1 acre that are part of a larger common plan disturbing 1 acre or greater. A land disturbance permit is obtained according to the normal process described above for the initial subdivision development disturbing 1 acre or greater. If a lot is sold to another developer, they must obtain a land disturbance permit over the counter when obtaining the building and sewer permits for that lot. A typical residential lot site plan is provided with the permit and informs the permittee that the SWPPP must be available on site. A simplified SWPPP template has also been developed for use. The SWPPP is not reviewed prior to issuing the permit for these residential lots. The typical residential lot site plan and simplified SWPPP template are available at https://www.springfieldmo.gov/3507/Land-Disturbance-Permit.

Land Disturbance Site Inventory and Tracking Procedures

The City uses e-City and e-Plans software for all development review and permitting, including land disturbance permits. The review and permitting software work together to track SWPPP review and permitting milestones. Fulcrum software is also used to track review, inspections, and enforcement for all land disturbance permits using the following statuses:

- SWPPP Review
- Needs Initial Inspection
- Initial Corrective Action
- Needs Routine Inspection
- Routine Corrective Action
- No Action Needed
- Needs Termination Inspection
- Termination in Progress
- Termination Corrective Action
- Terminated
- Open Common Plan
- Borrow/Fill Site

Land Disturbance Compliance Inspection and Documentation Procedures

As described above, WQM&P staff conduct an initial BMP inspection before issuance of the land disturbance permit. Once the permit is issued, the permittee is required to conduct self-inspections at the frequency specified in the state MORA permit. A self-inspection report template (Attachment D) is provided in the SWPPP and discussed during the initial BMP inspection. WQM&P staff conduct routine inspections and complaint-based inspections. Routine inspections are scheduled and prioritized to optimize the use of inspection time to address water quality issues and generally consist of one inspection during the life of construction of a permitted site. Complaint-based inspections are conducted in response to concerns reported by citizens or other parties, which are typically received through the Citizen Resource Center's service request system. Written procedures are in place for conducting inspections and enforcement. An inspection form is used for conducting inspections (Attachment E).

Prior to termination of the permit, a termination inspection is conducted to ensure adequate vegetation cover in accordance with the MORA permit, removal of temporary BMPs, and removal of construction-

related sources of pollutants such as accumulated sediment and trash. Multiple termination inspections may be performed before a permit is terminated.

Enforcement Response Plan and Control Measures for Compliance

The enforcement tools authorized in City Code Sec. 96-50 and 96-52 include a notice of violation, stop work order, summons, abatement, and penalties for violation. Written procedures are in place for conducting enforcement. Notices of violation are typically issued for permitted sites that have failed to address corrective actions identified during an inspection in accordance with the deadline in the inspection report. Stop work orders are typically used for sites conducting land disturbance without a permit. A site may be referred for a summons to Municipal Court if compliance is not achieved in response to a Notice of Violation or for repeated violations.

Process or Mechanisms for Gaining Public Input

The public portal for the permitting software is ecity.springfieldmo.gov. The general public can look up records, including searching for all open land disturbance permits or land disturbance permits by address. The public can report a concern about a land disturbance site by calling the Citizen Resource Center at 417-864-1010 or online at https://www.springfieldmo.gov/requesttracker.aspx. These concerns are entered into a database system and routed to the WQM&P Division.

Geographic Boundaries of the MS4 Regulated Area

A map layer was previously provided in January 2023.

Attachments

- Attachment A – Land Disturbance Permit Issuance and Termination Checklist
- Attachment B – SWPPP Review Checklist
- Attachment C – Initial Inspection Checklist
- Attachment D – Self-Inspection Checklist
- Attachment E – Routine Inspection Checklist

Land Disturbance Permit Issuance and Termination Checklist

290 E Central St Springfield, MO 65802 ·
Phone (417) 864-1169 · Email: smorrissey@springfieldmo.gov

This checklist is designed to help Land Disturbance Permit (LDP) applicants keep track of all the major components that will be necessary before a Land Disturbance Permit can be issued:

APPLICATION & SWPPP SUBMITTAL

1. ____ Apply for a Pre Dev meeting. Every project must go through the pre-development review process. Apply online here: https://ecity.springfieldmo.gov/. Or go to the City's main website (www.springfieldmo.gov) and clicking on the icon on the left side of the screen that says, "Start a Development Project." The pre-development meeting is a free, informal meeting prior to the formal applications process and is meant to discuss in general terms the proposed development.
2. ____Submit the Storm Water Pollution Prevention Plan (SWPPP) for review.
   a. Guidance and information about creating a SWPPP, including a template, can be found by visiting our website, https://www.springfieldmo.gov/3507/Land-Disturbance-Permit.
   b. Submit the SWPPP through the ePlans program. Include the document under "Reports and Specifications."

PAYMENT OF FEES

3. ____SWPPP has been approved.
   a. Once the SWPPP has been reviewed, and any comments have been addressed, an approval letter will be sent to the designer and the owner detailing the remaining steps in order for the City LDP to be issued.
   b. Follow the remaining steps addressed in the letter. These steps could vary from project to project.

4. ____City Land Disturbance Permit fee has been paid.
   a. City Land Disturbance fees are stated in the SWPPP approval package sent to the designer and owner.
   b. Submit your LDP fee online to ePlans or to the front desk at the Environmental Resource Center, 290 E Central St.
   c. Guidance and information about how to use ePlans can be found by visiting our website, https://www.springfieldmo.gov/5569/Using-ePlans-and-eCity.

OBTAINING THE LAND DISTURBANCE PERMIT (LDP)

5. ____Initial Best Management Practices (BMPs) Inspection.

a. Contact Bailey Wolf via email at bailey.wolf@springfieldndmo.gov or call 417-864-2087 to schedule an initial inspection.
b. Initial Inspection Requirements:
   Site Sign Hung on Site
   SWPPP on Site
   Self-Inspection Frequency Selected
   ESC Plan Updated & on Site
   Initial BMPs Installed per ESC Plan
   Spill Kit on Site
c. A City Land Disturbance Permit will be issued via email within 24 hours of an inspection of the site.

TERMINATING THE LAND DISTURBANCE PERMIT

6. ____Close of City and State Permit.
   a. Ensure the permitted site meets the following criteria: (a) 70% uniform grass growth throughout the project, (b) removal of any temporary erosion and sediment control BMPs, (c) vegetation or repair of any area associated with the removal of the BMP, and (d) any source of pollution to the City's MS4, such as sediment in storm water boxes, mud on public streets, solid waste issues, etc.
   b. Contact Bailey Wolf via email at bailey.wolf@springfieldndmo.gov or call 417-864-2087 for termination inspection.
   c. Closeout your Missouri Department of Natural Resources' permit and retain the project SWPPP and all relevant documentation for the required 3-year time frame after the closeout of the permit.

Have questions about SWPPP submittal or plan review? Spencer Morrissey, Stormwater Technician, smorrissey@springfieldmo.gove, 417-864-1169
Need to bring in a permit fee check? Diana Young, Administrative Assistant, dyoung@springfieldmo.gov, 864-1905
Have questions about the status of stormwater plan approval? Chris Dunnaway, cdunnaway@springfieldmo.gov, 417-864-1876.
Need to schedule an initial inspection or close your site? Bailey Wolf, Stormwater Technician, bailey.wolf@springfieldmo.gov, 417-864-2087