New Permit & Database Updates for Construction

State Operating Permit MO-0137910
New Permit & EPG Updates for Construction

- New Stacked Permit
  - Section I – Transportation Separate Storm Sewer System (TS4) Permit Conditions
    - Regulatory Requirement
    - Stormwater Management Plan
    - Minimum Control Measures (MCMs)
      - MCM 1 - MoDOT Community & Public Outreach and Education on Stormwater Impacts
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      - MCM 4 - Construction Stormwater Runoff Control
      - MCM 5 – Post-Construction Stormwater Management in New Development & Redevelopment
      - MCM 6 – Pollution Prevention /Good Housekeeping
  - Annual Report
  - Break
New Permit & EPG Updates for Construction

• Section II – Area Wide Land Disturbance Stormwater Permit Conditions
  • Area-wide Land Disturbance Permit Program;
  • Support Activities & Common Plan Concept
  • Prohibited Discharges;
  • BMP Installation & Maintenance;
  • Track Out;
  • Project Specific SWPPPs;
  • SWPPP Requirements;
    • Site Maps;
    • Site Description;
    • Surface Waters;
    • Description of BMPs;
New Permit & EPG Updates for Construction

• SWPPP Requirements cont.
  • Stabilization of Disturbed areas;
  • Good Housekeeping / Pollution Prevention Measures;
  • Dewatering
  • Amending/Updating the SWPPP;
• Site Inspections
  • Inspection Frequencies;
  • Deficiencies;
  • Inspection Observations;
• Water Quality Criteria;
• Public Notification Sign;
• Copies of the SWPPP;
Stormwater Database Changes

• Phase III Changes
  • Stormwater Inspection Frequency Changes;
  • 2-year, 24-Hour Storm Frequency;
  • Inspection Questions;
• Land Disturbance Page;
• Quick Reference Guides;
• Questions about Phase I, II, or III changes?
New Land Disturbance Permit MO-0137910

• Section I - Transportation Separate Storm Sewer Permit (TS₄)

• Section II - Area-Wide Land Disturbance Stormwater Permit Conditions
New Stacked Permit MO-0137910

- Incorporated TS4 and Land Disturbance under one individual permit;
- Saves MoDOT money;
- Allowed customization;
- Helps align National Pollution Discharge Elimination System (NPDES) requirements.
Regulatory Requirement

• MS4 – Municipal Separate Storm Sewer System (40 CFR 122.26(b)(8)) – a conveyance or a system of conveyances (Including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):
  • Owned or operated by a state, city, town, county, or other public body that discharges into water of the United States.
  • Design or used for collecting or conveying stormwater;
  • Which is not a combined sewer, and;
  • Which is not part of a publicly owned treatment works (POTW)

• TS4 is an MS4 for Transportation Agencies
Regulatory Requirement cont.

• Large, Medium, & Small MS4s
  • Large – Urbanized areas with population ≥ 250,000
  • Medium – Urbanized areas with population between 100,000 - 250,000;
  • Small – Urbanized areas with population of at least 50,000 or an unurbanized area with population of 10,000 or more and a population density of at least 1,000 people per sq. mile.
MS4 Communities in Missouri
Regulatory Requirement cont.

• MoDOT’s TS4 permit authorizes stormwater discharges located in:
  • Urbanized areas;
  • Regulated MS4s not located in urbanized areas;
  • Watersheds subject to an approved and effective Total Maximum Daily Load (TMDL);
  • Outstanding National Resource Waters;
  • Outstanding State Resource Waters and;
  • Statewide as established for illicit discharges and bridge washing
Storm Water Management Program (SWMP)

- Plan for reducing the discharge of pollutants;
  - Must contain Best Management Practices (BMPs) with purpose of reducing stormwater;
  - Must contain measurable goals for each BMP that are quantifiable;
  - Outline a person responsible for the SWMP;
  - Iterative process must be outlined to determine effectiveness of BMPs.
- Visit www.modot.org/stormwater
Permit Minimum Control Measures (MCMs)

- 6-focus areas
- Programs for each MCM
- Program obligations only apply in areas where TS4 are applicable (Except for Illicit Discharge)
MCM #1 - Public Education and Outreach

• Educate MoDOT community and public on discharge impacts to waterbodies;
• Steps that MoDOT community can take to reduce pollutants;
• Outreach opportunities MoDOT uses:
  • Earth Day
  • State Fair
  • Other education engagements.
MCM #2 - MoDOT Community & Public Involvement

- Involvement in SWMP development;
- Application renewals;
- Public notice periods;
- Provide Plan to target stakeholders;
- Availability for citizen volunteers to assist with right-of-way clean up efforts
MCM #3 - Illicit Discharge Detection & Elimination (IDDE)

- Plan to detect and eliminate illicit discharges into the TS4;
- Map all outfalls that receive discharges from the TS4;
- Standard operating procedure for notification to appropriate agencies;
- Detection schedule;
- Report a stormwater concern form;
- Vehicle accidents are not considered illicit discharges unless spill enters waters of the state.
MoDOT INCIDENT RESPONSE PLAN (IRP)

PRIVACY STATEMENT

Public disclosure of this document would have a reasonable likelihood of threatening public safety by exposing a vulnerability to terrorist attack. Accordingly, the Department of Transportation (MoDOT) is withholding this document from full public disclosure and is treating it as a confidential document. Note that a public agency that receives a confidential public record from another public agency is required to keep it confidential.

FORWARD

CHAPTER 1: Command and Management
CHAPTER 2: Preparedness
CHAPTER 3: Resource Management
CHAPTER 4: Communications and Information
CHAPTER 5: Supporting Technologies
CHAPTER 6: Ongoing Management and Maintainance

ANNEXES - SUPPLEMENTAL PLANS

A. Continuity of Operations Plan (COOP)
   Appendix A - Leadership Succession
   Appendix B - Drive-Away Kits
   Appendix C - Implementation Checklist
   Appendix D1 - Critical Function Summary
   Appendix D2 - Supplemental Critical Functions for Pandemic Influenza

B. Severe Weather Response Plan
C. Hazardous Materials Response Plan
D. Radiological Response Plan
E. Terrorism Response Plan
F. Pandemic Influenza Response Plan

Appendix A - Federal Government Response Stages
Appendix B - MoDOT’s Pandemic Influenza Communications Plan
Attachment 1 - Detailed guidelines for what triggers a media alert in the event roads are closed due to pandemic influenza

For use by Sodoro-Scale, ODOT Region 5, Sedalia, Sedgwick County, Kansas.
MCM #4 - Construction Stormwater Runoff Control

- Program to reduce pollutants from construction activities one-acre or greater within the TS4 area;
- Program is developed around land disturbance permit requirements;
  - Good housekeeping requirements;
  - Inspection procedures;
  - Plan reviews;
  - Sanctions to insure compliance.
- TS4 program is not any different than what we do for any project.
MCM #5 - Post-Construction Runoff Control

• Applicable to New Development or Redevelopment projects in TS4 area one-acre or greater;

• New Development – development where transportation facility previously did not exist. (EPG 127.29)

• Redevelopment - non-maintenance work to existing facility which provides an increased through lane of travel. (EPG 127.29)

• Post-construction BMPs must be considered to mimic pre-existing runoff condition in new development
MCM #6 – Pollution Prevention/Good Housekeeping

- Program to address runoff from MoDOT’s operations and maintenance areas within the TS4 area.
- Training to reduce or prevent pollution from:
  - Welcome centers, rest areas, & commuter lots;
  - Maintenance buildings;
  - New construction and land disturbance; and
  - Bridge washing/cleaning activities
- Inspection frequencies for structural BMP implementation (FRCP)
Annual Report

• Submit no later than February 28;
• Outlines BMPs, quantifiable measurable goals, and results of compliance effort for the year, and consideration for each BMP and measurable goal through the iterative process to determine effectiveness for future use.
• Documentation is key – if it is not documented it did not happen.
Break Time

Let’s take a break!!
Be back in 10 min.
Section II - Area-Wide Land Disturbance Stormwater Permit Conditions

Land Disturbance Permit Program

The program is for land disturbance projects performed by MoDOT or land disturbance projects under contract by MoDOT within a permitted site.

Permitted site – areas within the site boundary where work is performed or contracted by MoDOT:

• Area within MoDOT R/W
• Easements and
Support Activities & Common Plan Concept

• Support activities are concrete or asphalt plants, borrow sites, waste disposal sites, staging or equipment areas on or off MoDOT Right-of-Way used to construction the project;

• MoDOT policy contractors to get their own permit when off MoDOT R/W; unless permitted by a commercial operation or an operation that will continue beyond the completion of the project.

• Permit considers off-site support activities common plans with MoDOT permitted site;

• Will place more projects under permit obligation;

• Permits for off-site support activities must be documented in the project specific SWPPP.
Land Disturbance Permit Program

Prohibited Discharges

• Any hazardous material, oil, lubricant, fuels, etc.;
• Soaps or solvents used in vehicle washing;
• Concrete wash or rinse water from concrete mixing equipment (must be captured and shall not discharge to surface or subsurface waters);
• Wash water from clean out of stucco, paint, form release oils, curing compounds etc.;
• Domestic wastewater, including grey water; or
• Industrial stormwater runoff from other than construction.
Land Disturbance Permit Program

Permit Obligations

• To ensure the design, installation, and maintenance of effective erosion and sediment controls minimize the discharge of pollutants by:
  • Controlling stormwater volume and velocity within the site;
  • Controlling stormwater discharges, including peak flow rates and total stormwater volume, to minimize erosion at outlets
  • Address factors such as amount, frequency, intensity, and duration of precipitation, to minimize sediment discharges from the site
Land Disturbance Permit Program

Permit Obligations cont.

• Provide and maintain 50 ft. natural buffers around surface waters or provide BMPs to provide equal protection;
• Direct stormwater to vegetated areas to maximize infiltration and filtering;
• Minimize soil compaction, preserve topsoil; and
• Install sediment controls along any perimeter of the permitted site where stormwater has the potential to leave the site.
Land Disturbance Permit Program

BMP Installation and Maintenance

• BMPs shall be installed at the project boundaries where stormwater has the potential to leave the site prior to the start of all phases of construction;

• BMPs shall remain in effective operating condition in disturbed areas during the duration of the project;

• Maintenance of BMPs shall be conducted per the manufacturers specifications or before it is 50% full.
Land Disturbance Permit Program

Track-Out

• Vehicle traffic should be restricted to designated exit points;

• Use appropriate stabilization techniques at all exit points onto paved roads (*large gravel or commercially available items*);

• Sediment tracked out shall be removed within the same business day, or by the end of the next business day if track out occurs on a non-business day.
Project Specific SWPPPs

Project Specific SWPPP

• SWPPPs shall be developed specifically for each land disturbance site prior to any land disturbance activities;

• Each SWPPP must:
  • List and describe all points of discharge to receiving water(s);
  • Incorporate good housekeeping requirements;
  • Incorporate erosion control practices;
  • Provide for maintenance;
  • Discuss if additional permit are necessary such as 404 and 401 certifications;
  • Name the person responsible for inspections, operation, and maintenance of BMPs;
  • List subcontractors responsible for erosion & sediment control and of offsite support activities are being used.
Project Specific SWPPPs

SWPPP Requirements

- Nature of the Construction Activity
  - Function of the project;
  - Intended sequence and timing of activities that disturb soil;
  - List sub-contractors responsible for erosion and sediment control at the site,
  - Estimated areas of disturbance (including off site areas);
- General Map (portion of a city or county map or US geological survey quadrangle map) with enough detail to identify the site location and all waters of the state within one mile of the site.
- Site maps
Project Specific SWPPPs

Site Maps

- Site maps of each site must contain legible map showing permitted site boundaries, location(s) of public notification signs, and points of discharge to receiving waters as well as:
  - Direction of stormwater flows,
  - Approximate slopes of all phases of construction;
  - Areas of disturbance and non-disturbance,
  - Locations of support activities (waste, borrow, etc.)
  - Location of permanent and temp BMPs
  - Where stabilization is expected to occur;
  - Locations of waters of the state,
  - Locations where stormwater discharges to other MS4s.
New SWPPP Form

• Located in EPG and on Land Disturbance Page [www.modot.org/LD](http://www.modot.org/LD);

• Required information incorporated in the form;

• ALL projects under permit obligation must have this SWPPP form as well as the general location map, copies of typical sections, and erosion & sediment control plans (site maps). **These items make up your project specific SWPPP.**
Surface Water Buffers

- Old permit - 25 feet.
- New Permit is 50 feet undisturbed natural buffer;
- If infeasible, BMPs to equal sediment reduction of 50 ft. natural buffer shall be provided.
- 50 feet buffer not required if 404 permit and 401 water quality certification is obtained.
Project Specific SWPPPs

Description of BMPs

• Permit requires description of both structural and nonstructural BMPs used one or more times at the site; providing:
  • Physical description of the BMP;
  • Site conditions necessary for effective use of BMP;
  • Installation procedures, including typical drawings;
  • Operation and maintenance procedures for BMPs.

• SWPPP shall provide information for each specific instance where BMP is installed
Project Specific SWPPPs

Stabilization of Disturbed Areas

Site maps or maps defining sloped areas for all phases of the project must be included in the SWPPP;

• Steep slopes 3:1 <
  • Establish interim stabilization in 7 days;

• All other locations
  • Initiate interim stabilization within 7 days, complete within 14 days;

• Grading has permanently ceased
  • Final stabilization initiated within 7 days and completed within 14.

Interim stabilization shall consist of well-established and maintained BMPs that are reasonably certain to protect waters of the state over a period of time.
Project Specific SWPPPs

Good Housekeeping/Pollution Prevention

- Containers for regular site cleanup and proper disposal of solid waste, scrap building materials, cups, etc.;
- Minimize the exposure of construction materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, etc. to precipitation and stormwater;
- Minimize discharge of pollutants from spills and leaks and implement chemical spill and leak prevention procedures (containment berms, drip pans, etc.)
- Releases of hazardous substances must be reported to DNR.
Project Specific SWPPPs

**Dewatering**

• Discharges from dewatering are prohibited unless treated by an appropriate control;

• If water is being moved via pump, regardless of facility, that is dewatering;

• Appropriate controls shall be detailed in the SWPPP;
Site Inspections

Inspection Frequencies

• Inspections only required during project’s normal workday;

• 7-Day Inspections
  • Post-runoff inspections within 48 hrs. following event greater than or equal to 2-year, 24-hour storm event.

• 14-Day Inspections
  • Post-runoff events every 24 hours an event produces 1/4 in. of rain or the occurrence of snow melt.

• 30 Day Inspections
  • Only available to projects with temporary stabilization over entire project while other work continues.

• All inspection frequency changes must be documented in your project specific SWPPP
Site Inspections

Deficiencies

• Structural or Maintenance issues;
• Deficiencies corrected as soon as possible but not later than 7 days from inspection;
• Utilize halt as soon as you know conditions are not favorable for correction;
• New items or items shown in the erosion & sediment control plans are SWPPP amendments or part of the SWPPP and are to be installed as requested;
• New inspection is not required to clear out deficiencies;
Site Inspections

Inspection Observation

• Inspections are not just to identify deficiencies;
• Observations are required to document the effectiveness of BMPs;
• Should be more than “all BMPs are working effectively;”
• Documents necessary changes to SWPPP.
Water Quality Criteria

10 CSR20-7.031

- 2.5 ml/L no longer applicable;
- Water Quality Criteria and DNR subjectivity will rule;
- Free from oil, scum, unsightly turbidity, that results in toxicity to human and aquatic life.
- Consider this when omitting BMPs;
Public Notification Sign

• Must be accessible to public;
• If route is closed, place signs at each end of the project;
• Must stay posted until final stabilization is achieved;
• Question is on Inspection, inspectors should verifying during each regularly scheduled inspection.
Copies of the SWPPP

- Permittee – MoDOT representative;
- Those responsible for BMP installation;
- Those responsible for maintenance of BMPs;
- Shall have CURRENT copy with them when on site.
Questions about the Permit/SWPPP??

“How do you know when your students are learning?“

“When they are asking the right questions.”

David Truss
Stormwater Database Changes
I Hate Slideshow Articles!

LETS GO LIVE!
Land Disturbance Page

- www.modot.org/LD
- One Stop Shop for Land Disturbance;
- QRG’s;
- SWPPP Form;
- Public Notification Sign;
- WPCM List;
- N.O.A.A Atlas 14 (2-year, 24-hour rain amount frequencies)
Questions about Phase I, II, or III Database Changes