

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 RSMo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No. MO-0137910

Owner: Missouri Department of Transportation
Address: P.O. Box 270, Jefferson City, Missouri 65102

Continuing Authority: Same as above
Address: Same as above

Facility Name: Missouri Department of Transportation Separate Stormwater Sewer System
Facility Address: 105 West Capitol Avenue, Jefferson City, Missouri 65102

Legal Description: See page two (2)
UTM Coordinates: See page two (2)

Receiving Stream: See page two (2)
First Classified Stream and ID: See page two (2)
USGS Basin & Sub-watershed No.: See page two (2)

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

FACILITY DESCRIPTION

SIC/NAICS Codes: 9621/921110, 1629


Stormwater discharge from the Missouri Department of Transportation's Separate Storm Sewer System in regulated areas and area-wide land disturbance activities statewide.

This permit authorizes only stormwater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Sections 640.013, 621.250, and 644.051.6 of the Law, and 10 CSR 20-6.020 and 10 CSR 20-1.020

November 1, 2021
Effective Date


Edward B. Galbraith, Director, Division of Environmental Quality

October 31, 2026
Expiration Date


Chris Wieberg, Director, Water Protection Program

LEGAL DESCRIPTION (continued):

Transportation Separate Storm Sewer System Various Outfalls Statewide:

The Missouri Department of Transportation's (MoDOT) Separate Storm Sewer System (TS4) has a vast amount of stormwater outfalls. MoDOT maintains an electronic map of known outfalls and is hereby incorporated by reference. In place of listing the numerous outfalls, the below locational data is for MoDOT's Headquarters office in Jefferson City, Missouri, which is used to establish at least one outfall.

Legal Description:	Land Grant 2681
UTM Coordinates:	X = 572165.9, Y = 4270280.1
Receiving Stream:	Missouri River (P) 303(d)
First Classified Stream and ID:	Missouri River (P) (0701) 303(d)
USGS Basin & Sub-watershed No.:	10300102 - 1305

Land Disturbance Various Outfalls Statewide:

As part of the requirements under an area-wide land disturbance permit, active land disturbance project locations can occur at any location statewide on MoDOT properties, established easements, or other areas as appropriate and are to be reported quarterly. The activities covered by this permit do not have a set location for the duration of the permit cycle in most cases. In place of the numerous outfalls, the below locational data is for MoDOT's Headquarters office in Jefferson City, Missouri, which is used to establish at least one outfall.

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UTM Coordinates:	X = 572165.9, Y = 4270280.1
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SECTION I. TRANSPORTATION SEPARATE STORM SEWER SYSTEM (TS4) PERMIT CONDITIONS

A. COVERAGE AND RESTRICTIONS

1. This operating permit authorizes the discharge of stormwater from the Missouri Department of Transportation (MoDOT) Separate Storm Sewer System (TS4). The TS4 area is defined as MoDOT Property including, but not limited to: roadway right-of-way, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, salt/sand storage locations, snow disposal areas, parking lots, commuter parking lots, welcome centers, rest areas, and other areas owned and operated by MoDOT that are located in:
 - (a) Urbanized Areas as determined by the latest Decennial Census by the Bureau of Census;
 - (b) Regulated municipal separate storm sewer systems not located in an Urbanized Area per 10 CSR 20-6.200(5)(C) 24.B;

2. This operating permit authorizes the discharge of stormwater from the MoDOT TS4 that is located in:
 - (a) Watersheds subject to an approved and effective Total Maximum Daily Load (TMDL) in accordance with Section I Part C – DISCHARGES TO IMPAIRED WATERS;
 - (b) Outstanding National Resource Waters;
 - (c) Outstanding State Resource Waters; and
 - (d) Statewide as established in Section I Part B – DISCHARGE LIMITATIONS, item #6.

3. This operating permit also authorizes the discharge of certain non-stormwater from MoDOT's TS4 provided that the Missouri Department of Natural Resources (Department) has not determined these sources to be substantial contributors of pollutants to the permittee's TS4 that require a separate operating permit. Non-stormwater discharges permitted to discharge are as follows:
 - Landscape irrigation and lawn watering;
 - Water line and hydrant flushing;
 - Rising ground water;
 - Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(b)(20));
 - Uncontaminated pumped ground water;
 - Uncontaminated potable water sources;
 - Foundation drains;
 - Air conditioning condensate;
 - Springs;
 - Water from crawl space pumps;
 - Footing drains;
 - Flows from riparian habitats and wetlands;
 - Street and sidewalk wash water or water used to control dust, as long as the water does not use detergents;
 - Discharges or flows from emergency firefighting activities. Fire-fighting activities do not include washing of trucks, run-off water from training activities, and similar activities;
 - Individual residential car washing;
 - Dechlorinated and uncontaminated residential swimming pool discharges.

4. Oil/Water Separators (OWSs). In the event MoDOT operates OWS tanks for the treatment of stormwater and falls under 10 CSR 26-2.010(2)(B). OWS treating stormwater on property covered by this permit are hereby authorized and shall be operated per manufacturer's specifications. The specifications and operating records must be made accessible to Department staff upon request. Sludge from an OWS is considered used oil and must be disposed of in accordance with 10 CSR 25-11.279.

5. This permit does not authorize discharges that are:
 - (a) Mixed with sources of non-stormwater unless non-stormwater source discharges are:
 - i. In compliance with a separate NPDES permit, or
 - ii. Determined not to be a substantial contributor of pollutants to waters of the state.
 - (b) Associated with industrial activities requiring a separate NPDES operating permit as defined by 10 CSR 20-2.010(42)(A) and required by 10 CSR 20-6.200.
 - (c) Covered under another operating permit.

6. This operating 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(1)(3)(a) of the Clean Water Act (CWA).
7. Any pesticide application and potentially discharged into the TS4 by the permittee shall comply with the requirements of Federal Insecticide, Fungicide and Rodenticide Act as amended (*7 U.S.C. 136 et. seq.*) and the use of such pesticides shall be in a manner consistent with its label.

B. DISCHARGE LIMITATIONS

1. The permittee shall implement programmatic Best Management Practices (BMPs) via an iterative process to reduce the discharge of pollutants to the Maximum Extent Practicable (MEP) from the TS4 for the goal of attainment with Missouri's Water Quality Standards. Specific requirements are listed in Section I Parts D, E, and F of this permit.
2. The permittee shall implement and enforce a Stormwater Management Program (SWMP) per the requirements listed in this operating permit in accordance with the CWA and corresponding National Pollution Discharge Elimination System (NPDES) regulations, 40 CFR 122.34, and in accordance with the Missouri Clean Water Law (CWL) and state regulations 10 CSR 20-6.200.
3. The permittee shall comply with the provisions and requirements contained in this operating permit, the SWMP, and schedules developed in fulfillment of this permit.
4. The Department may require corrective action(s) or require additional applications for alternative general permits if the Department determines this TS4 is causing or creating a significant instream exceedance of Missouri's Water Quality Standards.
5. The permittee shall notify the Department's Municipal Separate Storm Sewer System (MS4) Team of any new or redevelopment TS4 area projects in areas subject to an existing U.S. Environmental Protection Agency (EPA) approved or established TMDL at least 180 days prior to beginning the construction, which may require the permittee to submit an application for modification. The Department will work with the permittee to ensure that BMPs are being implemented via an iterative process for the reduction of pollutants.
6. The items below are statewide requirements. Require actions listed under Part D and E are applicable whether or not the location is listed under Section I Part A – COVERAGE AND RESTRICTIONS, item 1.
 - (a) The permittee shall be required to give notification to appropriate local or state agencies of illegal dumping or illicit discharges as soon as practicably possible in accordance with Section I Part E – MINIMUM CONTROL MEASURES, item 3;
 - (b) Bridge washing and cleaning activities over waters of the state.
7. The full implementation of this operating permit and the Stormwater Management Plan (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 a minimum of 30 days prior to the action being conducted.

C. DISCHARGES TO IMPAIRED WATERS

1. The permittee shall develop and maintain a TMDL Assumptions and Requirement Attainment Plan (ARAP) if any area of the TS4 is identified in an EPA approved or established TMDL with an applicable Wasteload Allocation (WLA). If an ARAP has already been developed, it shall be amended if additional TMDLs are implemented. MoDOT shall implement steps toward the attainment of applicable WLA in accordance with 40 CFR 122.44(k)(2) and (3). 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) within the TS4, actions to be taken to address those sources within MoDOT's jurisdiction, 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) 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 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; however, if it is not feasible to utilize a measurable goal that is quantifiable, then the permittee shall provide justification indicating why the measurable goal cannot be quantifiable. 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 Section 1 Part C - DISCHARGES TO IMPAIRED WATERS, 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 the effective date of this operating permit, whichever is later. The initial TMDL ARAP is to be submitted to the Department's MS4 Team for review and rating at MS4@dnr.mo.gov or Water Protection Program, P.O. Box 176, Jefferson City, MO 65102. The deadline for the TMDL ARAP may be extended by request of the permittee and written approval by the Department.
 3. The permittee shall submit annual TMDL ARAP status reports to the Department on January 28th of each year until the TMDL ARAP has been submitted. The annual status report shall provide a brief update on the status of completion of the TMDL ARAP to be submitted to the Department. The deadline for the TMDL ARAP status report may be extended through written request by the permittee and with written approval by the Department. The annual status report shall be submitted to the Department's Water Protection Program (WPP), MS4 Team at MS4@dnr.mo.gov or Water Protection Program, MS4 Team, P.O. Box 176, Jefferson City, MO 65102.
 4. 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. In addition to the disapproval, the Department shall provide an itemized list of recommendations, discrepancies, and plan corrective action(s) to the permittee in written correspondence, which will also provide deadlines for any corrective action(s).
 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 MS4 SWMP Report.
 6. Once the TMDL ARAP has received Department approval, it shall be implemented in accordance to established and approved schedules. Implementation of TMDL ARAP control measures shall be documented, 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 MS4 SWMP Report.
 8. The permittee may demonstrate that no additional controls are needed beyond the successful implementation of the six Minimum Control Measures (MCMs), which includes modifications to BMPs or measurable goals, for the 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 Coordinator 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 an Integrated Plan is subject to the same requirements of this permit. If the permittee is to utilize an Integrated Plan, they shall contact the Water Protection Program's MS4 Coordinator to begin the process.
 10. If the EPA approved or established TMDL indicates that the 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 contain in Section I Part C of this permit.
 11. The Department retains the authority to review previously approved ARAPs for subsequent determinations to confirm the ARAP is meeting the applicable TMDL's assumptions and requirements. In the event that the Department requests a modification to the ARAP, the Department will work with the permittee on a schedule for alterations.

D. STORMWATER MANAGEMENT PROGRAM

1. The permittee shall develop, implement, and enforce their Stormwater Management Program. The Stormwater Management Program shall be designed to reduce the discharge of pollutants to the MEP. Permittees shall implement BMPs consistent with the provisions of both this permit and their specific Stormwater Management Program to achieve compliance with the standard of reducing pollutants to the maximum extent practicable per 40 CFR 122.34.
2. As part of the Stormwater Management Program, the permittee must update the SWMP, with appropriate appendices and/or supplemental attachments, explaining the Stormwater Management Program. This SWMP shall be a document used to explain programmatic BMPs and the on-going evaluation of the BMPs, the tracking, and methods of documentation. This document may be kept electronically.

The SWMP shall:

- (a) Include the name, title, phone number, and email for the person(s) responsible the Stormwater Management Program the person(s) responsible for each minimum control measure if different from the primary responsible person.
 - (b) The SWMP shall be maintained by the MS4 Operator to ensure consistency with the implementation, continuity of the Stormwater Management Program, and iterative reviews of programmatic BMPs and procedures.
 - (c) The SWMP shall be updated or developed within 128 days after the renewal of the permit.
3. The permittee shall operate the Stormwater Management Program in accordance with this operating permit and conduct annual reviews of their Stormwater Management Program.
 - (a) The permittee shall begin implementing the Stormwater Management Program on all new areas, per Section I Part A – COVERAGE AND RESTRICTION, added to the TS4 for which the permittee is responsible for as expeditiously as practicable but no later than one (1) year from the addition of the new areas. Implementation may be accomplished in a phased manner to allow additional time for controls that cannot be implemented immediately. Information on all new additional areas shall be included in the MS4 Stormwater Management Program Report.
 - (b) Only those portions of the Stormwater Management Program specifically required as permit conditions shall be subject to the modification requirements of 10 CSR 20-6.200. Addition of components, controls, or requirements by the permit holders and replacement of any ineffective or infeasible BMPs implementing a required component of the SWMP with an alternate BMP expected to achieve the goals of the original BMP shall considered minor changes to the SWMP and not modifications.
 4. The implementation of any minimum control measure may be shared with another governmental entity if:
 - (a) The other entity, in fact, implements the minimum control measure or portions thereof;
 - (b) The particular control measure, or component of that measure is at least as stringent as the corresponding permit requirement;
or
 - (c) The other entity agrees to implement the control measure on the permittee's behalf. Written acceptance of this obligation is required. This obligation shall be maintained as part of the SWMP. If the other entity agrees to report on the minimum measure on behalf of the permittee, then the permittee shall supply the entity with the reporting requirements contain in Section I Part F – MONITORING, RECORDKEEPING, AND REPORTING. The permittee remains liable for any discharges even in the case of the entity failing to implement the control measure.

E. MINIMUM CONTROL MEASURES (MCMs)

The below are the six (6) MCMs that shall be included in the Stormwater Management Program and described in the SWMP. The requirements listed below do not supersede or remove any requirement to comply with county or other local ordinances.

1. *MoDOT Community and Public Education and Outreach on Stormwater Impacts Program*

The permittee shall implement a community education program that focuses on the impacts of stormwater discharges on waterbodies and steps that the MoDOT community and the general public can take to reduce pollutants in stormwater runoff. The MoDOT community is comprised of MoDOT staff and external partners including contractors and consultants. The General Public is comprised of users of MoDOT's facilities or services that are not defined as members of the MoDOT Community. BMPs and target messages must be relevant to transportation stormwater issues. The Education and Outreach on Stormwater Impacts Program shall contain, at a minimum, the following:

 - (a) Maintain the MoDOT stormwater webpage with stormwater related topics.

- i. Track how many views the page receives annually. Include a breakdown of which specific sub-pages, brochures, or fact sheets receive views. Include the number of hits during the reporting period in the annual report.
 - ii. Evaluate the webpage at minimum annually and update the page as needed as identified as a result of the review. Provide specifics on the updates made during the reporting period in each annual report.
- (b) Participate in education and outreach events to promote water quality.
 - i. List the events and track participation at these events at minimum annually. Include how many days MoDOT attended the event.
 - ii. Evaluate the need to update the messages or the event participation in the future as a result of the review.
- (c) Maintain public outreach programs, such as No More Trash Bash, adopt a highway, and sponsor a highway programs.
 - i. Report how many individuals are involved in the programs annually.
 - ii. Document the quantity of trash picked up annually.
- (d) Distribute stormwater brochures.
 - i. Track how many are disseminated each year statewide.
 - ii. Evaluate if the events or location are effective and if there are specific target audiences or pollutants for the events.
- (e) Maintain public awareness campaigns. This may be through the MoDOT website, social media, or other media outlets.
 - i. Utilize available media outlets at minimum once a year to promote permit elements.
 - ii. Track what media outlet was utilized and the amount of campaigns promoted annually.
 - iii. If the outlet has tracking of views, or other method of recording reach, include the tracking of that element.

2. *MoDOT Community and Public Involvement/Participation in Program Development*

The permittee shall implement a public involvement/participation program that provides opportunities for both public and MoDOT community involvement in the development and oversight of the permittee's Stormwater Management Program. The public involvement/participation program shall, at a minimum, include the following:

- (a) A public notice period to allow the public and MoDOT community the opportunity to review the SWMP prior to finalization of the SWMP. It is recommended that the public review period is at least ten business days.
- (b) If the permittee utilizes a stormwater management panel/committee, then the permittee shall provide opportunities for input for public member(s) on the panel/committee;
- (c) Maintain the MoDOT stormwater email.
 - i. Track how many emails are received to the stormwater email annually.
- (d) Maintain a web "Report a Stormwater Concern" form for visitors to submit stormwater concerns.
 - i. Track how many stormwater concerns are received.
 - ii. Track how many stormwater concerns are related to permit components on MoDOT right-of-ways or facilities.
- (e) Track and report how many spill prevention control and countermeasure reports (SPCC) came from internal personnel or other methods.
 - i. Document reportable spills and illicit discharges identified by the MoDOT community.
- (f) Coordinate with other MS4 communities when appropriate. This may include, but is not limited to, the Hinkson Creek Collaborative Management (CAM) –Action Team, and the St. Louis Metropolitan Sewer District (MSD).
 - i. Track the instances of collaboration and the MS4 communities collaborated with annually.

3. *Illicit Discharge Detection and Elimination (IDDE) Program*

The permittee shall implement, and enforce a program to detect and eliminate illicit discharges into the TS4. Vehicular accidents are not considered illicit discharges unless the spill enters waters of the state. The IDDE program shall include, at a minimum, the following:

- (a) A stormwater outfall database, with mapping capabilities documenting the location of all known outfalls and the names and location of all receiving waters of the state that receive discharges from the TS4. The permittee shall make the map data and its origin available to the Department and EPA upon request
 - i. Include outfalls such as drainage ditches, bridge or culvert outfalls, and bridge drains. Where bridges cross classified streams and have more than one bridge drain, one location in the center of the bridge is taken to account for the many. If other outfalls are located at the bridge in the form of ditches, those are taken as separate outfalls.
 - ii. Utilize GIS data to provide a UTM point where outfalls intersect with a water of the state.
- (b) Detect, investigate, and eliminate illicit discharges into the TS4 and implement appropriate procedures or actions to the extent allowed by MoDOT's authority.
 - i. Continually inspect, through daily work and routine maintenance, the outfalls of the MoDOT system.

- ii. Report at minimum annually the amount of bridge structures and dry weather screenings were inspected.
- (c) To the extent allowable under state or local law, effectively prohibit through regulatory mechanism or equivalent, non-stormwater discharges from illicit discharges into the TS4 and implement appropriate procedures or actions. MoDOT shall maintain a plan and schedule to detect and address non-stormwater discharges, including discharges from illegal dumping and spills, to the TS4.
 - i. MoDOT shall notify appropriate local or state agencies of illicit discharges as soon as practicably possible. MoDOT shall maintain a policy which outlines how discoveries of illegal discharges will be handled. This policy shall cover industrial and domestic waste waters, as well as system attachments by other dischargers.
- (d) Report immediately the occurrence of any flows of unknown origin during dry weather believed to be an immediate threat to human health or the environment to MoDNR by calling the Environmental Emergency Response 24 hour Environmental Emergency Response Spill Line at 573-634-2436.
- (e) Inform the MoDOT community and the general public of hazards associated with illegal discharges and improper disposal of waste.
- (f) Maintain methods of public reporting of the presence of illicit discharges or water quality impacts associated with stormwater discharges are possible by contacting any of MoDOT's seven Customer Service Centers, Central Office, or MoDOT's website including the Report a Stormwater Concern form. Tracking shall be maintained in conjunction with MCM 1.
- (g) Maintain the Adopt-A-Highway program for volunteer groups to periodically pick up the trash and debris along the sides of state highways. Tracking shall be maintained in conjunction with MCM 1.
- (h) MoDOT shall educate and cross-train maintenance staff to assist with identification of illicit discharges on MoDOT right of way.
 - i. Track the number of staff trained on the identification of illicit discharges and spill reporting at minimum annually.
- (i) The permittee shall address the categories of non-stormwater discharges or flows listed under Section I Part A – COVERAGE AND RESTRICTIONS, item 2 (a – d) if the permittee identifies them as significant contributors of pollutants to the TS4.

4. *Construction Site Stormwater Runoff Control*

The permittee shall develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to their TS4 from construction activities on areas owned by MoDOT that result in a land disturbance of greater than or equal to one acre. Reduction of stormwater discharges from construction activities disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more.

The program shall include at minimum the following:

- (a) Department policies to require erosion and sediment controls are designed, implemented, and maintained for construction sites, as well as sanctions to ensure compliance, to the extent allowable under state or local law.
 - i. Ensure all requirements of Section II. Area Wide Land Disturbance are followed.
 - ii. Track the number of projects that are administered through the Stormwater Database that fall within the TS4 area annually.
 - iii. Maintain a Stormwater Pollution Prevention Plan (SWPPP) for use by the MoDOT community and MoDOT's contracting community. The SWPPP shall describe which BMPs may be used to control runoff from land disturbance activities of one acre or more on MoDOT projects.
 - iv. Maintain the authority to stop work on any construction job when the contractor does not perform work in compliance with contract provisions. In cases where the contractor is causing water quality problems or creates conditions with the potential to contaminate waters of the state, the engineer has the authority to take appropriate disciplinary action to ensure proper control measures are in place.
 - v. Maintain other possible enforcement actions such as; issuance of an Order Record, suspension of payments to the contractor, or suspension of work on the project. Liquidated damages are included in the Stormwater Database for failure to complete a deficiency within seven (7) days.
- (b) Maintain requirements for construction site operators to control waste, such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste, at the construction site that may cause adverse impacts to water quality.
 - i. Utilize spill prevention and containment measures.
 - ii. Develop and follow a plan for regular collection and disposal of waste materials as well as a designated site for disposal.
- (c) Procedures for plan reviews which incorporate considerations of potential water quality impacts to the receiving waterbody.

- i. MoDOT's design division in each district shall be responsible for project plan development including the erosion and sediment control plan for each project.
 - ii. Development erosion control plans take into account topographic features, sensitive areas, and site runoff.
- (d) Continue training of MoDOT personnel and contractors through Land Disturbance Training to ensure compliance with the MoDOT Land Disturbance Program.
 - i. Track the number of MoDOT employees who took the land disturbance training annually.
 - ii. Track the number of non-MoDOT persons who took the land disturbance training annually.
- (e) Erosion control inspections shall be required for all projects engaged in land disturbance of one acre or more.
 - i. Maintain records of inspections. Track and document inspection frequency, deficiencies identified, corrections made, any time extensions due to weather, and final stabilization documentation.
 - ii. Inspection records shall contain at minimum:
 - Contract/Job identification number;
 - County and Route location;
 - Receiving waters near the project;
 - Name of MoDOT inspector completing report;
 - Resident Engineer responsible for the project,
 - Date of inspection;
 - Evaluation of potential areas of concern regarding site runoff, dewatering operations, outfall protection, good housekeeping, etc. and;
 - Outline corrective actions necessary to address maintenance of BMPs.
 - iii. The contractor's Water Pollution Control Manager (WPCM) receives a copy of each week's report for prompt corrective action, if deemed necessary.
- (f) Perform statewide audits of construction sites to ensure that the MoDOT Land Disturbance program and applicable SWPPP are being followed. In addition to site inspections conducted weekly and following significant rainfall events, MoDOT will conduct quality assurance audits of projects covered by the Land Disturbance program.
- (g) Maintain procedures for receipt and considerations of information related to stormwater runoff controls submitted by the MoDOT community or general public.
- (h) Procedures for site-inspections and enforcement of control measures.
- (i) MoDOT's inspectors, Resident Engineers, designers, and contractor's Water Pollution Control Managers shall receive land disturbance training at least once every four years.

5. *Post-Construction Stormwater Management in New Development and Redevelopment*

The permittee shall develop, implement, and enforce a program to address the quality of stormwater runoff from new development and redevelopment projects on areas owned and operated by MoDOT that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale that discharge to the TS4. The program shall include, at a minimum, the following:

- (a) Strategies to minimize water quality impacts, which includes a combination of structural and/or non-structural BMPs appropriate for the TS4, including, but not limited to, the assessment of site characteristics at the beginning of the construction site design phase to ensure adequate planning for stormwater program compliance. The goal of this approach is to arrive at designs that protect sensitive areas, minimize the creation of stormwater pollution, and utilize BMPs that effectively remove stormwater pollution.
 - i. Track the number of projects evaluated for post-construction BMPs at minimum annually. Record if the projects are new developments, redevelopments, or maintenance.
 - ii. Track the number of post-construction BMPs constructed at minimum annually. Record the quantity, BMP type, and job number.
 - iii. Train MoDOT personnel to consider post-construction BMPs where required by policy definitions of new development and redevelopment.
 - iv. Track the number of staff trained at minimum every other year.
- (b) Policies and procedures to address post-construction runoff from new development and redevelopment projects to the extent allowable under state or local law.
- (c) Policies or procedures to ensure adequate long-term operating and maintenance of the BMPs.
 - i. Track how many post-construction BMPs are inspected annually.

- ii. Evaluate the inspections to determine if the BMP choices are adequate and effective. This information may be used for future decisions on what type of BMPs to install.
- (d) Coordinate and partner with other MS4 communities. The MoDOT system impacts almost every regulated MS4 in the state. Promote good stewardship through coordination and cooperation with other regulated MS4s.
 - i. Track the number of coordination events attended at minimum annually.
 - ii. Track the number of coordinating opportunities with other MS4 communities occurred through the project development process at minimum annually.
- (e) Train design staff in the post construction BMPs program at minimum once every other year.

6. *Pollution Prevention/Good Housekeeping for MoDOT Operations*

The permittee shall develop and implement an operation and maintenance program with the goal of preventing or reducing pollutant runoff from MoDOT operations and maintenance facilities located in areas established in Section I Part A – COVERAGE AND RESTRICTIONS, item 1.

As part of the Stormwater Management Program, the pollution prevention/good housekeeping program shall include the following:

- (a) A list of all MoDOT operations and maintenance areas subject to this program.
- (b) BMPs designed or developed with the purpose of reducing floatables or other pollutants into the TS4 or waters of the state.
 - Snow and ice control.
 - i. Chemicals and stockpiles of treated products shall be stored in a manner to prevent loss of material. All bulk salt shall be stored inside covered storage structures. Mixed materials shall be covered when not in use and between storm events.
 - ii. All salt and de-icing equipment shall be cleaned or parked in a manner to prevent product from running off the equipment following each storm event.
 - iii. Equipment used to apply liquid and dry snow and ice control materials shall be calibrated before the start of the winter season and re-calibrated or verified at regular intervals during the winter season.
 - iv. Any spilled or loose salt in the loading area shall be cleaned up as soon as practicable.
 - v. Maintain tracking on much winter abrasives, calcium chloride, or sodium chloride was applied in the different maintenance areas during a storm event. This tracking may include areas outside of the regulated TS4.

Street sweeping

- i. Mechanical sweeping of sand, dirt, and debris from paved surfaces, shoulders, curbs and gutters, and median barriers shall be performed in the TS4 area in areas with allowable closed drainage and curb and gutter. Note any areas covered by a maintenance agreement to maintain street sweeping on the MoDOT Right of Way in the SWMP.
- ii. Street sweepings shall either be disposed of in a permitted sanitary landfill or can be reused as established by the MoDNR Solid Waste Management Program. Sweepings which are reused shall be processed or screened to remove trash, litter and other debris and then must be tested as required by MoDNR and 40 CFR 226.11. Protocol for sampling and guidance shall be provided in the in the SWMP if sweepings reuse is being conducted.

Bridge washing and cleaning activities.

- i. Bridge cleaning and flushing are used to remove de-icing chemicals from the bridge deck, drains, expansion device drains, piers, abutments, and lower truss chords. Bridge cleaning activities shall use dry methods and equipment (scraping, sweeping, and vacuuming), to prevent debris, sediment, and other substances from entering waters of the State.

Wash water

- i. Vehicle and equipment washing must be done in a location where the water can be collected and properly treated prior to release to the environment or waters of the state.
- (c) MoDOT shall maintain good housekeeping and material management procedures and BMPs for the storage and disposal of materials that pose a potential to pollute stormwater at MoDOT maintenance or fleet facilities. Such materials include, but are not limited to, antifreeze, batteries, fuel, equipment cleaning fluids, paint, herbicides, and used oil.
 - i. MoDOT shall confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to designated areas or use drip pans under these vehicles and equipment.
 - ii. Provide cover for materials with potential to pollute stormwater runoff, such as, but not limited to, antifreeze, batteries, fuel, equipment cleaning fluids, paint, herbicides, and used oil.

- (d) Inspections of MoDOT-owned operations and maintenance facilities within the TS4 coverage area shall be conducted at minimum bi-annually (every six months). These inspections shall identify potential target pollutants and sources. Issues identified during an inspection should be addressed or resolved before the next rain event and no later than the next inspection.
- (e) MoDOT shall maintain procedures to prevent, contain, and respond to spills.
 - ii. MoDOT shall continue to implement Spill Prevention Control and Countermeasure (SPCC) plans at maintenance facilities where obligated to prevent oil spills from occurring, and to respond promptly in the event of a spill or leak.
- (f) Maintain MoDOT community training on BMPs to prevent or reduce stormwater pollution. Track how many MoDOT staff, and non-MoDOT staff when applicable, were educated on each topic at minimum every other year. Behavioral changes and responses to situations shall be used to determine if the training is sufficient.
 - i. Educate MoDOT employees on proper management and disposal of toxic materials or illicit discharges discovered on the right of way. The training shall be conducted at minimum every other year for maintenance employees either as full training or refresher training.
 - ii. Offer herbicide application training to MoDOT employees.
 - iii. Provide employees with training regarding hazardous chemicals in their work area at the time of their initial assignment, and whenever a new hazard is introduced into their work area.
 - iv. MoDOT shall provide training to promote Pollution Prevention and Good House Keeping through internal training opportunities reaching all employees at minimum once every other year.

F. MONITORING, RECORDKEEPING, AND REPORTING

1. The permittee shall retain records of any monitoring information used to complete the application for this operating permit, implementation of any part of this operating permit, and implementation for 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 by the Department at any time. Monitoring data shall include, if applicable, the following:
 - (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 methods used; and
 - (h) The result of such analyses.
2. Any monitoring conducted for the purpose of implementation of any part of this permit shall be conducted in accordance to test procedures approved under 40 CFR Part 136 unless another method is required under 40 CFR sub-chapters N or O.
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 six (6) MCMs and records of all data used to complete the application for this period for a period of at least five years from the date of the report or 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. This may be retained electronically.
5. The permittee shall submit the items under Section I Part F – MONITORING, RECORDKEEPING, AND REPORTING of this permit, including a copy of the permit, SWMP, or application upon written request by the public.
6. MS4 Stormwater Management Program Report. It is understood that this permit is specifically for MoDOT's TS4; however, for reporting purposes MoDOT shall submit a MS4 SWMP Report containing, at a minimum, the following:
 - (a) Information regarding progress achieving the statutory goal of reducing the discharge of pollutants to the Maximum Extent Practicable;
 - (b) The status of the TS4's compliance with permit conditions;
 - (c) Assessment(s) of the appropriateness of identified BMPs and corresponding measureable goals for each MCM;
 - (d) A summary of results of information collected and analyzed during the reporting period, including monitoring data or quantifiable values per the TS4's measurable goals;
 - (e) A summary of the TMDL ARAP;

- (f) If integrated planning is being utilized along with a summary of the status that incorporates the TMDL Attainment Plan.
 - (g) A summary of the stormwater activities the permit holders plan to undertake during the next reporting cycle (including an implementation schedule);
 - (h) Any proposed changes to the permit holders' Stormwater Management Program, including changes to any identified BMPs or measurable goals that apply to the Stormwater Management Program; and
 - (i) Notice that the permit holders individually or in combination are relying on another government or non-government entity to satisfy some of the permit holders' permit obligations. If applicable, the permit holder(s) shall supply the name of the entity, the name of the entity's primary contact person, and other relevant contact information.
7. The MS4 SWMP Report shall be submitted on **February 28th** every year during the life of the permit and until this operating permit is renewed and contain all required information and cover the reporting period of January 1st of the year of the reporting period to December 31st of the reporting period.
8. The permit holders shall submit the MS4 Stormwater Management Program Report on the **STORM WATER ANNUAL REPORT – SMALL MS4 PERMITS**, form (MO 780-1846) or revisions thereafter. If the permittee determines that report form MO 780-1846 does not appropriately or accurately capture the required data for their TS4, they can utilize an alternative report form. The alternative report form must be approved by the Water Protection Program's MS4 Team before it can be submitted.

PART II. AREA-WIDE LAND DISTURBANCE STORMWATER PERMIT CONDITIONS

A. COVERAGE AND RESTRICTIONS

1. The area-wide land disturbance program is for land disturbance projects performed by MoDOT or land disturbance projects under contract by MoDOT within a permitted site. This portion of the permit covers land disturbance activities across the entire State of Missouri, including land disturbance projects in areas listed in the legal description section of this permit. For the purposes of this permit, a permitted site is defined as, at a minimum, the area within a site boundary where work is performed or contracted by MoDOT within MoDOT's temporary or permanent right-of-way. The permitted site must be clearly marked in MoDOT's SWPPP for each site.
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 discharges from land disturbance support activities (e.g. concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) provided that appropriate stormwater controls are designed, installed, maintained and provided the following conditions are met:
 - (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, nor does it serve multiple unrelated construction sites; and
 - (c) The support activity does not continue to operate beyond the completion of the construction activity at the project it supports.

The permittee is responsible for compliance with this permit for any construction support activities or outside companies contracted to do work at the permitted site. Any projects contracted by MoDOT with support activities off MoDOT right-of-way or out of the permitted site are considered part of a common plan and are required to be covered under a land disturbance permit but not necessarily this permit.

4. This permit authorizes non-stormwater discharges from the following activities associated to land disturbance activities provided that these discharges are addressed in each site's specific SWPPP required by this permit:
 - (a) Dewatering activities if there are no contaminants and the discharge is treated as specified in requirements Part II section D.9 of this permit;
 - (b) Flushing water hydrants and potable water lines;
 - (c) Water only (i.e., without detergents or additives) rinsing of streets and buildings; and
 - (d) Site watering to establish vegetation.
5. Construction of an earthen basin or holding structure may require a construction permit. Instructions on how to apply for and receive a construction permit are located at <https://dnr.mo.gov/env/wpp/permits/ww-construction-permitting.htm>. Questions regarding permit requirements may be directed to Department's Water Protection Program phone line at 573-751-1300, or toll free at 800-361-4827.
6. This permit does not allow stream channel or wetland alterations unless approved by Section 404 of the federal CWA permitting authorities. Land disturbance activities may not begin in the affected waters of the United States until the required 404 permit and 401 certification have been obtained.

This includes, but is not limited to:

 - (a) Placement of fill materials in waters;
 - (b) Obstruction of water flow; and
 - (c) Changing the channel of a defined drainage course.
7. This permit prohibits any discharge of all wastewater not specifically allowed above, including wastewater generated from air pollution control equipment or the containment of scrubber water in lined ponds to waters of the state.
8. This permit prohibits any discharge of sewage, wastewater, or pollutants to waters of the state including, but not limited to:
 - (a) Any hazardous material, oil, lubricant, solid waste or other non-naturally occurring substance from the site, including fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;
 - (b) Soaps or solvents used in vehicle and equipment washing;
 - (c) Hazardous substances or petroleum products from an on-site spill or handling and disposal practices;
 - (d) Wash and/or rinse waters from concrete mixing equipment including ready mix concrete trucks. Any such pollutants cannot be discharged to waters of the state. Proper BMPs may be installed to capture wastewater and shall not allow discharge to surface or subsurface waters. Any waste concrete must be properly disposed of;
 - (e) Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds, or other construction materials;

- (f) Domestic (kitchen or bathroom) wastewaters, including gray waters (handwashing or shower); or
 - (g) Industrial stormwater runoff from an industry other than construction (including support activities described above) or land disturbance.
9. This permit does not authorize process wastewater discharges which are located in a way to allow water to be released into sinkholes, caves, fissures, or other openings in the ground which could drain into aquifers directly or indirectly (except losing streams) per 10 CSR 20-7.015(7).
10. The permit does not authorize stormwater discharges from land disturbance activities at sites that have contaminated soils that will be disturbed by the land disturbance activity or where such materials are brought to the site to use as fill or borrow.

B. EXEMPTIONS

1. This permit does not supersede any requirement for obtaining project approval under an established local authority.
2. 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 activity as described in 10 CSR 20-6.010(1)(B) and 10 CSR 20-6.200(1)(B);
 - (c) Oil and gas related activities as listed in 40 CFR 122.26(a)(2)(ii);
 - (d) Utilities with rights in the utility corridor which do not fall under MoDOT's authority;
 - (e) Land disturbances covered under a separate Missouri State Operating Permit.

C. REQUIREMENTS

1. This area-wide land disturbance program is to ensure the design, installation and maintenance of effective erosion and sediment controls 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 D.4;
 - (g) Directing stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration and filtering, unless infeasible; and
 - (h) Minimizing soil compaction and, unless infeasible, preserve topsoil. Minimizing soil compaction or preserving topsoil is not required where the intended function of a specific area of the site dictates that it be compacted or the topsoil be disturbed or removed.
2. 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.

D. SWPPP DEVELOPMENT AND IMPLEMENTATION

1. A SWPPP shall be developed for each land disturbance site. Development and implementation of a SWPPP shall incorporate site-specific practices to best minimize the soil exposure, soil erosion, and the discharge of pollutants. The permittee shall fully implement the provisions of the SWPPP required under this part as a condition of this permit throughout the term of each land disturbance project. The SWPPP shall be updated any time site conditions in the field require adjustments to the project or BMPs. **Each SWPPP must be specific to the project/land disturbance site and be developed prior to conducting any land disturbance activities at the site.**

The permitted entity 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 parties in either paper or electronic format as required by this permit and must remit a copy (electronic or otherwise) of the SWPPP and inspection reports to the Department upon request.

2. General SWPPP requirements must:
 - (a) Provide for maintenance and adherence to the plan;

- (b) Discuss whether or not additional authorizations, such as a Section 404 permit and associated Section 401 Water Quality Certification, are required for the project;
 - (c) Provide descriptions of BMPs. This may be provided electronically. The SWPPP of each site shall include a description of both structural and non-structural BMPs used one or more times at the site, providing the following general information for each BMP type:
 - 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 for the BMP.
 - (d) The SWPPP shall include BMPs for pollution prevention measures. At minimum such measures must be designed, installed, implemented, and maintained to:
 - i. 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 stormwater. Minimization of exposure is not required in cases where the exposure to precipitation and stormwater will not result in a discharge of pollutants or where exposure of a specific material or product poses little risk or stormwater contamination (such as final products and material intended for outdoor use); and
 - ii. 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.
 - (e) The permittee shall be responsible for notifying each contractor or entity (including utility crews and city employees or their agents) who will perform work at the site of the existence of the SWPPP and what action or precautions shall be taken while on-site to minimize the potential for erosion and the potential for damaging any BMP. The SWPPP shall contain a record of notification; for example, a list of contractors or entities given a copy of the SWPPP or education session sign-in sheet. The permittee is responsible for any damage a subcontractor may do to established BMPs and any subsequent water quality violation resulting from the damage.
3. Site Specific SWPPP Requirements shall include the following information and practices:
- (a) Nature of the construction activity and site description with sufficient information to be of practical use to contractors and site construction workers to guide the installation and maintenance of BMPs.
The SWPPP briefly must describe the nature of the construction activity, including:
 - i. The function of the project (e.g., right-of-way, highway, etc.);
 - ii. The intended sequence and timing of activities that disturb the soils at the site;
 - iii. List the Resident Engineer, primary contractor, inspector responsible for inspections, and any sub-contractor(s) responsible for erosion and sediment control and their role at the site;
 - iv. Estimates of the total area expected to be disturbed by excavation, grading, or other construction activities including off-site borrow and fill areas. Include separate permit number for any offsite borrow or staging areas if applicable; and
 - v. A general map (e.g., United States Geological Survey quadrangle map, a portion of a city or county map, or other map) with enough detail to identify the location of the construction site and all waters of the state within one mile of the site.
 - (b) The SWPPP of each site must contain a legible site map showing the permitted site boundaries, location of public notification sign(s), and points of discharge to receiving water(s) and identifying:
 - i. Direction(s) of stormwater flow and approximate slopes for all phases of construction activities;
 - ii. Areas of soil disturbance and areas that will not be disturbed (or a statement that all areas of the site will be disturbed unless otherwise noted);
 - iii. Location of permanent and temporary structural and non-structural BMPs, identifying whether the BMP is temporary or permanent; when the BMP will be installed in relation to each phase of the project; and the conditions that must be met before removal of the BMP if the BMP is not a permanent BMP;
 - iv. Locations where stabilization practices are expected to occur;
 - v. Locations of material, waste, borrow, or equipment storage areas;
 - vi. Locations of all waters of the state (including wetlands);
 - vii. Locations where stormwater discharges to a water, including any discharges to waters within and at the perimeter of the permitted site;
 - viii. Locations where stormwater discharges to another regulated MS4; and
 - ix. Areas where final stabilization has been accomplished and no further construction-phase permit requirements apply.
 - (c) Slopes for disturbed areas must be defined in each site's SWPPP. The site map or maps must define the sloped areas for all phases of the project. The disturbance of steep slopes shall be minimized.
 - (d) Stockpiles: Manage stockpiles or land clearing debris piles composed, in whole or in part, of sediment and/or soil.
 - i. 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;

- ii. Install a sediment barrier along all downgradient perimeter areas;
 - iii. Prevent stormwater flows from causing erosion of stockpiles, for example, by diverting flows around them.
 - iv. For piles that will be unused for 14 or more days, provide cover with appropriate temporary stabilization in accordance with SWPPP requirement 18.
 - v. Hosing down or sweeping soil or sediment accumulated on pavement or other impervious surfaces into any stormwater conveyance, storm drain inlet, or water of the state is prohibited.
- (e) Selection of Temporary and Permanent BMPs: The permittee shall select, install, use, operate, and maintain appropriate BMPs for each site and list them in the SWPPP.
- (f) Preservation of Trees and Vegetation: The SWPPP of each site shall require existing vegetation and trees to be preserved where practical.
- (g) Amending/Updating the SWPPP: The permittee shall amend and update the SWPPP as necessary during the term of the land disturbance activity. It is necessary for the permittee to amend the SWPPP, at a minimum, whenever the:
- i. Design, operation, or maintenance of BMPs is changed, including the installation and removal of temporary BMPs;
 - ii. Design of the construction project is changed and could significantly affect the quality of the stormwater discharges;
 - iii. Department notifies the permittee in writing of deficiencies in the SWPPP;
 - iv. SWPPP is determined to be ineffective in minimizing or controlling erosion and sedimentation (i.e., there is visual evidence of excessive site erosion or excessive sediment deposits in streams or lakes); and/or
 - v. Department determines violations of water quality standards may occur or have occurred.

E. BEST MANAGEMENT PRACTICES (BMP) INSTALLATION

1. The permittee shall ensure the BMPs are properly installed at the locations and relative times specified in each site's SWPPP.
 - (a) Prior to the start of all phases of construction, install sediment controls along any perimeter areas of the permitted site where stormwater has the potential to leave the site. Note that this requirement does not apply to earth disturbances related to initial site clearing and establishing entry, exit, and access of the site, which may require that stormwater controls be installed immediately after the earth disturbance. For sites where perimeter controls are infeasible, other practices shall be implemented to minimize discharges to perimeter areas of the site.
 - (b) 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, silt fences, and/or check dams prior to leaving the land disturbance site.
 - (c) A drainage course change shall be clearly marked on a site map and described in the SWPPP.
 - (d) If vegetative stabilization measures are being implemented, stabilization is considered "installed" when all activities necessary to seed or plant the area are completed.
 - (e) All stormwater controls for sediment and erosion shall be properly installed and maintained per the manufacturer's instructions or before sediment has accumulated to one-half of the above-ground height of any sediment control.
2. 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.
 - (a) Temporary BMPs shall be added and removed as necessary with updates in the SWPPP as specified elsewhere in this permit.
 - (b) Remove any sediment per the BMP manufacturer's recommendations or before it has accumulated to one-half of the height between the ground and top of the device or BMP that collects sediment (e.g., silt fences, sediment traps, etc.).
3. Surface Water Buffers: For waters of the state as defined by Section 644.016.1(27), the permittee must comply with (a), (b), or (c), except as noted in (d):
 - (a) Provide and maintain a 50-foot undisturbed natural buffer;
 - (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 of the following exceptions apply and documentation is provided in the SWPPP:
 - i. If authorized per Clean Water Act Section 404 Department of the Army permit and its associated Section 401 Water Quality Certification from the Department. The angle of any crossing shall be as perpendicular as feasible to the water course or natural stream buffer to minimize adverse impacts.
 - 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 your site. This includes situations where you have 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, you are required to comply with i, ii, or iii above.

- iv. Where site constraints make it infeasible to implement a buffer or equivalent provided you limit disturbances within 50 feet of any waters of the state and/or you provide supplemental erosion and sediment controls to treat stormwater discharges from earth disturbances within 50 feet of the water of state.
 - v. For sites less than one (1) acre of total land area that is part of a larger common plan if the larger common plan will disturb equal to or greater than (1) acre; where site constraints make it infeasible to implement a buffer or equivalent provided you limit disturbances within 50 feet of any waters of the state and/or you provide supplemental erosion and sediment controls to treat stormwater discharges from earth disturbances within 50 feet of the water of state.
4. Measuring Buffer Width: 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:
 - (a) 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
 - (b) The edge of the stream or river bank, bluff, or cliff, whichever is applicable.
5. Roadways: Where applicable, upon installation of or connection to roadways, all efforts should be made to prevent the deposition of earth and sediment onto roadways through the use of proper BMPs.
 - (a) Where stormwater inlets are susceptible to receiving sediment or other pollutants from the permitted land disturbance site, the inlets shall have protection. This may include, but is not limited to, curb inlets, drop inlets, and area inlets.
 - (b) Where stormwater will flow off the end of where a roadway terminates, a sediment catching BMP such as berm or silt fence shall be provided.
 - (c) Curb inlets shall be cleaned as needed or following a precipitation event that generates run-off.
 - (d) Minimize sediment track-out from the site.
 - i. Restrict vehicle traffic to properly designed exit points.
 - ii. Use appropriate stabilization techniques at all points that exit onto paved roads.
 - iii. Remove any sediment that has been tracked out within the same business day or by the end of the next business day if track-out occurs on a non-business day.
6. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, shall be treated with appropriate controls.
 - (a) Appropriate controls for sediment control include, but are not limited to, sediment basins or sediment traps, 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 sediment.
 - (b) Appropriate controls to use downstream of dewatering controls to minimize erosion include, but are not limited to, vegetated buffers, check dams, and riprap.
 - (c) Water with a sheen shall not be discharged and shall be noted in the SWPPP. The SWPPP shall indicate what steps occurred to remove the sheen or not discharge the stormwater.
 - (d) Visible floating solids and foam in other than trace amounts shall not be discharged.
7. Good housekeeping/pollution prevention practices shall be maintained at all times to keep waste from entering waters of the state. Management of solid and hazardous waste includes providing trash containers and regular site cleanup for proper disposal of solid waste, such as scrap building material, product/material shipping waste, and food containers and cups, and providing containers and proper disposal of waste paints, solvents, and cleaning compounds. Portable chemical toilets for disposal of sanitary sewage and construction material storage areas should be kept away from drainage courses and low areas.
8. All fueling facilities present shall at all times adhere to applicable federal and state regulations concerning underground storage, above ground storage, secondary containment, SPCC plans (if applicable), and dispensers. Discharge of any sheen to waters of the state is prohibited.
9. Hazardous substances that are transported, stored, or used for maintenance, cleaning, or repair shall be managed according to the provisions of the Missouri Hazardous Waste Laws and Regulations.
10. All paint, solvents, petroleum products, petroleum waste products, and storage containers such as drums, cans, or cartons shall be stored according to BMPs and any applicable regulations. The materials exposed to precipitation shall be stored in watertight, structurally sound, closed containers. All containers shall be inspected for leaks or spillage during the inspection of BMPs.
11. Sedimentation Basins: The site shall include a sedimentation basin(s) for each drainage area with ten or more acres disturbed at one time.
 - (a) The sedimentation basin(s) shall be sized to a local 2-year, 24-hour storm.
 - (b) Sediment basins shall not be constructed in any waters of the state or natural buffer zones and shall be designed to avoid collecting water from wetlands.

- (c) Until final stabilization has been achieved, sediment basins and impoundments shall utilize outlet structures that withdraw water from the surface when discharging.
 - (d) Accumulated sediment shall be removed from the basin to maintain at least half of the design capacity. Accumulated sediment shall not exceed 50% of design capacity.
 - (e) Use erosion controls and velocity dissipation devices to prevent erosion at inlets and outlets.
 - (f) Discharges from the basin shall not cause scouring of the banks or bottom of the receiving stream.
 - (g) The basin shall be maintained until final stabilization of the disturbed area served by the basin.
 - (h) 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 delivery. 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.
12. Soil disturbing activities on site that have ceased either temporarily or permanently shall initiate stabilization immediately in accordance with the options below. Document in the SWPPP the date of stabilization initiation and the date installed.
- (a) For soil disturbing activities that have been temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days:
 - i. The permittee shall construct BMPs to establish interim stabilization; and
 - ii. Stabilization must be initiated immediately and completed within 14 calendar days.
 - (b) For soil disturbing activities that have been permanently ceased on any portion of the site, final stabilization of disturbed areas must be initiated immediately and completed within 14 calendar days.
 - (c) Allowances to the 14 day completion period for temporary and final stabilization may be made due to weather and equipment malfunctions. The use of allowances shall be documented in the SWPPP.
 - (d) Interim stabilization shall consist of well-established and maintained BMPs that are reasonably certain to protect waters of the state from sediment pollution over an extended period of time. This may require adding more BMPs to an area than is normally used during daily operations. These BMPs may include a combination of sediment basins, check dams, sediment fences and mulch. The types of BMPs used must be suited to the area disturbed, taking into account the number of acres exposed and the steepness of the slopes. If the slope of the area is greater than 3:1 (three feet horizontal to one foot vertical) or if the slope is greater than 3% and greater than 150 feet in length, then the permittee shall establish interim stabilization within seven days of ceasing operations on that part of the site.
 - (e) The following activities would constitute the immediate initiation of stabilization:
 - i. Preparing 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 but no later than one calendar day of completing soil preparation;
 - ii. Applying mulch or other non-vegetative product to the exposed areas;
 - iii. Seeding or planting the exposed areas; and
 - 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. If non-vegetative stabilization measures are being implemented, stabilization is considered “installed” when all such measures are implemented or applied. Installed does not mean established.

F. SITE MANAGEMENT REQUIREMENTS

1. An individual shall be designated by the permittee as the lead for environmental matters for each site. The lead individual for environmental matters shall have a thorough and demonstrable knowledge of the site’s SWPPP and sediment and erosion control practices in general. The lead individual for environmental matters or a designated inspector knowledgeable in erosion, sediment and stormwater control principles shall inspect all structures that function to prevent pollution of waters of the state
2. The permittee (or a representative of the permittee) shall conduct regularly scheduled inspections. These inspections shall be conducted by a qualified person 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 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, 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) 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 or sediment deposition. Discharges occurring during inspections shall be observed. Document the visual quality of the discharge and take note of the characteristics of the stormwater discharge, including color; odor; floating, settled, or suspended solids; foam; oil sheen; and other indicators of stormwater pollutants.
 - (f) When practicable, receiving streams shall also be inspected for 50 feet downstream, or further if warranted, of the outfall.
 - (g) The perimeter shall be inspected for evidence of BMP failure to ensure concentrated flow does not develop a new outfall.
3. All BMPs must be inspected in accordance to one of the schedules listed below.
- (a) Routine and post-runoff inspections are only required during normal business hours, Monday through Friday. A routine inspection may be delayed until the next business day if it falls on a holiday.
 - (b) At least once every seven 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 and within 72 hours if the rain event ceases during a non-work day such as a weekend or holiday; or
 - (c) Once every 14 calendar days and within 24 hours of the occurrence of a storm event of 0.25 inches or greater of precipitation or the occurrence of runoff from snowmelt. To determine if a storm event of 0.25 inches or greater has occurred on your site, you must either keep a properly maintained rain gauge on site or obtain the storm event information from a weather station near your location.
 - i. You must conduct an inspection within 24 hours once a storm event has produced 0.25 inches within a 24 hour period, even if the storm event is still continuing.
 - ii. If you have elected to inspect every 14 calendar days and there is a storm event at your site that continues for multiple days and each day of the storm produces 0.25 inches or more of rain, you are required to conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the end of the storm.
4. Any structural BMP or maintenance problems shall be noted in an inspection report and corrected as soon as possible but no more than seven calendar days after the inspection.
- (a) If weather conditions prevent correction of BMPs within seven calendar days, the reasons for the delay must be documented (including pictures) and there must be a narrative explaining why the work cannot be accomplished within the seven day time period.
 - (b) The documentation must be filed with the regular inspection reports.
 - (c) The permittee shall correct the problem as soon as weather conditions allow.
5. Areas on-site that have achieved stabilization at the same time active construction continues on other areas may reduce inspections to monthly if the following conditions:
- (a) 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 above.
 - (b) For areas where disturbed portions have achieved final stabilization, inspection frequency may be ceased if the following conditions are met:
 - i. After the first monthly inspection, inspect once more within 24 hours of a storm even of 0.25 inches or greater.
 - ii. If there are no issues or evidence of stabilization problems, further inspections may cease.
 - iii. If unstable site conditions or sediment movement are observed, the site must be re-stabilized and monthly inspections shall occur until final stabilization has been achieved and confirmed following a storm event of 0.25 inches or greater.
6. The SWPPP must explain how the person responsible for erosion control will be notified when stormwater runoff occurs.
7. A log of each inspection and copy of the inspection report shall be kept readily accessible and must be available upon request by the Department. Electronic logs are acceptable as long as reports can be provided in a timely manner. If inspection reports are kept off-site, your SWPPP must indicate where they are stored. The inspection report shall be signed by the permittee or by the person performing the inspection if duly authorized to do so.
- At a minimum, the following areas must be inspected and documented in the report:
- (a) Disturbed areas;
 - (b) Stormwater controls and pollution prevention measures;
 - (c) Locations where stabilization measures have been implemented;
 - (d) Material, waste, borrow, or equipment storage and maintenance areas;
 - (e) Areas where stormwater flows; and

- (f) Points of Discharge. If the discharge is occurring at time of inspection, take note of the turbidity of the discharge compared to the turbidity of the receiving stream. If the color of the discharge is significantly more turbid or discolored then a corrective action must be taken.
8. The inspection report is to include the following minimum information:
- (a) Inspector's name and title;
 - (b) Date of inspection;
 - (c) Observations relative to the effectiveness of the BMPs and stabilization measures. The following must be documented:
 - i. Whether all 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. Facility examined for visual signs of erosion or sedimentation at outfalls. Excessive erosion or sedimentation may be due to BMP failure or insufficiency. Response to the excessive erosion or sedimentation should be addressed in the inspection report.
 - v. Corrective actions taken or necessary to correct the observed problem; and
 - vi. Listing of areas where land disturbance operations have permanently or temporarily stopped.
9. Corrective Actions: Any structural or maintenance deficiencies for BMPs or stabilization measures shall be documented in a corrective action report and corrected as soon as possible but no more than seven (7) calendar days after the inspection.
- (a) Corrective action reports 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 prevent correction of BMPs within seven calendar days, the reasons for the delay must be documented (including 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 allow.
 - (d) Corrective actions may be required by the Department as after site inspections. You must comply with any corrective actions required by the Department as a result of permit violations found during an inspection.
10. BMPs shall be maintained and remain in effective operating condition in disturbed areas during the entire duration of the project, with repairs made within the timeframe specified in requirements Section II Part F.4 of this permit, until final stabilization has been achieved. Temporary BMPs may be added and removed as necessary with updates to the SWPPP as specified in the requirements below.
11. Final Stabilization: Prior to removal of BMPs, ceasing site inspections, and terminating permit obligations, 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 (excluding volunteer vegetation), pavement, buildings, or structures using permanent materials (e.g., riprap, gravel, etc.) cover all areas that have been disturbed and all supporting activities, which are not intended to be permanent, have been removed. With respect to areas that have been vegetated, vegetation cover must be at least 70% over 100% of the site. Vegetation must be evenly distributed, without large bare areas.
 - (b) Disturbed areas on agricultural land are considered to have achieved final stabilization when they are restored to their preconstruction agricultural use.
 - (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 (e.g., dirt access roads, 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 to prevent sediment and other pollutants from entering waters of the state.
 - iii. Inspection requirements in Section II Part F- SITE MANAGEMENT REQUIREMENT are 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.
 - (e) Disturbed areas under bridge structures where vegetation will not grow due to the lack of sunlight and moisture are considered to have achieved final stabilization once they have been restored to their pre-construction condition. Bridges oriented such that they receive sun underneath the bridge all day shall meet the criteria in (a) or (b) for final stabilization.

12. The Department may require sampling and reporting as a result of illegal discharges, compliance issues, complaint investigations, or other such evidence of contamination from activities at the site. If such an action is needed, the Department will specify in writing any sampling requirements, including such information as location, extent, and parameters.
13. The permittee shall retain copies of this permit, the SWPPP and all amendments for the site, results of any monitoring and analysis, and all site inspection records. These may be maintained electronically. The records shall be accessible during normal business hours.
14. The permittee shall provide a copy of the SWPPP to the Department, as requested.
15. If the permittee sells any portion of the permitted site to a developer for commercial, industrial, or residential use, this land remains a part of the common sale and the new owner must obtain a permit prior to conducting any land disturbance activity. Therefore, the original permittee must amend the SWPPP to show that the property has been sold and therefore no longer under the original permit coverage.
16. All record keeping for releases, spills, or illegal discharges shall be retained with the SWPPP and made available to the Department upon request. This includes all investigations and enforcement actions. Release of a hazardous substances must be reported to the Department. If the spill occurs outside of normal business hours, or if the permit holder cannot reach regional office staff for any reason, the permit holder is instructed to report the spill to the Department's 24-hour Environmental Emergency Response hotline at (573) 634-2436 at the earliest practicable moment after discovery. Leaving a message on a Department staff member voice-mail does not satisfy this reporting requirement.
17. The permittee shall prepare a quarterly report with a list of active land disturbance sites performed or contracted by MoDOT within a permitted site. 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 data:
 - (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;
 - (f) The number of acres disturbed;
 - (g) The percent of completion of the project. A project may be considered 100% complete when final stabilization has been achieved; and
 - (h) The projected date of completion.

A project shall stay on the quarterly report until it has reported 100% complete as well as zero (0) disturbed acres. The quarterly report(s) shall be maintained by the permittee and readily available for review by the Department as well as submitted to the Department 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:	Corresponding Quarter:	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

III. STANDARD PERMIT CONDITIONS (For both TS4 and Area-Wide Land Disturbance Programs)

1. Per 40 CFR Part 127 National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule reporting of effluent monitoring data and any report required by the permit (unless specifically directed otherwise by the permit) shall be submitted via an electronic system to ensure timely, complete, accurate, and nationally consistent set of data about the NPDES program. Participation in the Department's Electronic Discharge Monitoring Report Submission System (eDMR) is required.
2. *Duty to Comply*: The permit holder 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 denial of a permit renewal. It is a violation of the Missouri CWL to fail to pay fees associated with this permit, [RSMo §644.055].

3. *Duty to Mitigate:* The permit holder shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.
4. *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 of this permit 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.
5. *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.
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 otherwise specific in this permit or an approved Quality Assurance Project Plan. 40 CFR 122.41(j)(1) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
8. *Duty to Provide Information:* The permittee shall furnish to the Department, within a reasonable time, any information that 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.
9. *Need to Halt or Reduce Activity Not an Excuse:* 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.
10. *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 a term or condition of this permit.
11. *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.
12. *Signatory Requirement:*
 - (a) All permit applications, reports required by the permit, or information requested by the Department shall be signed and certified. (See 40 CFR 122.22 and 10 CSR 20-6.010)
 - (b) The Federal Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six (6) months per violation, or by both.
 - (c) The Missouri CWL 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.
13. 40 CFR 122.41(g) Property rights. This permit does not convey any property rights of any sort or any exclusive privilege.
14. In addition to specified conditions stated herein, this permit is subject to the attached Part I standard conditions dated August 1, 2014, and hereby incorporated as though fully set forth herein.

15. *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.

IV. 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
FACT SHEET
FOR THE PURPOSE OF A NEW PERMIT
FOR
MO-0137910
MISSOURI DEPARTMENT OF TRANSPORTATION (MoDOT)
SEPARATE STORMWATER SEWER SYSTEM (TS4) &
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 TS4: Industrial; Stormwater Urban stormwater Runoff/ Land Disturbance
Facility SIC Code(s): 9511, 1629
Facility NAICS Code: 924110
Application Date: April 29, 2021
Expiration Date: October 31, 2021

FACILITY DESCRIPTION:

Urban Stormwater Runoff. The MoDOT Phase II Small TS4 is a system of stormwater sewer conveyances and systems, which include roads with drainage systems, catch basins, curbs, gutters, ditches, man-made channels, and stormwater drainage located in an urbanized area and/or within the municipal boundaries of a regulated MS4, that are owned and operated by MoDOT.

Area Wide Land Disturbance; 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).

FACILITY PERFORMANCE HISTORY & COMMENTS:

The Stormwater Management Program reports were reviewed for the last permit term. Department records indicate that MoDOT's TS4, has not had an inspection or audit conduct by the Department. Due to the nature of MoDOT being a statewide agency, audits and inspections (component focused audits) are to be conducted by the Department's MS4 Water Protection Program team.

OTHER ENVIRONMENTAL PERMITS:

In accordance with 40 CFR 122.21(f)(6), the Department evaluated other environmental permits currently held by this facility. This facility holds no other permits.

PART II: RECEIVING STREAM & PERMITTED FEATURES

APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:

Per Missouri Effluent Regulations (10 CSR 20-7.015), the waters of the state are divided into seven (7) categories. This permit applies to facilities discharging to the following water body categories:

- ✓ Missouri or Mississippi River [10 CSR 20-7.015(2)]
- ✓ Lakes or Reservoirs [10 CSR 20-7.015(3)]
- ✓ Losing Streams [10 CSR 20-7.015(4)]
- ✓ Metropolitan No-Discharge Streams [10 CSR 20-7.015(5)]
- ✓ Special Streams [10 CSR 20-7.015(6)]

- ✓ All Other Waters [10 CSR 20-7.015(8)]

PERMITTED FEATURES:

A NPDES Permitted Feature is a term borrowed from the Department’s Clean Water Information System (MoCWIS), which is typically a three digit code used to describe if the point source location is an outfall, monitoring location, well, internal monitoring location, stormwater outfall, etc.

The permit requires MoDOT to update their stormwater sewer map with the location of all known outfalls and the names and locations of all receiving waters of the state that receive discharge from their TS4 within the permitted area. However, the operating permit only list one permitted feature, which is not a true outfall as it is the location of MoDOT’s Headquarters in Jefferson City, Missouri. This is due to the fact that the amount of actual outfalls is too numerous to list in this operating permit.

In accordance with 10 CSR 20-6.200, an outfall is defined as, “A point source as defined by 10 CSR 20-2.010 at the point where a municipal separate storm sewer discharges and does not include open conveyances connecting two (2) municipal separate storm sewer systems, pipes, tunnels or other conveyances which connect segments of waters of the state and are used to convey water of the state.” An outfall is not where a stream or waters of the state leave the municipal boundary. Outfalls include discharges from pipes, ditches, swales, and other points of concentrated flow.

An outfall is a point source where a regulated separate storm sewer system discharges to waters of the state; however, there are other types of permitted features that do not clearly fall under the term outfall.

A point source is defined in 10 CSR 20-2.010 as, “Any discernible, confined and discrete conveyance including, but not limited to, any pipe, ditch, channel, tunnel conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, separate storm sewer or vessel or other floating craft from which pollutants are, or may be, discharged.” Therefore, there may be locations from regulated MS4s that meet the definition of a point source; however, they do not meet the definition of an outfall. Because of this MoDOT is required to have a list of stormwater outfalls and their locations in their SWMP. However, in some cases where outfalls are located on the same segment of the TS4 and discharging to the same body of water, MoDOT may use one permitted feature as a designated outfall or representative outfall.

Areas of Missouri – Urban Areas

There are currently nine Urbanized Areas in Missouri. MoDOT’s TS4 through these areas is regulated under this operating permit based on the boundary of the Urbanized Area and not on the political boundary of the local government.

Urbanized Areas of Missouri

Cape Girardeau	Columbia	Jefferson City
Joplin	Lee’s Summit	Kansas City
Springfield	St. Joseph	St. Louis

Furthermore, there are portions of MoDOT’s TS4 that cross or run through regulated MS4s with a population over 10,000 and a population density of 1,000 people/mi². These regulated MS4 boundaries are based on the political boundary of the local government and not the urban cluster boundary. Below is a list of regulated MS4s not located in one of the nine Urbanized Areas listed above.

Regulated MS4s Not Located in Urbanized Areas

Carthage	Lebanon	Sedalia
Excelsior Springs	Marshall	Sikeston
Farmington	Maryville	Warrensburg
Fort Leonard Wood	Mexico	Washington
Fulton	Moberly	West Plains
Hannibal	Neosho	Eureka
Kennett	Poplar Bluff	Branson
Kirksville	Rolla	Bolivar
Harrisonville	Troy	Union

Areas of Missouri - TMDLs

In addition to urban areas listed above (i.e., population and population density based TS4 areas), this permit also establishes areas where MoDOT’s TS4 is subject to the terms and conditions of the operating permit are watersheds subject to approved and effective TMDLs. It is the responsibility of MoDOT as the NPDES permit holder to know which TMDLs are applicable to their activities. For the most part, TMDLs will list permit holders that are known to cause or contribute to the pollutant(s) of concern; and the permit holders not believed to have potential to cause or contribute to the pollutant(s) of concern. In accordance with Section I Part B, item 5 MoDOT may have to implement additional controls for projects located or will be located in areas already subject to existing TMDLs; however, if MoDOT does not implement appropriate action, the Department may modify the operating permit to ensure that pollutants are being reduced to the Maximum Extent Practicable

for the specific area. To determine if any areas of MoDOT’s TS4 is applicable to any existing TMDLs, the Department’s website, Total Maximum Daily Loads page may offer assistance.

TMDL information can be found on the Department’s website: <https://dnr.mo.gov/env/wpp/tmdl/>
 It is also suggested that MoDOT determine if any TMDLs under development list them as a source of contribution of cause.

Areas of Missouri – Outstanding National Resource Waters and State Resource Waters

Outstanding National Resource Waters are located in 10 CSR 20-7.031 Table D, and Outstanding State Resource Waters are located in 10 CSR 20-7.031 Table E.

Table E of 10 CSR 20-7.031

Table E
Outstanding State Resource Waters

Water Body	Miles/Acres	Location	County(ies)
Baker Branch	4 mi.	Taberville Prairie	St. Clair
Bass Creek	1 mi.	in Three Creeks Conservation Area	Boone
Big Buffalo Creek Morgan	1.5 mi.	Big Buffalo Creek Conservation Area	Benton-
Big Creek	5.3 mi.	Sam A. Baker State Park	Wayne
Big Sugar Creek	7 mi.	Cuivre River State Park	Lincoln
Big Lake Marsh	150 ac.	Big Lake State Park	Holt
Blue Springs Creek	4 mi.	Blue Spring Creek Conservation Area	Crawford
Bonne Femme Creek	2 mi.	Three Creeks Conservation Area	Boone
Brush Creek	0.7 mi.	Bonanza Conservation Area	Caldwell
Bryant Creek	1.5 mi.	Bryant Creek Natural Area in Rippee Conservation Area	Ozark/Douglas
Bull Creek	8 mi.	Mark Twain National Forest Sec. 24,25N,21W to Sec. 22,26N,20W	Christian
Cathedral Cave Branch	5 mi.	Onondaga Cave State Park	Crawford
Chariton River	9.8 mi.	Rebels Cove Conservation Area	Putnam- Schuyler
Chloe Lowry Marsh	40 ac.	Chloe Lowry Marsh Conservation Area	Mercer
Coakley Hollow	1.5 mi.	Lake of the Ozarks State Park	Camden
Coonville Creek	2 mi.	St. Francois State Park	St. Francois
Courtois Creek	12 mi.	Mouth to Hwy. 8	Crawford
Crabapple Creek	1.0 mi.	Bonanza Conservation Area	Caldwell
Devils Ice Box Cave Branch	1.5 mi.	Rock Bridge State Park	Boone
East Fork Black River	3 mi.	Johnson’s Shut-Ins State Park	Reynolds
First Nicholson Creek (East Drywood Creek)	2 mi.	Prairie State Park	Barton
Gan’s Creek	3 mi.	Rock Bridge State Park	Boone
Huzzah Creek	6 mi.	Mouth to Hwy. 8	Crawford
Indian Creek	17.5 mi.	Mark Twain National Forest	Douglas- Howell
Ketchum Hollow	1.5 mi.	Roaring River State Park	Barry
Little Piney Creek	25 mi.	Mouth to 21,35N,08W	Phelps
Little Black River	3 mi.	Mud Puppy Natural History Area S22,T24N,R3E to S25,T24N,R3E	Ripley
Log Creek	0.4 mi.	Bonanza Conservation Area	Caldwel
Meramec River	8 mi.	Adjacent to Meramac State Park	Crawford/Franklin
Water Body	Miles/Acres	Location	County(ies)
Meramec River	3 mi.	Adjacent to Onondaga and Huzzah State Forest	Crawford
Mill Creek	5 mi.	Mark Twain National Forest	Phelps
N. Fork White River	5.5 mi.	Mark Twain National Forest	Ozark
Noblett Creek	5 mi.	Above Noblett Lake, Mark Twain National Forest	Douglas-Howell
Onondaga Cave Branch	0.6 mi.	Onondaga Cave State Park	Crawford
Pickle Creek	3 mi.	Hawn State Park	Ste. Genevieve
S. Prong L. Black River	2 mi.	In Little Black Conservation Area	Ripley
Shoal Creek	0.5 mi.	Bonanza Conservation Area	Caldwell
Spring Creek	17 mi.	Mark Twain National Forest	Douglas
Spring Creek	6.5 mi.	Mark Twain National Forest	Phelps
Taum Sauk Creek	5.5 mi.	Johnson’s Shut-Ins State Park Addition S23,T33N,R2E to S5,T33N,R3E	Reynolds-Iron
Turkey Creek	4.6 mi.	In Three Creeks Conservation Area	Boone
Van Meter Marsh	80 ac.	Van Meter State Park	Saline
Whetstone Creek	5.1 mi.	Whetsone Creek Conservation Area	Callaway

Table D of 10 CSR 20-7.031:

Table D
Outstanding National Resource Waters

Water Body	Location	County(ies)
Current River	Headwaters to Northern Ripley Co. Line Sec. 22,32N,07W to Sec. 15,25N,01E	Dent to Ripley
Jacks Fork River	Headwaters to Mouth Sec. 29,28N,07W to Sec. 9/15,29N,03W	Texas to Shannon
Eleven Point River	Headwaters to Hwy. 142 Sec. 32,25N,05W to Sec. 21,22N,02W	Oregon

PART III: STORMWATER MANAGEMENT PROGRAM AND PLAN

STORMWATER MANAGEMENT PROGRAM

This permit, in accordance with 10 CSR 20-6.200 and 40 CFR Part 122, requires the permittee to develop and implement a Stormwater Management Program. The Stormwater Management Program shall address the six MCMs; public education and outreach, public involvement/participation process, illicit discharge detection and elimination, construction site stormwater runoff control, post-construction stormwater management, and pollution prevention/good housekeeping for municipal operations. In addition, the Stormwater Management Program addresses TMDL implementation plan components, if applicable.

The Stormwater Management Program also includes, but is not limited to, specific BMPs, relevant local regulations, policies, procedures, interim milestones, measurable goals, measures of success, designation of responsible persons/positions for each of the measurable goals, and any applicable TMDL assumptions and requirements.

STORMWATER MANAGEMENT PLAN (SWMP)

The SWMP is the document explaining the implementation of the Stormwater Management Program. This SWMP is a document 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.

For this comprehensive permit, a SWMP is required, it does not need to be submitted to the Department as part of the application. The SWMP shall lay out standard procedures and details of the Stormwater Management Program. This document will help ensure consistency and continuity in the Stormwater Management Program.

Supplemental may be incorporated show support of the implementation of the requirements. These items may include, but are not limited to:

- Standard operating procedures,
- Inspection forms,
- Maps,
- Ordinances,
- SWPPPs,
- Operations and Maintenance Manual,
- Tracking documents,
- Inspection checklists,
- Documentation of agreements for co-permittees, and
- Documentation of agreements for cooperative agreements

SWMP PUBLIC NOTICE PROCEDURE

The MS4 Remand Rule became effective on January 9, 2017 and requires public participation in the permitting process. This comprehensive permit lays out the requirements of the Stormwater Management Program. Using the specific SWMP may make an effective method of explaining the Stormwater Management Program.

STORMWATER MANAGEMENT PROGRAM ORDINANCES

To the extent allowable under state or local law, ordinances (or other regulatory mechanisms if a non-traditional MS4) are required to be developed, implemented, and enforced within five years of initial permit issuance under the following sections, in accordance with 40 CFR 122.34(b):

Construction site stormwater runoff control; to require erosion and sediment controls at construction sites, as well as sanctions designed to ensure compliance; and

Post-construction; to address post-construction runoff from new development and redevelopment projects and sanctions designed to ensure compliance. The “Missouri Guide to Green Infrastructure: Integrating Water Quality into Municipal Stormwater Management” (May 2012) was written specifically to aid MS4s in developing and implementing the post-construction runoff program. The guide

can be viewed at <http://www.dnr.mo.gov/env/wpp/stormwater/mo-gi-guide.htm>. The EPA and the Department and certain MS4s have developed compliant model ordinances that may be adapted for use by other interested MS4s.

PART IV: RATIONALE FOR PERMIT TERMS AND CONDITIONS

CLEAN WATER ACT SECTION 402(L)

On December 7, 2012, the U.S. EPA promulgated a rule (77FR 72970) clarifying that discharges of stormwater from silviculture activities do not require a NPDES permit. On March 20, 2013, the U.S. Supreme Court ruled that discharges of stormwater that run off from logging roads into ditches, culverts, and channels did not require a NPDES permit as stormwater from industrial activity.

In January 2014, Congress amended CWA §402(l) to prohibit the requirements of NPDES permits for the discharge of runoff “resulting from the conduct of the following silviculture activities conducted in accordance with standard industry practice: nursery operations, site preparation, reforestation and subsequent cultural treatment, thinning, prescribed burning, pest and fire control, harvesting operations, surface drainage or road construction and maintenance.” In 2016, the U.S. EPA published its decision to not regulate forest road discharges under Phase II stormwater non-permitting programs.

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 for NPDES operating permits. 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 on 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 on the Department’s State Historic Preservation Office Section 106 Review, which is located at: <http://dnr.mo.gov/shpo/sectionrev.htm>. 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 regulated by federal law under the Resource Conservation and Recovery Act or the Comprehensive Environmental Response, Compensation, and Liability Act.

ANTI-BACKSLIDING

Anti-backsliding is a provision in federal 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. Areas of the permit were added to in order to follow the MS4 Remand Rule to ensure clear, specific, measurable elements.

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 best avenue forward for implementing the anti-degradation requirements for TS4s is identical to MS4 general permits, which is by requiring the appropriate development and maintenance of a SWMP. The permit directs the permittee to identify reasonable and effective BMPs in the SWMP, document the decision process for each minimum control measure, include a rationale statement for each BMP and measurable goal defined, provide an implementation schedule and develop a plan to evaluate program compliance, appropriateness of identified BMPs, and progress towards achieving identified measurable goals.

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

This TS4 is considered a Phase II, or Small, MS4 (as defined under 10 CSR 20-6.200) and is required to apply and obtain an operating permit in accordance with 40 CFR 122.33 and 10 CSR 20-6.200(5).

AREA-WIDE LAND DISTURBANCE REQUIREMENTS

The area-wide land disturbance section, Requirement number 3, includes support activities. Those support activities for land disturbance projects performed or under contract by MoDOT within a permitted site 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.

For example, if a project performed by MoDOT has a main land disturbance site that is 0.6 acre and MoDOT disturbs an additional 0.5 acre within their right-of-way or permitted site for the purposes of the same project but physically separated from that project area for ancillary activities such as a borrow material, then the total acreage for this project is 1.1 and is to be included as part of the permitted site. The conditions of this permit apply to both the main construction area and the borrow area.

If MoDOT has a contractor performing land disturbance work within a MoDOT permitted site that is 0.6 acre and the project requires the contractor to get fill from a borrow site specific to this project but outside of the permitted site which equals 0.5 acre, then the total acreage for the MoDOT permit is 0.6 acre and the remaining 0.5 acre borrow area must still be covered by a land disturbance permit. Where MoDOT is limited to the boundary of their right-of-way (marked as the permitted site in the SWPPP), it is the responsibility of the contractor to obtain coverage under an individual land disturbance permit (MORA). The conditions of this permit apply only to the land disturbance within the permitted site, and MoDOT must note in the SWPPP who the contractor is, what their role at the site will be, and that they are utilizing an offsite borrow area for any separately permitted activity.

Regarding MoDOT's ability to do work off their right-of-way or any temporary easements identified as such, the Missouri Constitution per Article IV, Section 30(b) prohibits the use of state revenue derived from highway users (e.g., license fees, fuel taxes) for anything other than state highway purposes such as maintenance and construction of state highways. Any use of funds in areas not owned or secured by MoDOT would be considered a diversion of state funds.

(<http://www.moga.mo.gov/mostatutes/ConstArticles/Art04.html>)

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/>.

Disturbed areas under bridge structures where vegetation will not grow due to the lack of sunlight and moisture are considered to have achieved final stabilization once they have been restored to their pre-construction condition. The hydraulic design parameters MoDOT uses will not allow the placement of a permanent BMP. Controlling factors in these specific situations that prohibit the use of rock or rock blankets to comply include the hydraulic design criteria, National Flood Insurance Program, The Corp of Engineers Permit Section 404, and the overall liability that comes with alterations of a natural water course that may cause damage to another party.

COMPLIANCE AND ENFORCEMENT

Enforcement is the action taken by the 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.

Dischargers of stormwater from regulated MS4s, as defined in the Missouri Stormwater Regulations 10 CSR 20-6.200, who do not obtain coverage under this or other Missouri general permits, or under a site-specific NPDES permit, will be in violation of the Missouri CWL and its implementing regulations and subject to civil penalties of up to \$10,000 per violation, per day. For entities covered under a NPDES permit, failure to comply with any NPDES permit requirement also constitutes a violation of the Missouri CWL and its implementing regulations.

BRIDGE WASHING ACTIVITIES

Bridge washing, cleaning, and flushing is a relatively common non-stormwater discharge that occurs when necessary for construction and maintenance activities. Preventative maintenance can extend the life of a bridge by slowing the rate of deterioration of bridge components. Spraying water on bridges is also used to remove inactive bird nests. Bridge washing and cleaning activities potential impact to water quality is to be reduced or prevented with established BMPs, measurable goals, and the iterative process under minimum control measure #6.

ITERATIVE PROCESS

The iterative process is documented process consisting of action items and analysis that is to be conducted by the permittee to ensure that BMPs are effective and 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 set was ill-chosen or unattainable due to no fault of the permittee.

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 was not 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 naive to believe that all BMPs can be evaluated annually. Thus, BMPs are to be evaluated every 5 years (i.e., the life of the permit) as required by this operating permit.

MAXIMUM EXTENT PRACTICABLE (MEP)

The permittee shall use an adaptive management approach whereby the permittee will implement management measures, including structural and non-structural BMPs. MEP is a permittee-specific determination guided by factors such as: community financial capability and the need for reasonable rate or funding increases, weighing program-wide priorities compared to site-specific MS4 improvements, MS4 impacts to receiving waters, local priorities, watershed planning, integrated planning, MS4 size, climate, implementation schedules, hydrology, topography, geology, and the MS4's capacity to perform additional operation and maintenance.

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. As established in the *1999 National Pollution Discharge Elimination System Regulations for Revisions of Water Pollution Control Program Addressing Storm Water Discharges* (64 FR No. 235), MEP is, "...the statutory standard that establishes the level of pollutant reduction that operators of regulated MS4s must achieve," (i.e., not water quality standards).

In addition to indicating that MEP is the statutory requirement, the EPA also clearly stated that MEP is applicable to the six (6) minimum controls measures in 64 FR No. 235, which states, "*The first component, reduction to the MEP, would be realized through implementation of the six minimum measures.*" The description of MEP continues in 64 FR No. 235, with "*EPA envisions application of the MEP standard as an iterative process. MEP should continually adapt to current conditions and BMP effectiveness and should strive to attain water quality standards.*" The iterative process, mentioned is also defined in 644 FR. No 235 with the following, "...implement an iterative process of using BMPs, assessment, and refocused BMPs, leading toward the attainment of water quality standards."

Compliance is determined by the successful implementation of the six MCMs in accordance with the conditions established in the operating permit, BMPs designed to reduce pollutants to the MEP and the utilization of the iterative process. MEP is first the development and successful implementation of the six (6) Minimum Control Measures. The development and successful implementation of the 6 MCMs is realized through the development/implementation of effective BMPs designed or developed to reduce pollutants directly or indirectly into the MS4. Effective BMPs are realized through their corresponding measurable goals. The operating permit requires measurable goals to be developed to evaluate the BMP. In the event that a measurable goal determines that a BMP is not effective, the permittee is then subject to the iterative process where they are required to replace or revise the ineffective BMP with a new or revised BMP.

Ninth Circuit court ruling in *EDC v. EPA* (2003) found that the Phase II rule requirements for small MS4 General Permits violated the CWA. The court ruling found a lack of permitting authority review and lack of public participation in permit process. The MS4 Remand Rule was promulgated December 9, 2016 and became effective on January 9, 2017 as a result of this ruling. The Remand

Rule requires more stringent public notice requirements and authorization requirements, including SWMP review, approval, and incorporation for two-step general permits. There is not review, approval, or incorporation for this comprehensive permit.

The MS4 Remand Rule ensures permit requirements include narrative, numeric, or other types of requirements such as:

- Implementation of specific tasks or BMPs
- BMP design and performance requirements
- Adaptive management requirements
- Schedules for implementation and maintenance
- Frequency of actions.

All requirements in this permit must be expressed in clear, specific, and measurable terms. This applies to any part of the permit addressing the six MCMs, TMDLs, and Stormwater Management Program Reports. MCMs were not intended to serve as stand-alone permit requirements, but rather areas of stormwater management that must be addressed in the permit through clear, specific, and measurable terms and conditions that meet the MS4 permit standard. Verbatim adoption of the MCMs from the Federal regulations will not satisfy this requirement.

MINIMUM CONTROL MEASURES (MCMs)

The Phase II Rule defines a Phase II MS4 storm water management program as comprised of six areas of management, known as MCMs. When administered properly and collectively, they are expected to result in reduction of the discharge of pollutants into receiving water bodies.

Operators of regulated Phase II MS4s, or in this case a TS4, are required to design their programs to do the following: reduce the discharge of pollutants to the MEP, protect water quality, and satisfy the appropriate water quality requirements of the CWA per 40 CFR 122.34(a). Proper implementation of the measures will improve water quality as indicated in 64 FR. No. 235, which states, “Absent to the contrary, EPA presumes that a small MS4 program that implements the six minimum measures in today’s rule does not require more stringent limitations to meet water quality standards. Proper implementation of the measures will significantly improve water quality.” The Department considers narrative effluent limitations requiring the implementation of BMPs to be the most appropriate in accordance with 40 CFR 122.44(k)(2) and (3).

MCM 1 Public Education and Outreach on Stormwater Impacts

Terms and conditions related to this MCM are in accordance with 40 CFR 122.34(b)(1).

Public education and outreach is vital, as an informed and knowledgeable community is central to the success of a stormwater management program. Everyone has a part to play in both contributing to stormwater runoff and protecting water quality.

The MS4 Operator has the flexibility to choose which target audiences make sense for their MS4. The MS4 Operator can choose the audience, the medium, and the specific message. By educating the residents, the MS4 can help ensure greater support for stormwater management measures, and the public gains a greater understanding of the reasons why stormwater management programs are necessary and important. Some MS4s may have a valid reason to include another target audience to their education program. MoDOT has the unique challenge of targeting a traveling community.

Tracking is important to ensure the target audiences are getting the information about the targeted pollutants. Many MS4 programs will see cycles of when education for certain topics is needed more than other topics. Learning through tracking and adaptive management will help the MS4 get effective education to the audiences.

When people participate in an activity, the underlying message becomes more tangible and their personal impact has a stronger tie to the message. There are many ways to get people involved, and these ways will ideally reach different groups. Communities may already have philanthropic organizations willing to assist the permittee with activities.

MCM 2 Public Participation

This MCM is required in accordance with 40 CFR 122.34(b)(2).

The Stormwater Management Program shall use a public notice procedure similar to that of the Master General Permit because the Management Program is the part that is specific to the MS4 for which it was created. Following the public notice processes laid out in Part 4.2 of this permit will give the public the opportunity to comment on or learn about the Stormwater Management Program.

The MS4 Operator does not need to create a stormwater management panel or committee. Having such a panel or committee will give the MS4 Operator a more immediate way of getting public representation involved and getting feedback from the public. A board with a diverse membership can enhance a stormwater management program by getting multiple viewpoints. Involving so much feedback and input will help gain backing from the residents and this understanding of the program will garner support when needed.

MCM 3 Illicit Discharge Detection and Elimination (IDDE)

This MCM is required in accordance with 40 CFR 122.34(b)(3).

An outfall is any point where a separate storm sewer system discharges to waters of the state which is owned or operated by the permittee. Outfalls include discharges from stormwater conveyances such as pipes, ditches, swales, gutters, and other points of concentrated flow.

An outfall does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances that connect segments of the same stream or other waters of the state and are used to convey waters of the state (such as culverts). If waters of the state flow through a channelized area, this remains waters of the state, not an open conveyance.

Outfalls are not where streams leave the municipal boundaries of an MS4. Outfalls are not limited by size, as illicit discharge can travel through any size outfalls, even those that are small. While larger outfalls may collect more drainage from a larger area, small outfalls were also constructed to convey stormwater and are equally likely to have illicit discharges. Overland flows, or areas of non-concentrated or sheet flow, are not considered to be outfalls. Therefore they are not required to be mapped. Where a conveyance ends and discharges to a BMP, such as a vegetated area, and there is no conveyance to waters of the state, the conveyance end is not an outfall if the discharge does not reach waters of the state.

Mapping all MS4 outfalls is vital to a functioning illicit discharge program. Mapping outfalls gives the MS4 Operator a starting point to trace back to the source. Knowing the locations of outfalls and receiving waters are necessary to be able to conduct dry weather field screening for non-storm water flows and to respond to illicit discharge reports from the public. Outfalls must be mapped no matter their size.

Mapping the storm sewer system which leads to those outfalls will further assist in illicit discharge tracing. Once an illicit discharge is detected at an outfall, it will be necessary to trace the discharge through that portion of the storm sewer system leading to the outfall in order to locate the source.

Because privately owned storm sewers and conveyances were authorized by a municipality or the county to become connected with the municipal system, the municipality or county with the MS4 permit does have responsibility for that stormwater. Facilities owned by homeowners associations, for example, are subject to local codes, ordinances, and enforcement. The municipalities are responsible for discharges of wastes from private storm water conveyance systems; therefore, enforcement actions shall take place if an illicit discharge is detected from a private outfall. So while the outfalls from such private stormwater conveyances and outfall are not required for mapping, it is recommended to do so in order to assist with illicit discharge investigations and enforcement.

Ongoing dry weather field screening for non-stormwater flows is a strong tool for detecting illicit discharges. This process will verify outfall locations by walking, wading, or even using a boat in streams or along the streambanks and shorelines. Evidence of past non-stormwater flows, trash, and improper yard waste disposal, along with the structural integrity of the storm sewer system, can be found.

Per 260.505 RSMo, any emergency involving a hazardous substance must be reported to the Department's 24 hour Environmental Emergency Response hotline at (573) 634-2436 at the earliest practicable moment after discovery. The Department may require the submittal of a written report detailing measures taken to clean up a spill. These reporting requirements apply when the spill results in chemicals or materials leaving the permitted property or reaching waters of the state. This requirement is in addition to the noncompliance reporting requirement found in Standard Conditions Part I.

MCM 4 Construction Site Runoff Control

This MCM is required in accordance with 40 CFR 122.34(b)(4).

Polluted stormwater runoff from construction sites often flows to MS4 storm sewers and is ultimately discharged into local waterbodies. Of the pollutants that have the potential to be discharged, sediment is usually the main pollutant of concern. According to the 2000 National Water Quality Inventory, States and Tribes report sediment as one of the most widespread pollutants affecting assessed rivers and streams, second only to pathogens (bacteria). Sources of sediment include agriculture, urban runoff, construction, and forestry. However, sediment runoff rates from construction sites are typically 10 to 20 times greater than those of agricultural lands and 1,000 to 2,000 times greater than those from forest lands.

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.

The MS4 Operator must establish a construction program that controls polluted runoff from construction sites with a land disturbance of greater than or equal to one acre. There must be control through ordinances and/or other regulatory mechanism, such as a permit for land disturbance or grading activity.

Land disturbance activities, such as clearing and grading the land surface, increases the potential for sediment discharges. Clearing reduces the natural uptake of water and nutrients by vegetation, and excessive grading can smooth the ground surface, increasing amount and velocity of runoff. Vegetation inhibits erosion, as the roots hold the topsoil in place and leaves protect the surface against

rain. Once the vegetative cover is gone, erosion is accelerated. The longer the exposed area is subject to erosive forces, the more severe the effect.

The goal for this land disturbance program should be to expose the smallest practical area of land for the shortest possible time to eroding forces. Phased construction minimizes the amount of land exposed at one time. When the site becomes active, BMPs must be in place, and the permittee inspection and enforcement activities must begin. To ensure that the BMPs are properly installed, the permittee is required to develop procedures for site inspection and enforcement of control measures to deter infractions. Procedures include steps to identify priority sites for inspection and enforcement based on the nature and extent of the construction activity, topography, the characteristics of soil, and the receiving water body's quality. Inspections give MS4s an opportunity to provide additional guidance and education, issue warnings, or assess penalties.

Each site shall self-inspect to ensure their compliance with the regulations of both the MS4 and the State of Missouri CWL. An MS4 may require the site operator submit their self-inspection reports to the MS4 Operator as a form of oversight, tracking of compliance, or issues with the site.

MCM 5 Post-Construction Runoff Control

This MCM is required in accordance with 40 CFR 122.34(b)(5).

If water quality impacts are considered from the beginning stages of a project, new development and redevelopment provide more opportunities for water quality protection. Post-construction stormwater management in areas undergoing new development or redevelopment is necessary because runoff from these areas has been shown to significantly affect receiving waterbodies. Many studies indicate that prior planning and design for minimization of pollutants in post-construction stormwater discharges is the most cost-effective approach to stormwater quality management.

The Phase II rule applies to redevelopment projects that alter the footprint of an existing site or building in such a way that there is a disturbance of equal to or greater than one acre of land. This program requires ordinances, or policies, that address stormwater runoff quality. Post-construction stormwater management can be utilized in ways that preserve and protect in a non-structural way and in structural items that are used to mitigate the decreased water quality in the stormwater runoff. Because structural and non-structural practices work together, a minimum of one ordinance is required for structural controls, and one ordinance for non-structural controls.

Structural controls have traditionally been concrete or "gray" infrastructure created to quickly move the stormwater away from the place it falls. These have caused increased erosion and water quality degradation to the receiving streams. Current standards include water quality as a factor in design, and many standards are actually based on natural systems and rely upon vegetation and soil mechanisms in order to perform as intended. The choice of which structural BMPs are most appropriate comes not as a post-construction fix, but rather as a result of the site design review, which should also look at the stormwater management of the site comprehensively.

Numeric, or technical, performance standards are broken into two types for stormwater discharges, a treatment standard or a volume-based/retention standard. Treatment standards typically specify an amount of pollutant to be managed, for example 80% TSS removal. Volume-based or retention standards typically require the use of infiltration, evapotranspiration, or harvest practices to control a specified volume of stormwater onsite and are usually expressed as a volume of rainfall, a percentile storm event or a groundwater recharge volume.

Non-structural controls focus on preserving open space, protecting natural systems, and incorporating existing landscape features such as wetlands and stream corridors into a site plan to manage stormwater at its source. There is also emphasis on clustering and concentrating development, minimizing disturbed areas, and reducing the size of impervious areas.

MCM 6 Pollution Prevention/Good Housekeeping

This MCM is required in accordance with 40 CFR 122.34(b)(6).

The MS4 Operator's actions and facilities are the example for the residents of that MS4. Leading by example can be an important component of education.

Training shall be given to any staff that have influence on stormwater for the MS4, not just environmental coordinators. By only focusing the training on a few members, the message will not get out. Each MS4 should take a realistic look at each department, division, and individual. If their work may either negatively impact or positively impact stormwater runoff, they must attend the training.

Maintaining an Operations and Maintenance document or SWPPP for each municipal site will ensure proper management and behavior at those sites. This document should also include inspections for these sites as a method of checking up on the individual site programs. Inspections, cleaning, and routine maintenance of stormwater structures is necessary to ensure the structures are functioning properly and stormwater is managed properly.

Road salt and other deicers are a safety item for most residents of Missouri. However, the chloride concentrations in streams is increasing, which can potentially harm aquatic life and may impair drinking water. So although there is a need for road salt, there are changes that can be made to use less salt and still clear the roads for the safety of the public. This is seen in product management. Loading, unloading, and cleanup practices in the loading and parking areas can greatly reduce the amount of salt loss to precipitation and subsequent stormwater. A winter maintenance program which tracks the rock salt use and finds ways to manage the product to reduce loss on the municipal yard is the goal of any BMPs designed and implemented for rock salt.

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.

PESTICIDE RULE

The Department has developed a Pesticide General Permit #MOG-870000 for point source discharges resulting from the application of pesticides. 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; 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, to ensure proper oversight of pesticide applications. MS4s under this permit are 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/facility 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).

STANDARD CONDITIONS

The standard conditions Part I incorporate all sections of 10 CSR 20-6.010(8) and 40 CFR 122.41(a) through (n) by reference as required by law. These conditions, in addition to the conditions enumerated within the standard conditions, should be reviewed by the facility to ascertain compliance with this permit, state regulations, state statutes, federal regulations, and the CWA.

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

WATER QUALITY STANDARDS

The nature of the MS4 program is technology-based, which is in accordance with Section §402(p)(3)(B)(iii) of the CWA with the establishment of the technology-based standard MEP. Many in the MS4 community believe that MEP is the only standard applicable for compliance determination, which is true for the most part (specifically for the six (6) minimum control measures, is correct). Given the litigious nature surrounding the “agreeability” of MS4 compliance with WQS, MS4 permits have been the subject of court cases for several years.

40 CFR 122.34(a)(1) clearly requires that the MS4 permit will require the MS4 permittee to, “...develop, implement, and enforce a storm water management program designed to reduce the discharge of pollutants from your MS4 to the maximum extent practicable (MEP), to protect water quality, and satisfy the appropriate water quality requirements of the Clean Water Act.” While this regulation seems to be in contradiction to Section §402(p)(3)(B)(iii) of the CWA due to the fact that it appears to require the permittee to “...protect water quality” and “satisfy the appropriate water quality requirements...” it actually is not; however, it has been mistakenly applied to require strict, immediate compliance with WQS even in previously issued Missouri MS4 Master General Permits.

As noted in 64 FR No. 235, “The Court, did, however, disagree with the EPA’s interpretation of the relationship between CWA sections 301 and 402(p). The Court reasoned that MS4s are not compelled by section 301(b)(1)(C) to meet all State water quality standards, but rather the Administrator or the State may rely on section 402(p)(3)(B)(iii) to require such controls.” The discussion continues with, “...the 1996 Policy describes how permits would implement an iterative process using BMPs, assessment, and refocused BMPs leading toward attainment of water quality standards. The ultimate goal of the iteration would be for water bodies to support their designated uses...” and “EPA also believes the iterative approach toward attainment of water quality standards represents a reasonable interpretation of CWA section 402(p)(3)(B)(iii).”

A break-down of 40 CFR 122.34(a) is given in 64 FR No. 235, as follows, “The first component, reduction to the MEP, would be realized through implementation of the six minimum measures. The second component, to protect water quality, reflects the overall design objective for municipal programs based on CWA section 402(p)(6). The third component, to implement other applicable water quality requirements of the CWA, recognizes the Agency’s specific determination under the CWA section 402(p)(3)(B)(iii) of the need to achieve reasonable further progress toward the attainment of water quality standards according to the iterative BMP process, as well as the determination that State or EPA officials who establish TMDLs could allocate waste loads to MS4s, as they would other point sources.”

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 (i.e., 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.

Federal regulation 40 CFR 122.34(a) establishes the requirements applicable to all MS4s, in this case the TS4, with, “*Your NPDES MS4 permit will require at a minimum that you develop, implement, and enforce a storm water management program designed to reduce the discharge of pollutants from your MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act.*” EPA translated this regulation into three parts in 64 FR No. 235, as follows, “*The first component, reductions to the MEP, would be realized through implementation of the six minimum measures. The second component, to protect water quality, reflects the overall design objective for municipal programs based on CWA section 402(p)(6). The third component, to implement other applicable water quality requirements of the CWA, recognizes the Agency’s specific determination under CWA section 402(p)(3)(B)(iii) of the need to achieve reasonable further progress toward attainment of water quality standards according to the iterative BMP process, as well as the determination that State or EPA officials who establish TMDLs could allocate waste loads to MS4s, as they would to other point sources.*”

The above citation of 64 FR No. 235 clearly states that MEP is specific to the six (6) MCMs and clearly establishes that WLAs are applicable to MS4s. However, unlike other traditional point sources that utilize treatment facilities, the EPA clearly indicated that attainment of the WLA is to be conducted via “*the iterative BMP process.*” Thus, requiring any condition for the attainment of water quality standards in addition to the MCMs is going beyond MEP but the process for attainment of the WLA is still achieved with BMPs using the iterative process of establishing BMPs, evaluating the BMPs, and refocusing on BMPs.

However, just because a WLA for any given pollutant(s) of concern (POC) has been established in a TMDL for a MS4, additional BMPs or modifications to BMPs for the six MCMs should not be required as a trigger action. Rather, the MS4 permit holder subject to an effective and approved TMDL should first make a determination if the implementation of their MCMs is adequately meeting the requirements and assumptions of the TMDL. As noted in 64 FR No. 235, “*At this time, EPA determines that water quality-based controls, implemented through the iterative process today are appropriate for the control of such pollutants and will result in reasonable further progress towards the attainment of water quality standards.*” While potentially rare this does indicate that no further action may be necessary to implement the requirements and assumptions of the TMDL as the MS4 community may, through successful implementation to the MEP for each of the MCMs, have already demonstrated “*reasonable further progress.*” This, rightfully so, places the burden of support on the MS4 community; however, in order for the MS4 community to continue operating only under the six MCMs, the determination of beneficial use re-attainment must be reviewed and timely approved by applicable program staff (i.e., the MS4 program coordinator and Watershed Protection Section staff).

If the requirements and assumptions of the TMDL are not being met, then the MS4 will need to, at a minimum, develop BMPs that target the given POC with the goal or design for the reduction of the pollutant. Due to the nature of stormwater controls via the iterative process, subsequent determinations can and should be made by the MS4 community to determine if “*reasonable further progress*” has resulted in the attainment of the WLA.

In addition to the initial determination or additional BMPs as required in the operating permit, integrated planning actions may be considered as actions taken to specifically restore a waterbody’s beneficial uses. Regardless, if the MS4 permit holder uses integrated planning or BMP design to reduce pollutants, other factors need to be considered in accordance with 64 FR No. 235, which states, “*If the permitting authority (rather than the regulated small MS4 operator) needs to impose additional or more specific measures to protect water quality, then that action will most likely be the result of an assessment based on a TMDL or equivalent analysis that determines sources and allocations of pollutant(s) of concern. EPA believes that the small MS4’s additional requirements, if any, should be guided by its equitable share based on a variety of considerations, such as cost effectiveness, proportionate contribution of pollutants, and ability to reasonably achieve Wasteload reductions. Narrative effluent limitations in the form of BMPs may still be the best means of achieving those reductions.*”

In addition to the above, the TMDL portion of the permit requires the development and implementation of a TMDL ARAP. While the TMDL ARAP is not a Schedule of Compliance actions and schedules established in the TMDL ARAP will be subject to the federal regulations on Schedules of Compliance [40 CFR 122.47]. Specifically, if the development and implementation of the TMDL ARAP is to be conducted in a period of time extending one calendar year, then the permittee will be required to report annually for either the status of the development of the plan or for the implementation of the plan based on 40 CFR 122.47(a)(3)(ii).

Regarding the time period allowed for development of the TMDL ARAP (i.e., as soon as practicable not exceeding 30 months), the Department has determined the 30 month time period is appropriate, as it allows the permittee the necessary time and flexibility that is needed to ultimately achieve attainment with the TMDLs assumptions and requirements. The Department has experience in the facilitation of an adaptive management plan, along with EPA Region 7, with a MS4 community that addressed the assumption and requirements of an applicable TMDL. The time period to develop the adaptive management plan took more than 30 months, but the assumptions and requirements of the TMDL were more complex than other straight forward TMDLs. Thus, the 30 month maximum time period allows the permittee to determine or develop appropriate BMPs, measurable goals, funding sources, local votes, strategic planning, opportunity to engage interested parties and stakeholders, etc. The permit does allow for MoDOT to extend the 30 month

period upon request; however, seeking approval of the extension will need to provide appropriate justification of why the extension is needed, a revised time schedule of compliance, and reason for failing to meet the 30 month maximum time.; The allowance of extending the time period beyond 30 months is not guaranteed.

The exemption of the TMDL portion of the operating permit indicates that the TMDL is to indicate that the permittee does not cause or contribute to the impairment addressed by the TMDL. While this language is straight forward, it would be naive to believe that TMDLs will always include this language verbatim. Therefore, language similar to “does not cause or contribute” may also provide the exemption. If the permittee has any question regarding the language of a TMDL, if it means the TMDL is applicable or not, then they recommended to contact the Department’s MS4 coordinator. Additionally, it would greatly benefit the permittee to review future draft TMDLs and work with the Department on language so as to avoid any confusion regarding the applicability of a TMDL.

Part V – Administrative Requirements

COST ANALYSIS FOR COMPLIANCE

Pursuant to Section 644.145, RSMo, when issuing permits (under this chapter) that incorporate a new requirement for discharges from publicly owned combined or separate sanitary or storm sewer systems or publicly owned treatment works, or when enforcing provisions of this chapter or the Federal Water Pollution Control Act, 33 U.S.C. 1251 et seq., pertaining to any portion of a publicly owned combined or separate sanitary or storm sewer system or [publicly owned] treatment works, the Department shall make a cost analysis for compliance upon which to base such permits and decisions to the extent allowable under this chapter and the Federal Water Pollution Control Act. Where permit modifications, permit renewals, or sewer extensions do not impose new requirements and/or do not require rate increases, the cost analysis for compliance may receive a less detailed review. Permits that do not include new requirements may be deemed affordable.

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.

DEFINITIONS

All definitions contained in 10 CSR 20-6.200 shall apply to this permit and are incorporated herein by reference. For convenience, simplified explanations of some regulatory/statutory definitions have been provided, but in the event of a conflict, the definition found in the regulation takes precedence.

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

Clear, specific, and measurable terms: This permit is written to contain clear, specific, and measurable terms, using plain language to clearly establish permit requirements and the standards that will be used to assess compliance. “Such terms and conditions may include narrative, numeric, or other types of requirements (e.g., implementation of specific tasks or best management practices (BMPs), BMP design requirements, performance requirements, adaptive management requirements, schedules for implementation and maintenance, and frequency of actions).” 40 C.F.R. § 122.34(a)

Common Promotional Plan: A plan undertaken by one (1) or more persons, to offer lots for sale or lease; where land is offered for sale by a person or group of persons acting in concert, and the land is contiguous or is known, designated, or advertised as a common unit or by a common name or similar names, the land is presumed, without regard to the number of lots covered by each individual offering, as being offered for sale or lease as part of a common promotional plan.

Construction activities: Clearing, grading, and excavating that result in land disturbance of equal to or greater than one (1) acre. Construction activity also includes the disturbance of less than one (1) acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one (1) acre. See 10 CSR 20-6.200(1)(D)28.

Construction Site Operator: The entity or entities with operational control over construction plans and specifications including the ability to make modifications to those plans and specifications; or with day-to-day operational control of those activities at a project

that are necessary to ensure compliance with a SWPPP for the site or other permit conditions. Typically this is the owner of the site or the general contractor of the project.

Control Measure: Any BMP or other method used to prevent or reduce the discharge of pollutants to waters of the state.

Conveyance: Curbs, gutters, artificial channels, swales, ditches, drains, pipes, catch basins, paved or unpaved channels, storm drains, or other constructed or natural features designed or utilized for routing of stormwater.

Discharge: “[T]he causing or permitting of one or more water contaminants to enter the waters of the state.” Section 644.016(6) RSMo. The water contaminant authorized to be discharged by this permit is urban stormwater runoff.

Illicit Discharge: “Any discharge to a municipal separate storm sewer that is not composed entirely of storm water, except discharges pursuant to a state operating permit, other than storm water discharge permits and discharges from fire fighting activities.” 10 CSR 20-6.200(1)(D)7.

Illicit discharge does not mean permitted discharge(s) from which wastewater is introduced into the conveyance system, if such discharges are properly managed and permitted by the Department or other authorized permitting authority; this may include de minimis determinations as made by the Department. An MS4 entity does not have authority to provide *de minimis* wastewater determinations. Should the MS4 permittee identify wastewater introduction into the system which is not properly permitted or authorized by the Department of Natural resources, the MS4 must contact the discharging facility and Department to assure the proper permit is obtained, and any adjoining MS4s through which the illicit discharge may flow.

MS4 Operator: “The owner, or an agent of the owner, of a separate storm sewer with responsibility for operating and maintaining the effectiveness of the system.” 10 CSR 20-6.200(1)(D)17.

Permanently: For the purposes of this permit, permanently should be defined as any activity that has been ceased without any intentions of future disturbance.

Permittee: Refers to the MS4 Operator, or the entities identified as the owner and continuing authority of this permit, in this permit it is MoDOT.

Stormwater: “[S]torm water runoff, snowmelt runoff and surface runoff, and drainage.” 10 CSR 20-6.200(1)(D)31.

Structural Controls: Pollution prevention practices that require the construction, or use of a device, to capture or prevent pollution in stormwater runoff. Structural controls may include, but are not limited to: extended detention basins, bio-retention, infiltration basins, stormwater wetlands, bio-swales, vegetative lined ditches, subsurface drains, permeable pavement or concrete, sand filter basins, stormwater planters, proprietary BMPs, storage tanks, and hydrodynamic separators.

Support activities: For the purposes of this permit, support activities are directly related to the construction site covered area-wide land disturbance section of this permit. Support activities are not a commercial operation and do not continue beyond the completion of the construction activity at the project it supports.

Temporary Stabilization: For the purposes of this permit, an area of a project is considered to be temporarily stabilized when BMPs have been installed with the intent to prevent erosion in areas of a project that may or are intended to be disturbed before the whole project has achieved final stabilization. Sediment control BMPs may be installed to supplement any erosion prevention BMPs.

Urbanized Area (UA): An area of densely developed territory as defined and used by the U.S. Census Bureau that may include multiple MS4s. The Census Bureau delineates urbanized areas after each decennial census.

Waters of the State: “[A]ll waters within the jurisdiction of this state, including all rivers, streams, lakes, and other bodies of surface and subsurface water lying within or forming a part of the boundaries of the state which are not entirely confined and located completely upon lands owned, leased, or otherwise controlled by a single person or two or more persons jointly or as tenants in common.” Section 644.016(27) RSMo.

PUBLIC NOTICE:

The Department shall give public notice 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 or with concerns related to a draft permit. No public notice is required when a request for a permit modification or termination is denied; however, the requester and facility must be notified of the denial in writing. <http://dnr.mo.gov/env/wpp/permits/pn/index.html> The Department must issue public notice of a pending operating 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 wishing to submit comments regarding this proposed operating permit, 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. All comments must be in written form.

- ✓ The Public Notice period for this operating permit was held August 27, 2021 to September 27, 2021.
No responses received or responses to the Public Notice of this permit do not warrant the modification of the terms and conditions of this permit.

DATE OF FACT SHEET: AUGUST 4, 2021

COMPLETED BY

SARAH WRIGHT, ENVIRONMENTAL SPECIALIST
MS4 & LAND DISTURBANCE PERMITTING COORDINATOR
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