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-R240xxx
Owner: < name >
Address: < address >
Continuing Authority: < name, or Same as above >
Address: < address, or Same as above >
Facility Name: < name >
Facility Address: < physical address >
Legal Description: ¼, ¼, ¼, Sec. xx, TxxN, RxxW, < county > County
UTM Coordinates: X = , Y =
Receiving Stream: < receiving stream > < (U, C, P, L1, L2, L3) >
First Classified Stream and ID: < 1st classified stream > <(U, C, P, etc.)> <(ID number)> 303(d) List
USGS Basin and Sub-watershed No.: < (USGS HUC12 #) >

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

FACILITY DESCRIPTION
All Outfalls – SIC Codes #2873, 2874, 2875, 2879
Facilities manufacturing, for wholesale or retail: fertilizers, pesticides, and other agricultural chemicals as their primary business.

See page 2 for specific applicability.

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 §§ 621.250, 640.013, and 644.051.6, RSMo; 10 CSR 20-1.020 and 20-6.020.

May 1, 2019
Effective Date
Edward B. Galbraith, Director, Division of Environmental Quality

April 30, 2024
Expiration Date
Chris Wieberg, Director, Water Protection Program
A. APPLICABILITY

1. This Missouri State Operating Permit (permit) authorizes the discharge of stormwater from operational areas (as defined in 10 CSR 20-2.010) and some facilities’ secondary containment structures to waters of the State of Missouri from agrichemical facilities with primary SIC codes #2873, #2874, #2875, and #2879. The primary SIC Code is the activity from which a facility receives its primary source [greater than fifty percent (50%)] of income.

This permit does not apply to composting operations (which may operate under SIC code #2875). These operations must apply for the MOG92xxxx or MOG97xxxx general permit, whichever is appropriate for the material being composted.

2. For SIC Code #2874, Phosphatic Fertilizer Producing Facilities, this permit does not authorize contaminated non-process wastewater discharges, as defined in 40 CFR 418.11 and below in A.2(a), from operational areas and calcium sulfate storage pile runoff.

Per the Effluent Limitation Guideline (ELG) at 40 CFR 418.11, for SIC Code #2874:
(a) The term “contaminated non-process wastewater” shall mean any water, including precipitation runoff, which, during manufacturing or processing, comes into incidental contact with any raw material, intermediate product, finished product, by-product or waste product by means of: (1) precipitation runoff; (2) accidental spills; (3) accidental leaks caused by the failure of process equipment; (4) discharges from safety showers and related personal safety equipment and from equipment washings for the purpose of safe entry, inspection, and maintenance.

(b) The term “calcium sulfate storage pile runoff” shall mean the calcium sulfate transport water runoff from or through the calcium sulfate pile and the precipitation which falls directly on the storage pile and which may be collected in a seepage ditch at the base of the outer slopes of the storage pile.

3. This permit:
(a) Authorizes discharges of accumulated uncontaminated stormwater from secondary containments constructed prior to or on August 30, 2008, except as detailed in A.8. through A.12. below, and in compliance with the limitations found with Table A. For SIC code #2874, no contaminated non-process wastewater (as described in A.2. above) shall be discharged from secondary containments.
(b) Does not authorize discharges from new or expanded secondary containments constructed after August 30, 2008. Facilities that added or are adding new tanks, new buildings, etc. to secondary containment constructed prior to August 30, 2008, but do not increase the secondary containment size, are authorized to discharge those containments.

4. Process wastewater and non-contact cooling water are not authorized for discharge under this permit. This includes stormwater that has contacted wastewater, industrial processes, or industrial materials that could become mobilized via stormwater.

5. This permit does not authorize the discharge of rinsate, as defined in 10 CSR 20-2.010, from pesticide or fertilizer manufacturing or application equipment; the discharge from washing, with or without soaps/detergents, of vehicles or tires; or the discharge of spray additives. However, rinsate and vehicle wash water, which may be combined with stormwater, may be directly land applied, or used for dilution of agricultural chemicals to be land applied, without analysis, provided such applications are otherwise lawful.

6. This permit does not cover land disturbance activities or construction of earthen basins.
(a) Land disturbance activities disturbing one or more acres of total area for the entire project or less than one acre for sites that are part of a common promotional plan of development may require a land disturbance permit. Instructions on how to apply for the online land disturbance permit are located at [www.dnr.mo.gov/env/wpp/epermit/help.htm](http://www.dnr.mo.gov/env/wpp/epermit/help.htm). Questions regarding permit requirements may be directed to the Department’s Land Disturbance phone line at 573-526-2082 or toll free at 855-789-3889.
(b) Construction of an earthen basin 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](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.

7. Discharge to the watersheds of a Metropolitan No-Discharge Stream (10 CSR 20-7.031 Table F) is prohibited except for non-contaminated stormwater flows, permitted stormwater discharges in compliance with permit conditions, and excess wet-weather bypass discharges not interfering with beneficial uses per 10 CSR 20-7.015(5) and 7.031(7).

8. This permit does not authorize 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).
9. For facilities located where they would discharge directly to Outstanding State Resource Waters:
   (a) Outstanding State Resource Waters are protected against any degradation in quality as defined in 10 CSR 20-7.015(6)(B) and 7.031(3)(C).
   (b) This permit does not authorize discharge in Outstanding State Resource Waters watersheds unless they are in compliance with the conditions, limitations, and benchmarks in this permit.

10. For facilities operating within the watershed of Outstanding National Resource Water (ONRW), which includes the Ozark National Scenic Riverways and the National Wild and Scenic Rivers System:
    (a) This permit authorizes no-discharge facilities [as defined in 10 CSR 20-6.015(1)(B)7.] to operate in these watersheds.
    (b) Any discharge from a no-discharge facility will be considered a violation of this permit unless a catastrophic or chronic storm event [as defined in 10 CSR 20-6.015(1)(B)2.-3.] occurs. In the event of a catastrophic or chronic storm event, the no-discharge facility is authorized to release only the amount of stormwater required to prevent damage to the facility or established Best Management Practices (BMPs).
    (c) Non-stormwater discharges listed under A.15. below are not authorized within the watershed of Outstanding National Resource Waters.
    (d) Per 10 CSR 20-7.015(6)(A)3., all precipitation collected in the operational area or secondary containment area as well as process generated wastewater shall be stored and disposed of in a no-discharge manner. Agrichemical facilities shall be designed and constructed so all bulk liquid pesticide nonmobile storage containers and all bulk liquid fertilizer nonmobile storage containers are located within a secondary containment facility. Dry bulk pesticides and dry bulk fertilizers shall be stored in a building so that they are protected from the weather. The floors of the buildings shall be constructed of an approved design and material(s). At an agrichemical facility, all transferring, loading, unloading, mixing, and repackaging of bulk agrichemicals shall be conducted in an operational area.

11. Facilities located within the watershed of an impaired water as designated in the 305(b) Report must be evaluated on a case-by-case basis for inclusion under this permit. Missouri’s impaired waters can be found at https://dnr.mo.gov/env/wpp/waterquality/index.html. Facilities found to be discharging the listed pollutant(s) of concern for any impaired water may be required to obtain a site-specific permit.

12. The Department may require any facility authorized by a general permit to apply for a site-specific permit [10 CSR 20-6.010(13)(C)]. Cases where a site-specific permit may be required include, but are not limited to, the following:
    (a) The discharge(s) is a significant contributor of a pollutant(s) which impairs the beneficial uses of the receiving stream;
    (b) The discharger is not in compliance with the conditions of the general permit;
    (c) A Total Maximum Daily Load (TMDL) containing requirements applicable to the discharge(s) is approved.

13. If a facility covered under a current general permit desires to apply for a site-specific permit, the facility may do so by contacting the Department for application requirements and procedures.

14. Facilities covered under a current site-specific permit who desire to apply for inclusion under this general permit may contact the Department for application requirements and procedures.

15. The following are allowable non-stormwater discharges authorized under this permit (except for those facilities discharging to areas identified in A.7. and A.10. above):
    (a) Fire hydrant flushing (testing).
    (b) Potable water, including water line flushing (testing).
    (c) Uncontaminated condensates from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids. Condensate is water which condenses from the air on the outside of piping and machinery due to differences in temperature between the piping/machinery and the air. This does not include cooling waters which have been used in the industrial process and/or circulated through a cooling system.
    (d) Landscape watering, provided all pesticides, herbicides, and fertilizers have been applied in accordance with manufacturer’s instructions.
    (e) Incidental windblown mist from cooling towers which collects on rooftops or adjacent portions of your facility, but not intentional discharges from the cooling tower (e.g., “piped” cooling tower blowdown or drains).
    (f) Effluent from oil-water separators which are used solely to treat stormwater discharges. Effluent discharged from oil-water separators which receive wastewaters from pavement washing or rinsing (with or without detergents), discharges from shop buildings or other maintenance facilities, or other process wastewaters are not covered by this permit and must obtain the MOG14 general permit or a site-specific operating permit.
B. EXEMPTIONS AND EXCLUSIONS

1. Facilities discharging stormwater directly to a combined sewer system (as defined in 40 CFR 122.26 and 40 CFR 35.2005) connecting to a publicly owned treatment works which has consented to receive such a discharge are exempt from stormwater permit requirements.

2. Facilities mixing fertilizers on-site under primary SIC Code #5191, Farm Supplies, are not required to obtain a stormwater permit, and are thus exempt from this permit.

3. In accordance with 40 CFR 122.26(g), if a facility has no materials exposed to stormwater (all materials and activities are protected by a storm resistant shelter that is enclosed on all sides to prevent exposure to rain, snow, snowmelt and/or runoff), the facility may apply for No Exposure Certification in lieu of coverage for all of the stormwater under this permit. If applicable, the facility must submit a No Exposure Certification form ([https://dnr.mo.gov/forms/780-2828-f.pdf](https://dnr.mo.gov/forms/780-2828-f.pdf)) with the application for permit coverage. No Exposure Certification Guidance can be found at [https://dnr.mo.gov/pubs/pub2729.htm](https://dnr.mo.gov/pubs/pub2729.htm). Some examples of the no exposure requirements are:

   a. Drums, barrels, tanks, and similar containers are tightly sealed, provided those containers are not deteriorated and do not leak (sealed means banded or otherwise secured and without operational taps or valves);

   b. Adequately maintained vehicles are used in material handling; and

   c. All industrial materials consist of final products other than products that would be mobilized by stormwater [10 CSR 20-6.200(1)(B)16].

C. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

<table>
<thead>
<tr>
<th>TABLE A</th>
<th>FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Secondary Containment Discharge</strong></td>
<td><strong>Only</strong></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>EFFLUENT PARAMETER(S)</th>
<th>UNITS</th>
<th>FINAL EFFLUENT LIMITATIONS</th>
<th>MONITORING REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>DAILY MAXIMUM</td>
<td>MONTHLY AVERAGE</td>
</tr>
</tbody>
</table>

**BULK PESTICIDE SECONDARY CONTAINMENTS**

OUTFALL: LIMIT SET: SP (SECONDARY CONTAINMENT PESTICIDE)

| Flow | GPD | * | * | once/discharge | 24 hour est. |
| Bulk agrichemicals stored or handled | µg/L | *** | -- | *** | grab |
| pH † | SU | 6.5-9.0 | -- | *** | grab |
| Settleable Solids | mL/L/hr | 1.5 | 1.0 | *** | grab |

**BULK FERTILIZER SECONDARY CONTAINMENTS**

OUTFALL: LIMIT SET: SF (SECONDARY CONTAINMENT FERTILIZER)

| Flow | GPD | * | * | once/discharge | 24 hour est. |
| Bulk agrichemicals stored or handled | µg/L | *** | -- | *** | grab |
| Ammonia, Total as N | mg/L | 1.5 | 1.0 | *** | grab |
| Nitrate as N | mg/L | 10.0 | 10.0 | *** | grab |
| pH † | SU | 6.5-9.0 | -- | *** | grab |
| Phosphorus, Total as P | mg/L | 1.0 | 1.0 | *** | grab |
| Settleable Solids | mL/L/hr | 1.5 | 1.0 | *** | grab |

**MONITORING REPORTS SHALL BE SUBMITTED ON THE 28TH DAY OF THE MONTH FOLLOWING THE DISCHARGE VIA THE DEPARTMENT’S eDMR SYSTEM. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS. IT IS A VIOLATION OF THIS PERMIT TO FAIL TO SAMPLE IF A SECONDARY CONTAINMENT DISCHARGES.**

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

<table>
<thead>
<tr>
<th>Effluent Parameters</th>
<th>Units</th>
<th>Final Limitations</th>
<th>Monitoring Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Daily Maximum</td>
<td>Monthly Average</td>
</tr>
<tr>
<td>Flow</td>
<td>GPD</td>
<td>*</td>
<td>--</td>
</tr>
<tr>
<td>Chemical Oxygen Demand</td>
<td>mg/L</td>
<td>**</td>
<td>120</td>
</tr>
<tr>
<td>Nitrogen, Total</td>
<td>mg/L</td>
<td>*</td>
<td>--</td>
</tr>
<tr>
<td>Oil &amp; Grease</td>
<td>mg/L</td>
<td>**</td>
<td>10</td>
</tr>
<tr>
<td>pH †</td>
<td>SU</td>
<td>**</td>
<td>6.5-9.0</td>
</tr>
<tr>
<td>Phosphorus, Total as P</td>
<td>mg/L</td>
<td>*</td>
<td>--</td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>mg/L</td>
<td>**</td>
<td>100</td>
</tr>
<tr>
<td>Lead, Total Recoverable</td>
<td>µg/L</td>
<td>*</td>
<td>--</td>
</tr>
<tr>
<td>Zinc, Total Recoverable</td>
<td>µg/L</td>
<td>*</td>
<td>--</td>
</tr>
</tbody>
</table>

**NOTES:**

* Monitoring requirement only.

** Monitoring and reporting requirement with benchmark. See Special Conditions #3 through #7.

*** Prior to discharging, the permittee shall collect a sample of the captured stormwater in each secondary containment used for bulk agrichemical handling or storage. If the sample results exceed the discharge limitations specified in Table A of this permit or the water quality standards in 10 CSR 20-7.031 Tables A1 & A2, discharge is not authorized. Analytical values and all associated laboratory reports will be reported via the eDMR system as attachments. The “report due” parameter will be filled in as “0” if a report is attached, and “1” if a report is not submitted. Failure to submit a report and reporting “1” is considered a violation of this permit (Permit Requirement #4 below).

If the secondary containment is constructed of concrete, the samples shall be analyzed for the applicable parameters in Table A in the permit and any additional bulk agrichemicals found in 10 CSR 20-7.031 Tables A1 & A2 stored or handled in the respective area within the last year.

If the secondary containment is an earthen storage structure constructed of soil, clay, or other permeable materials, the discharge samples shall be analyzed for the applicable parameters in Table A and any additional bulk agrichemicals found in 10 CSR 20-7.031 Tables A1 & A2 stored or handled in the respective area within the last three years.

For individual pollutants listed in the water quality standards (10 CSR 20-7.031 Tables A1 & A2), the concentration at the monitoring point shall not exceed the most stringent of the aquatic life standards, human health standards, drinking water supply standards (DWS), or health advisory levels. For pollutants with an effluent limit below the method detection limit (MDL) of all available EPA approved methods (40 CFR part 136), the permittee will conduct the analysis in accordance with the most sensitive method available and report actual analytical values or “less than” sign and the detection limit, whichever is more.

Certain parameters may have an established Practical Quantitation Limit (PQL) which is above the current water quality standards. The PQL is the minimum value which can be reported with confidence by a laboratory. The PQL may vary from laboratory to laboratory. The permittee must ensure the use of the most sensitive 40 CFR part 136 approved method, or, if no approved method is available, the most sensitive standardized method available. The use of PQLs does not authorize the discharge of pollutants in excess of the water quality standards.
Other potentially toxic substances for which sufficient toxicity data are not available may not be released to waters of the state until safe levels are demonstrated through adequate bioassay studies [10 CSR 20-7.031(4)]. Other bulk pesticides and other potentially toxic substances for which safe levels are demonstrated through adequate bioassay studies may be released to waters of the state, provided that the concentration at the monitoring point shall not exceed the demonstrated safe levels.

If the analysis of three consecutive samples taken at rain events (separated by 72 hours of dry weather) do not show detections of a discontinued or no longer used product, then the permittee is no longer required to test for that chemical. The laboratory reports for these three analyses shall be submitted as an attachment via the eDMR system.

† pH is measured in standard units and is not to be averaged.

◊ Quarterly sampling

<table>
<thead>
<tr>
<th>QUARTER</th>
<th>MONTHS</th>
<th>QUARTERLY EFFLUENT PARAMETERS</th>
<th>REPORT IS DUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>January, February, March</td>
<td>Sample at least once during any month of the quarter</td>
<td>April 28th</td>
</tr>
<tr>
<td>Second</td>
<td>April, May, June</td>
<td>Sample at least once during any month of the quarter</td>
<td>July 28th</td>
</tr>
<tr>
<td>Third</td>
<td>July, August, September</td>
<td>Sample at least once during any month of the quarter</td>
<td>October 28th</td>
</tr>
<tr>
<td>Fourth</td>
<td>October, November, December</td>
<td>Sample at least once during any month of the quarter</td>
<td>January 28th</td>
</tr>
</tbody>
</table>

D. PERMIT REQUIREMENTS

1. The physical components of the facility shall conform to 10 CSR 20-8.500, Secondary Containment for Agrichemical Facilities.

2. This permit incorporates the definitions set forth in 10 CSR 20-2.

3. Sampling and analysis of discharges shall occur as specified in Tables A and B. The Department may also request sampling and reporting as a result of illegal discharges or other compliance issues, or evidence of off-site impacts from activities at the facility. If such an action is needed, the Department will specify in writing the sampling requirements, including such information as location, extent, and required parameters.

4. It is a violation of this permit if a facility is found to be using or storing a chemical containing a parameter listed in 10 CSR 20-7.031 but does not submit an analysis for that chemical in their discharge from secondary containments. It is the responsibility of the facility to know chemicals in use and stored at the facility.

5. The laboratory results of all samples from discharges collected and analyzed must be retained on-site with monitoring records and made available to the Department upon request for a period of five years.

6. Stormwater outfalls not receiving stormwater from secondary containments or operational areas are not required to be monitored or reported under this permit. Benchmarks in this permit apply only to stormwater from operational areas.

7. Operational areas not exposed to precipitation or stormwater runoff are not subject to stormwater monitoring or reporting requirements.

8. This permit specifies pollutant benchmarks applicable to the facility’s discharge. The benchmarks do not constitute direct numeric effluent limitations. Benchmark exceedances alone, therefore, are not a permit violation. The facility shall develop and implement a Stormwater Pollution Prevention Plan (SWPPP) as explained in more detail later in this section. Benchmark monitoring data are primarily to determine the overall effectiveness of the SWPPP and to assist the facility in knowing when additional corrective action may be necessary to protect water quality.

If a sample exceeds a benchmark, the facility must review the SWPPP and BMPs to determine what improvements or additional controls are needed to reduce the pollutant in the stormwater discharge(s). Additionally, when a benchmark exceedance occurs a Corrective Action Report (CAR) must be completed and documented in the SWPPP. A CAR is a document that records the efforts undertaken by the facility to improve BMPs to meet benchmarks in future samples. If the efforts taken by the facility are not sufficient and subsequent exceedances of a benchmark occur, the facility may demonstrate to the Department a benchmark value cannot be achieved. The demonstration must include rationale and supporting documentation (which would include multiple CARs) and must show a benchmark value cannot be achieved through the application of BMPs representing available practicable technology. Additionally, the demonstration must show the benchmark is not feasible because no further pollutant reductions are technologically available and economically practicable in light of best industry practices. This demonstration must be presented to the Department for review and approval. Failure to improve BMPs or take corrective action to address a
benchmark exceedance and failure to make tangible progress towards achieving a benchmark is a permit violation, unless the permittee has demonstrated to the Department a benchmark value cannot be achieved, and an alternative benchmark is approved, or in the process of being approved, by the Department. Exceedances believed to be the result of legacy chemical use at the facility are not exempted from this requirement. Facilities are encouraged to contact the Department to formulate a plan for investigation and clean-up if legacy chemical use is suspected to be the cause of exceedances.

9. Benchmark sampling (Table B) is not required during the off-season periods for operational containment areas that have been cleaned, secured, and are not in operation. The facility shall keep a written log in the SWPPP of all clean-up activities and the dates when operations cease. These quarters shall be reported as “operation shut-down” in the eDMR system with the code “AB,” and the log of clean-up activities shall be submitted as an attachment to the report.

10. The BMPs at the facility should be designed to meet the benchmarks during rainfall events up to the 10-year, 24-hour rain event. The 10-year, 24-hour rain events for Missouri may be found at: http://hdsc.nws.noaa.gov/hdsc/pfds/

11. When a sample of stormwater is collected from a precipitation event, including rainfall or the melting of frozen precipitation:
   (a) For flow-through BMPs, stormwater samples shall be collected within the first 60 minutes of discharge occurring as a result of precipitation events exceeding 0.1 inches during a 24-hour period, if possible.
   (b) For retention BMPs, stormwater samples shall be collected only when a discharge occurs, and if possible, shall be taken from the outfall. Dip sampling of effluent in retention structures should not be performed.
   (c) Stormwater samples shall be collected prior to leaving or at the property boundary or before the discharge enters waters of the state on the property.


12. Outfalls must be:
   (a) Above the normal high water mark of the waterbody to which it discharges and
   (b) Maintained so a sample of the discharge can be obtained at a point after the final treatment process and/or best management practices and before the discharge enters waters of the state.

13. If data becomes available indicating alternative benchmarks specific to this industry, the Department will propose to incorporate those benchmarks into this permit as part of a permit modification. Such data must be approved by the Department as appropriate and representative before it can be considered.

14. This permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP). When applying for coverage under this permit, a SWPPP including an Alternative Analysis of the BMPs must be developed, implemented, updated, and maintained at the facility. Failure to implement and maintain the chosen alternative, which can be revised and updated, is a permit violation. The Alternative Analysis is a structured evaluation of BMPs to determine which are reasonable and cost effective. The analysis should include practices designed to be 1) non-degrading, 2) less degrading, or 3) degrading water quality. The chosen BMP will be practicable and cost effective while ensuring the highest statutory and regulatory requirements are achieved and the highest quality water attainable for the facility is discharged. The analysis must demonstrate why “no discharge” or “no exposure” are not feasible alternatives at the facility. Existing facilities with established SWPPPs and BMPs need not conduct an additional alternatives analysis unless new BMPs are established to address BMP failures. This structured analysis of BMPs serves as the Antidegradation review, fulfilling the requirements of 10 CSR 20-7.015(9)(A)5 and 7.031(3).

   (a) New Facilities: The new SWPPP for the facility must be prepared within 60 days and implemented within 180 days of permit issuance.
   (b) Existing Facilities: The existing SWPPP for your facility must be reviewed, revised as necessary, and implemented within 30 days of reissuance of coverage.
   (c) Expanding Facilities: The existing SWPPP for the facility, including the Alternative Analysis, must be reviewed and revised as necessary. Once expansion occurs, the revised SWPPP must be implemented within 30 days of permit modification.

16. The SWPPP must be kept on-site (either electronically or paper copy), readily available upon request, and should not be sent to the Department unless specifically requested. Throughout coverage under this permit, the facility must perform SWPPP review and revision to incorporate any site condition changes.
17. For all facilities, the SWPPP must include the following:
   (a) An assessment of all stormwater discharges associated with the facility, facility activities, and facility materials. This assessment must include a list of potential contaminants and an annual estimate of amounts used and/or produced in the described activities.
   (b) A listing of BMPs and a narrative explaining how the BMPs will be implemented to control and minimize the amount of potential contaminants entering stormwater.
   (c) A map of the location of all outfalls, other permitted features, and structural BMPs.
   (d) A schedule for monthly site inspections and a brief written report, which includes the name of the inspector, the signature of the inspector, and the date. The inspections must include observation and analysis of BMP effectiveness, deficiencies, and corrective action to be taken as well as the integrity of the containment structure(s) including but not limited to above ground tanks, secondary containment, external piping, etc. Deficiencies must be corrected within seven (7) days and must be documented in the inspection report. The facility may submit a written request to the Department justifying additional time, if necessary, to complete corrective action. The purpose of the SWPPP and the BMPs listed therein is to prevent pollution per 10 CSR 20-2.010(56) to waters of the state. A deficiency of a BMP means it was not effective in preventing pollution of waters of the state or meeting benchmarks of this permit. Corrective action means the facility took steps to eliminate the deficiency. Inspection reports must be kept with the SWPPP and must be made available to the Department upon request.
   (e) A provision for designating an individual to be responsible for environmental matters.
   (f) A provision for providing training to all personnel involved in material handling, material storage, and housekeeping of areas having materials exposed to stormwater. Proof of training must be made available to the Department upon request.
   (g) A provision for evaluating benchmarks/effluent limitations established in this permit.

18. The following minimum BMPs must be in the SWPPP and implemented at all facilities:
   (a) For uncovered dry fertilizer and dry pesticide containment areas:
      (1) Operational containment areas shall be cleaned daily when loading, unloading, or mixing occurs;
      (2) Measures shall be used to contain any spilled product within the operational areas. This may be satisfied by the use of sediment logs, straw wattles or bales, sandbags, tarps, or other permanent or temporary measures around the area.
      (3) All spills of bulk agrichemicals in any secondary containment or operational area must be properly remediated as soon as practicable.
   (b) Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, or warehouse activities and thereby prevent the contamination of stormwater from these substances.
   (c) Provide collection facilities on-site and arrange for proper disposal of waste products including, but not limited to, petroleum waste products, solid waste, de-icing/anti-icing products, and solvents that may be exposed to stormwater.
   (d) Store all paints, solvents, petroleum products, petroleum waste products, and storage containers (such as drums, cans, or cartons) so they are not exposed to stormwater or provide other prescribed BMPs such as plastic lids and/or portable spill pans to prevent the commingling of stormwater with container contents. Commingled water may not be discharged under this permit. Provide spill prevention, control, and countermeasures to prevent any spill of these pollutants from entering waters of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall prevent the contamination of groundwater.
   (e) Provide sediment and erosion control sufficient to minimize sediment loss off of the property, pollution of waters of the state, and to comply with the conditions of this permit, Missouri Clean Water Law, and the CWA. This may require the use of straw bales, silt fences, sediment basins, or other treatment structures. This may require the construction of properly designed sediment basins or other treatment structures.
   (f) Provide good housekeeping practices on-site to keep solid waste from entering waters of the state.
   (g) Ensure adequate provisions are provided to prevent surface water intrusion into secondary containments and to protect earthen embankments of secondary containments from erosion.
   (h) Facilities shall manage materials (products, stockpiles, waste piles, etc.) to ensure these materials are not discharged off-site or into a water of the state during a high water event.

19. Captured stormwater may be land applied or used for dilution of agrichemicals to be land applied without analysis, provided such applications are otherwise lawful.

20. If any of the sampling results from outfalls as described in C. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS show exceedance of the permit discharge limitations, written notification shall be made to the Department within five days of notification of sampling results. The letter shall indicate the date(s) sampled, actual sample results, permit number, and shall include a statement concerning the revisions or modifications in management practices being implemented to address the violation of the limitations that occurred. Repeat monitoring of the outfall(s) for which the violation occurred shall be done at the next discharge, and uploaded as a report via the eDMR system.
E. **NO-DISCHARGE STORAGE BASIN REQUIREMENTS**

1. No-discharge Systems:
   (a) The minimum and maximum operating water levels for the storage basin shall be clearly marked. Each basin shall be operated so the maximum water elevation does not exceed two feet below the Emergency Spillway except due to exceedances of the 10-year or 25-year, 24-hour storm events according to National Weather Service data. Process wastewater shall be land applied whenever feasible based on soil and weather conditions and permit requirements. Storage basin(s) shall be lowered to the minimum operating level prior to each winter by November 30.
   (b) Storage basins shall have an emergency spillway to protect the structural integrity during operation at near full water levels and in the event of overflow conditions. The spillway shall be at least one foot below top of berm. It is a violation of this permit to place material in the emergency spillway or otherwise cause it to function improperly, as this may result in a catastrophic failure of the storage basin.

2. The storage basin berms shall be mowed and kept free of any deep rooted vegetation, burrowing animal dens, or other potential sources of damage to the berms.

3. Ensure adequate provisions are provided to prevent surface water intrusion into storage basins and to protect earthen embankments of storage basins from erosion.

4. Any unauthorized discharge from the wastewater storage basins shall be reported to the Department as soon as possible but always within 24 hours of the facility becoming aware of the discharge. Unauthorized discharges should be reported to the appropriate regional office during regular business hours, or to the Department’s 24-hour Environmental Emergency Response Hotline at 573-634-2436 outside of regular business hours.

F. **STANDARD CONDITIONS**

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

G. **PERMIT REQUIREMENTS**

1. **Electronic Discharge Monitoring Report (eDMR) Submission System.** Per 40 CFR Part 127 National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule, reporting of effluent limits and monitoring shall be submitted by the permittee via an electronic system to ensure timely, complete, accurate, and nationally consistent set of data about the NPDES program. All general permit covered facilities under this master general permit shall comply with the Department’s requirements for electronic reporting.
   (a) Discharge Monitoring Reporting Requirements.
      (1) Registration to participate in the Department’s eDMR system is required as part of the application for general permit coverage in order to constitute a complete permit application and may be accessed at [dnr.mo.gov/env/wpp/edmr.htm](http://dnr.mo.gov/env/wpp/edmr.htm).
      (2) The permittee must electronically submit compliance monitoring data via the eDMR system. In regards to Standard Conditions Part I, Section B, #7, the eDMR system is currently the only Department approved reporting method for this permit.
   (b) Other actions. The following shall be submitted electronically after such a system has been made available by the Department:
      (1) General Permit Applications/Notices of Intent to discharge (NOIs);
      (2) Notices of Termination (NOTs);
      (3) No Exposure Certifications (NOEs); and
      (4) Low Erosivity Waivers and Other Waivers from Stormwater Controls (LEWs).
   (c) Electronic Submissions. To access the eDMR system, use the following link in your web browser: [https://edmr.dnr.mo.gov/edmr/E2/Shared/Pages/Main/Login.aspx](https://edmr.dnr.mo.gov/edmr/E2/Shared/Pages/Main/Login.aspx). If you experience difficulties with using the eDMR system you may contact edm@dnr.mo.gov or call 573-526-2082 or toll free 855-789-3889 for assistance.
   (d) Waivers from Electronic Reporting.
      (1) The permittee must electronically submit compliance monitoring data and reports unless a waiver is granted by the Department in compliance with 40 CFR Part 127.
      (2) The permittee may obtain a temporary or permanent electronic reporting waiver by first submitting an eDMR Waiver Request Form (Form 780-2692): [http://dnr.mo.gov/forms/780-2692-f.pdf](http://dnr.mo.gov/forms/780-2692-f.pdf), by contacting the appropriate permitting office or emailing edm@dnr.mo.gov. The Department will either approve or deny this electronic reporting waiver request within 120 calendar days of receipt.
      (3) Only permittees with an approved waiver request may submit monitoring data and reports on paper to the Department for the period the approved electronic reporting waiver is effective.
2. It is a violation of the Missouri Clean Water Law to fail to pay fees associated with this permit (Section 644.055, RSMo). The fees can be found at 10 CSR 20-6.011.

3. Compliance with all requirements in this permit does not supersede nor remove liability for compliance with county and other local ordinances.

4. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, termination, notice of planned changes, or anticipated non-compliance does not stay any permit condition.

5. The permittee shall furnish to the Department, within a reasonable time, information that the Department requests to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine if the permittee is in non-compliance with this permit. The permittee shall also furnish to the Department upon request copies of records required to be kept by this permit.

6. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility when:
   (a) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants subject to the effluent limitations of this permit as well as new pollutants different from pollutants listed in this permit; or
   (b) The alteration or addition results in a significant change in disposal practices and may justify the application of permit conditions different from or absent in the current permit.

7. Before releasing water accumulated in petroleum secondary containment areas, it must be examined for hydrocarbon odor and presence of sheen to protect the general criteria found at 10 CSR 20-7.031(4). If the presence of odor or sheen is indicated, the water shall be treated using an appropriate method or disposed of in accordance with legally approved methods, such as being sent to a wastewater treatment facility. Following treatment and before release, the water shall be tested for oil and grease, benzene, toluene, ethylbenzene, and xylene using 40 CFR part 136 methods. All pollutant levels must be below the most protective, applicable standards for the receiving stream, found in 10 CSR 20-7.031 Table A before discharge is authorized. Records of all testing and treatment of water accumulated in secondary containment shall be stored in the SWPPP and be available on demand to the Department.

8. The full implementation of this operating permit, which includes implementation of any applicable schedules of compliance, 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, this permit may be reopened and modified, or alternatively revoked and reissued to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), §304(b)(2), and §307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or controls any pollutant not limited in the permit.

9. Changes in Discharges of Toxic Substances. In addition to the reporting requirements under §122.41(1), all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:
   (a) An activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if the discharge will exceed the highest of the following notification levels:
      (1) One hundred micrograms per liter (100 µg/L);
      (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile;
      (3) Five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol;
      (4) One milligram per liter (1 mg/L) for antimony;
      (5) Five (5) times the maximum concentration value reported for the pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
      (6) The notification level established by the Department in accordance with 40 CFR 122.44(f).
   (b) An activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if the discharge will exceed the highest of the following “notification levels:”
      (1) Five hundred micrograms per liter (500 µg/l);
      (2) One milligram per liter (1 mg/l) for antimony;
      (3) Ten (10) times the maximum concentration value reported for the pollutant in the permit application in accordance with §122.21(g)(7).
      (4) The level established by the Director in accordance with §122.44(f).
10. Reporting of Non-Detects:
   (a) An analysis conducted by the permittee or their contracted laboratory shall be conducted in such a way the precision and accuracy of the analyzed result can be enumerated.
   (b) The permittee shall not report a sample result as “Non-Detect” without also reporting the detection limit of the test. Reporting as “Non-Detect” without also including the detection limit will be considered failure to report, which is a violation of this permit.
   (c) The permittee shall report the “Non-Detect” result using the less than sign and the minimum detection limit (e.g., <10).
   (d) Where the permit contains a Minimum Level (ML) and the permittee is granted authority in the permit to report zero in lieu of the < ML for a specified parameter (conventional, priority pollutants, metals, etc.), then zero (0) is to be reported for the parameter.
   (e) See Standard Conditions Part I, Section A, #4 regarding proper detection limits used for sample analysis.
   (f) When calculating monthly averages, one-half of the minimum detection limit (MDL) should be used instead of a zero. Where all data are below the MDL, the “<MDL” shall be reported as indicated in item (C).

H. PERMIT RENEWAL

1. Unless terminated, the permittee shall submit an application for the renewal of this permit by submitting Form E-Application for General Permit http://dnr.mo.gov/forms/780-0795-f.pdf no later than thirty (30) days prior to the permit’s expiration date.

2. When a facility submits a timely and complete application in accordance with 10 CSR 20-6.010(5)(B), and (10)(E)1, as well as §644.051.10 RSMo, and if the Department is unable, through no fault of the permittee, to issue a renewal prior to expiration of the previous permit, the terms and conditions of the expired permit are administratively continued and will remain fully effective and enforceable until such time when a permit action is taken. Failure to submit a renewal application is a violation of the Missouri Clean Water Law.

3. As part of the complete application and as required by the federal NPDES eReporting rule, participation in the Department’s Electronic Discharge Monitoring Report Submission System (eDMR) will be required. Facilities already participating in eDMR need not re-apply upon renewal. More information can be found at: http://dnr.mo.gov/env/wpp/edmr.htm.

I. PERMIT TRANSFER

1. This permit may not be transferred to a new owner in any fashion except by submitting an Application for Transfer of Operating Permit http://dnr.mo.gov/forms/780-1517-f.pdf signed by the seller and buyer of the facility along with the appropriate modification fee. In some cases, revocation and reissuance may be necessary. Standard Condition Part 1, Subsection D.7 applies.

2. Facilities that have undergone transfers of ownership without prior notice to the Department will be considered to be operating without a permit.

J. PERMIT TERMINATION

1. The permittee shall apply for permit termination when activities covered by this permit have ceased and no significant materials as defined by 10 CSR 20-6.200(1)(C)27 remain on the property or if on the property are stored in such a way as to have no potential for pollution. Whenever a release or a potential for release from a permitted facility is permanently eliminated, the existing permit may be terminated.

2. Proper closure of any effluent storage structure is required prior to permit termination. See https://dnr.mo.gov/pubs/pub2568.htm for more information on closure.

3. Permits do not terminate automatically upon expiration. In order to terminate this permit, the permittee shall notify the Department’s appropriate regional office by completing and submitting Request for Termination of Operating Permit http://dnr.mo.gov/forms/780-1409-f.pdf. The Department may require inspection of the premises prior to granting termination of a permit.
Missouri Department of Natural Resources
Fact Sheet
MO-R240xxx

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

Per 40 CFR 124.56, 40 CFR124.8, and 10 CSR 20-6.020(1)(A)2., a Fact Sheet shall be prepared to give pertinent information regarding the applicable regulations, rationale for the development of effluent limitations and conditions, and the public participation process for the permit. A Fact Sheet is not an enforceable part of an MSOP.

This Fact Sheet is for a:
- [ ] Major
- [ ] Minor
- [x] Industrial Facility
- [ ] Variance
- [ ] Master General Permit
- [ ] Permit with widespread public interest

Part I – Facility Information

Facility Type: Agrichemical
Facility SIC Code(s): 2873, 2874, 2875, 2879
Facility Description: Facilities manufacturing, for wholesale or retail, fertilizers, pesticides, and other agricultural chemicals as their primary business.

This permit covers stormwater discharge from agrichemical facilities. No discharge of process wastewater is authorized. In additions, there is no discharge of stormwater from new or expanded secondary containments constructed after August 30, 2008. Stormwater discharges of accumulated stormwater in secondary containments constructed prior to August 30, 2008 and stormwater runoff from operational areas are allowed.

Clarification:
Stormwater permitting requirements are based on the facility’s primary Standard Industrial Classification (SIC) Code. The master general permit MO-R240000 applies to agrichemical facilities operating under the primary SIC code of 287X. Primary SIC codes are based on the primary source of income. Full descriptions of SIC codes can be found on the U. S. Department of Labor website at https://www.osha.gov/pls/imis/sicsearch.html.

SIC Industry Group 287x (SIC Codes 2873 Nitrogenous Fertilizers, 2874 Phosphatic Fertilizers, 2875 Fertilizer Mixing, and 2979 Pesticides and Agricultural Chemicals, Not Elsewhere Classified) is listed in federal and state stormwater regulations as requiring coverage under a stormwater permit. SIC Code 2875, fertilizer mixing, is defined as “establishments primarily engaged in mixing fertilizers from purchased fertilizer materials.” These sites’ primary industrial activity is production of mixed fertilizer for wholesale distribution or commercial sale. Those sites which merely mix the product onsite for customers as a service, but do not manufacture fertilizer, do not fall under SIC Code 2875. SIC Code 2875 may also apply to compost operations. Compost operations are not covered by Master General Permit MO-R240 and should review the applicability of MO-G92 and MO-G97 to their site.

SIC Code 5191 is not listed in federal stormwater regulations and the requirement for all agrichemical facilities to obtain an operating permit has been removed from state regulations. Therefore, facilities with a primary SIC Code of 5191, farm supply establishments, should terminate permit coverage.
Changes to this permit include:

- Clarifies applicability under ELG (40 CFR 418.11) for phosphatic fertilizer producing facilities.
- Clarifies SIC code 5191 is not required to obtain a stormwater permit.
- Clarifies discharge of non-contact cooling water is not authorized.
- Clarifies discharge from washing vehicles or tires is not authorized.
- Updated language throughout the permit to current permit language used by the Department.
- Removed, updated, and/or clarified setbacks.
- Authorizes certain non-stormwater discharges, including from oil-water separators used solely to treat stormwater discharges.
- Changes limit for nitrate + nitrite in Table A to “Nitrate as N”.
- Requires reporting through the eDMR system, and the attachment of laboratory reports with eDMR submission.
- Removes the listed pesticides from 10 CSR 20-7.031 Table A, and instead references the table.
- Clarifies open burning conditions to relate to clean water.
- Specifies an Alternative Analysis of BMPs is required to meet antidegradation rules.
- Updates SWPPP language to current Department general permit language.
- Includes no discharge storage basin requirements.

Part II – Receiving Stream Information

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)] (except L1 lakes)
- × Losing Streams [10 CSR 20-7.015(4)]
- × Metropolitan No-Discharge Streams [10 CSR 20-7.015(5)] (stormwater discharges only)
- × Special Streams [10 CSR 20-7.015(6)] (ONRW = no discharge only, OSRW = non-degrading discharges only)
- × Subsurface Waters [10 CSR 20-7.015(7)]
- √ All Other Waters [10 CSR 20-7.015(8)]

Missouri Water Quality Standards (10 CSR 20-7.031) defines the Clean Water Commission water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and/or 1st classified receiving stream’s beneficial water uses shall be maintained in accordance with 10 CSR 20-7.031(4). The limits established by this permit are intended to be protective of all streams falling within the categories of receiving water bodies indicated above. A general permit does not take into consideration site-specific conditions.

Mixing Considerations:
This permit applies to receiving streams of varying low flow conditions. Therefore, the effluent limitations must be based on the smallest low flow streams considered, which includes waters without designated uses. As such, no mixing is allowed [10 CSR 20-7.031(5)(A)4.B.(I)(a)]. No Zone of Initial Dilution is allowed. [10 CSR 20-7.031(5)(A)4.B.(I)(b)].

Receiving Stream Monitoring Requirements:
There are no receiving water monitoring requirements recommended at this time.

Part III – Rationale and Derivation of Effluent Limitations & Permit Conditions

305(b) Report, 303(d) List, & Total Maximum Daily Load (TMDL):
Section 305(b) of the Federal CWA requires each state identify waters not meeting Water Quality Standards and for which adequate water pollution controls have not been required. Water Quality Standards protect such beneficial uses of water as whole body contact, 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 which are impaired but not addressed by normal water pollution control programs.

A TMDL is a calculation of the maximum amount of a given pollutant a body of water can absorb before its water quality is affected. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan will be developed which shall include the TMDL calculation. For facilities with an existing general permit before a TMDL is written on their receiving stream, the Department will evaluate the permit and may require any facility authorized by this general permit to apply for and obtain a site-specific operating permit. Requests for coverage of a new facility under this general permit will be evaluated on a case-by-case basis for facilities located within the watershed of an impaired water as designated on the 305(b) Report.

- Conditional: The Department will review all discharges to impaired waters on a case-by-case basis.
ANTI-BACKSLIDING:
A provision in the Federal Regulations [CWA Section 303(d)(4); CWA Section 402(c); 40 CFR Part 122.44(I)] requires a reissued permit to be as stringent as the previous permit with some exceptions.

- Applicable: Limitations in this operating permit for the reissuance conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Act, and 40 CFR Part 122.44.
- The Department determined technical mistakes or mistaken interpretations of law were made in issuing the permit under section 402(a)(1)(b).
- The previous permit special conditions contained a specific set of prohibitions related to general criteria found in 10 CSR 20-7.031(4); however, there was no determination as to whether the discharges have reasonable potential to cause or contribute to excursion of those general water quality criteria in the previous permit. Federal regulations 40 CFR 122.44(d)(1)(iii) requires instances where reasonable potential (RP) to cause or contribute to an exceedance of a water quality standard exists, a numeric limitation must be included in the permit. Rather than conducting the appropriate RP determination, the previous permit simply placed the prohibitions in the permit. These conditions were removed from the permit. Appropriate reasonable potential determinations were conducted for each general criterion listed in 10 CSR 20-7.031(4)(A) through (I) and effluent limitations were placed in the permit for those general criteria where it was determined the discharge had reasonable potential to cause or contribute to excursions of the general criteria. Specific effluent limitations were not included for those general criteria where it was determined the discharges will not cause or contribute to excursions of general criteria. Removal of the prohibitions does not reduce the protections of the permit or allow for impairment of the receiving stream. The permit maintains sufficient effluent limitations, monitoring requirements and best management practices to protect water quality. See General Criteria Considerations below.
  - A condition was removed from this permit which stated, “this permit may not be issued to any agrichemical facility unless all spills of bulk agrichemicals in any secondary containment area or operation containment areas are properly removed.” This condition was unnecessary. The permit contains limitations which prohibit discharge of pesticides and other chemicals from secondary containment or operational areas. Standard conditions require reporting of suspected contaminated discharges. Additionally, this permit excludes discharge of process wastewater or stormwater which has contacted industrial products (condition #4).
  - This permit authorizes certain non-stormwater discharges which were not specifically authorized in the previous permit; however, the Department believes these discharges to be minimal and non-degrading of receiving streams and the environment.
  - SIC Code #5191 is exempted from permitting requirements by this permit, whereas they were previously required to have a permit. State regulations were altered (10 CSR 20-8.500) to remove the requirement that these facilities obtain a stormwater permit; therefore, these facilities are exempted from permitting requirements.
  - Nitrate + Nitrite was changed to Nitrate as N. This change was made because there are no numeric water quality standards for Nitrate + nitrite in regulation. It was replaced by nitrate as N, as water quality standards are found in 10 CSR 20-7.031. Nitrate as N is a pollutant of concern, especially in groundwater and drinking water. Limits were retained on this parameter to protect the water quality standards in the receiving waterbodies.

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

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

- Applicable; it is believed the only discharges resulting from the activities allowed under this permit are short term, and intermittent and are expected to be non-degrading or minimally degrading. Compliance with the effluent limitations established in this permit for the protection of General Criteria, along with the evaluation and implementation of BMPs as documented in the SWPPP, meets the requirements of Missouri’s Antidegradation Review [10 CSR 20-7.031(3), 10 CSR 20-7.031 Table A, and 10 CSR 20-7.015(9)(A)5].
BENCHMARKS:
When a permitted feature or outfall consists of only stormwater, a benchmark may be implemented at the discretion of the permit writer. Benchmarks require the facility to monitor, and if necessary, replace and update stormwater control measures. Benchmark concentrations are not effluent limitations. A benchmark exceedance, therefore, is not a permit violation; however, failure to take corrective action is a violation of the permit. Benchmark monitoring data is used to determine the overall effectiveness of control measures and to assist the permittee in knowing when additional corrective actions may be necessary to comply with the limitations of the permit.

Because of the fleeting nature of stormwater discharges, the Department, under the direction of EPA guidance, determined monthly averages are capricious measures of stormwater discharges. The Technical Support Document for Water Quality Based Toxics Control (EPA/505/2-90-001; 1991) Section 3.1 indicates most procedures within the document apply only to water quality based approaches, not end-of-pipe technology-based controls. Hence, stormwater only outfalls will generally only contain a maximum daily limit (MDL) or benchmark, determined by the site-specific conditions including the receiving water’s current quality.

Numeric benchmark values are based on water quality standards or other stormwater permits including the Environmental Protection Agency’s (EPA’s) Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP). Because precipitation events are sudden and momentary, benchmarks based on state or federal standards or recommendations use the Criteria Maximum Concentration (CMC) value, or acute standard. The CMC is the estimate of the highest concentration of a material in surface water to which an aquatic community can be exposed briefly without resulting in an unacceptable effect. The CMC for aquatic life is intended to be protective of the vast majority of the aquatic communities in the United States.

- Applicable; this permit contains benchmark requirements.

Effluent Limitation Guideline:
Effluent Limitation Guidelines, or ELGs, are found at 40 CFR 400-499. These are limitations established by the EPA based on the SIC code and the type of work a facility is conducting. Most ELGs are for process wastewater and some address stormwater. All are technology based limitations which must be met by the applicable facility at all times.

- The industries covered under this permit have an associated ELG (40 CFR 418 and 455) but are not authorized to discharge wastewater to waters of the state; stormwater discharges are not addressed by the ELGs.

General Criteria Considerations:
In accordance with 40 CFR 122.44(d)(1), effluent limitations shall be placed into permits for pollutants which have been determined to cause, have the reasonable potential to cause, or to contribute to an excursion above any State water quality standard, including State narrative criteria for water quality. The rule further states 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 protecting the narrative criterion. The previous permit included the narrative criteria as specific prohibitions placed upon the discharge. These prohibitions were included in the permit absent any discussion of the discharge’s reasonable potential to cause or contribute to an excursion of the criterion. In order to comply with this regulation, the permit writer has completed a reasonable potential determination on whether the discharge has reasonable potential to cause, or contribute to an excursion of the general criteria listed in 10 CSR 20-7.031(4). These specific requirements are listed below followed by derivation and discussion (the lettering matches the rule itself, under 10 CSR 20-7.031(4)). In instances where reasonable potential exists, the permit includes numeric limitations to address the reasonable potential. In instances where reasonable potential does not exist the permit includes monitoring of the discharges potential to impact the receiving stream’s narrative criteria. Finally, all of the previous permit narrative criteria prohibitions have been removed from the permit given they are addressed by numeric limits where reasonable potential exists. It should also be noted Section 644.076.1, RSMo as well as Section D – Administrative Requirements of Standard Conditions Part I of this permit state 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 which are in violation of sections 644.006 to 644.141 of the Missouri Clean Water Law or any standard, rule, or regulation promulgated by the commission.

(A) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses.
- For all outfalls, there is no RP for putrescent bottom deposits preventing full maintenance of beneficial uses because the permit writer determined through research on the industry it is unlikely putrescent wastewater would be discharged from the permitted facilities.
- For all outfalls, there is no RP for unsightly or harmful bottom deposits preventing full maintenance of beneficial uses because the permit writer determined through research on the industry it is unlikely unsightly or harmful bottom deposits would be discharged from the permitted facilities.

(B) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses.
- For all outfalls, there is no RP for oil in sufficient amounts to be unsightly preventing full maintenance of beneficial uses because nothing disclosed by the industry, or in research done by the permit writer, indicates oil will be present in sufficient amounts to impair beneficial uses.
For all outfalls, there is no RP for scum and floating debris in sufficient amounts to be unsightly preventing full maintenance of beneficial uses because nothing disclosed by the industry, or in research done by the permit writer, indicates scum and floating debris will be present in sufficient amounts to impair beneficial uses.

(C) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses.

- For all outfalls, there is no RP for unsightly color or turbidity in sufficient amounts preventing full maintenance of beneficial uses because nothing disclosed by the industry, or in research done by the permit writer, indicates unsightly color or turbidity will be present in sufficient amounts to impair beneficial uses.
- For all outfalls, there is no RP for offensive odor in sufficient amounts preventing full maintenance of beneficial uses because nothing disclosed by the industry, or in research done by the permit writer, indicates offensive odor will be present in sufficient amounts to impair beneficial uses.

(D) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life.

- The permit writer considered specific toxic pollutants when writing this permit. Numeric effluent limitations are included for those pollutants which could be discharged in toxic amounts. These effluent limitations are protective of human health, animals, and aquatic life.

(E) There shall be no significant human health hazard from incidental contact with the water.

- Much like the condition above, the permit writer considered specific toxic pollutants when writing this permit, including those pollutants which could cause human health hazards. The discharge is limited by numeric effluent limitations for those conditions which could result in human health hazards.

(F) There shall be no acute toxicity to livestock or wildlife watering.

- The permit writer considered specific toxic pollutants when writing this permit. Numeric effluent limitations are included for those pollutants which could be discharged in toxic amounts. These effluent limitations are protective of livestock and wildlife watering.

(G) Waters shall be free from physical, chemical or hydrologic changes which would impair the natural biological community.

- For all outfalls, there is no RP for physical or hydrologic changes which would impair the natural biological community because nothing disclosed by the industry, or in research done by the permit writer, indicates physical or hydrologic changes would impair the natural biological community.
- It has been established any chemical changes are covered by the specific numeric effluent limitations established in the permit.

(H) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

- There are no solid waste disposal activities or any operation which has reasonable potential to cause or contribute to the materials listed above being discharged through any outfall.

**MAJOR WATER USER:**
Any surface or groundwater user with a water source and the equipment necessary to withdraw or divert 100,000 gallons (or 70 gallons per minute) or more per day combined from all sources from any stream, river, lake, well, spring, or other water source is considered a major water user in Missouri. All major water users are required by law to register water use annually (Missouri Revised Statues Chapter 256.400 Geology, Water Resources and Geodetic Survey Section). [https://dnr.mo.gov/pubs/pub2337.htm](https://dnr.mo.gov/pubs/pub2337.htm)

**OPERATOR CERTIFICATION REQUIREMENTS:**
As per 10 CSR 20-6.010(8) Terms and Conditions of a Permit, permittees shall operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions and regulations. Operators or supervisors of operations at regulated wastewater treatment facilities shall be certified in accordance with [10 CSR 20-9.020(2)] and any other applicable state law or regulation.

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

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

- Not Applicable: Public Notice is not required for issuance of coverage under this permit to individual facilities for the first time.
REASONABLE POTENTIAL ANALYSIS (RPA):
Federal regulation 40 CFR Part 122.44(d)(1)(i) requires effluent limitations for all pollutants which are or may be discharged at a level which will cause or have the reasonable potential to cause or contribute to an in-stream excursion above narrative or numeric water quality standard. In accordance with 40 CFR Part 122.44(d)(iii) if the permit writer determines any given pollutant has the reasonable potential to cause, or contribute to an in-stream excursion above the water quality standard, the permit must contain effluent limits for the pollutant.

✔ Conservative assumption: A traditional statistical Reasonable Potential Analysis has not been conducted for this master general permit; but instead the Department has made a reasonable potential determination based on sources of pollutants related to water quality standards. Activities performed by facilities covered under this master general permit were evaluated as to whether discharges have reasonable potential to cause or contribute to excursions of general criteria listed in 10 CSR 20-7.031(4). A reasonable potential to violate water quality standards is assumed for the pollutants of concern due to the nature of the activities carried out under this permit, resulting in the effluent limits contained in the permit.

✔ Permit writers use the Department’s permit writer’s manual (http://dnr.mo.gov/env/wpp/permits/manual/permit-manual.htm), the EPA’s permit writer’s manual (https://www.epa.gov/npdes/npdes-permit-writers-manual), program policies, and best professional judgment. For each parameter in each permit, the permit writer carefully considers all applicable information regarding technology based effluent limitations, effluent limitation guidelines, and water quality standards. Best professional judgment is based on the experience of the permit writer, cohorts in the Department and resources at the EPA, research, and maintaining continuity of permits if necessary. For stormwater permits, the permit writer is required per 10 CSR 6.200(6)(B)2 to consider: A. application and other information supplied by the permittee; B. effluent guidelines; C. best professional judgment of the permit writer; D. water quality; and E. BMPs. Part V provides specific decisions related to this permit.

✔ The permit writer reviewed industry materials, available DMR data, past inspections, and other available documents and research to evaluate general and narrative water quality reasonable potential for this permit. Per the permit writer’s best professional judgment, based on available data and full and accurate disclosure on application materials, this industry demonstrates reasonable potential for excursions from the general or narrative water quality criteria. See Part IV: Effluent Limit Determinations for specific parameter RP.

SCHEDULE OF COMPLIANCE (SOC):
Per § 644.051, RSMo, a permit may be issued with a Schedule of Compliance (SOC) to provide time for a facility to come into compliance with new state or federal effluent regulations, water quality standards, or other requirements. Such a schedule is not allowed if the facility is already in compliance with the new requirement, or if prohibited by other statute or regulation. An SOC includes an enforceable sequence of interim requirements (actions, operations, or milestone events) leading to compliance with the Missouri Clean Water Law, its implementing regulations, and/or the terms and conditions of an operating permit. See also Section 502(17) of the Clean Water Act, and 40 CFR 122.2. For new effluent limitations, the permit may include interim monitoring for the specific parameter to demonstrate the facility is not already in compliance with the new requirement. Per 40 CFR 122.47(a)(1) and 10 CSR 20-7.031(11), compliance must occur as soon as possible. If the permit provides a schedule for meeting new water quality based effluent limits, an SOC must include an enforceable, final effluent limitation in the permit even if the SOC extends beyond the life of the permit.

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

SETBACKS:
Setbacks are common elements of permits and are established to provide a margin of safety in order to protect the receiving water from accidents, spills, unusual events, etc.

✔ Per 10 CSR 20-7.031(5) and 10 CSR 20-7.031(7) discharge of process wastewater and stormwater out of compliance with permit conditions is prohibited in metropolitan no discharge watersheds.

✔ Outstanding State Resource Waters are protected against any degradation in quality as defined in 10 CSR 20-7.015(6)(B) and 7.031(3)(C). This permit does not authorize discharge in Outstanding State Resource Waters watersheds unless they are in compliance with the limitations and benchmarks in this permit.

✔ Per 10 CSR 20-7.016(6)(A), all agrichemical facilities shall adhere to the following: agrichemical facilities shall be designed and constructed so all bulk liquid pesticide nonmobile storage containers and all bulk liquid fertilizer nonmobile storage containers are located within a secondary containment facility. Dry bulk pesticides and dry bulk fertilizers shall be stored in a building so that they are protected from the weather. The floors of the buildings shall be constructed of an approved design and material(s). At an agrichemical facility, all transferring, loading, unloading, mixing, and repackaging of bulk agrichemicals shall be conducted in an operational area. All precipitation collected in the operational area or secondary containment area as well as process generated wastewater shall be stored and disposed of in a no-discharge manner.
**SLUDGE – DOMESTIC BIOSOLIDS:**

Biosolids are solid materials resulting from domestic wastewater treatment meeting federal and state criteria for beneficial use (i.e. fertilizer). Sewage sludge is solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works; including but not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works. Additional information: [http://extension.missouri.edu/main/DisplayCategory.aspx?C=74](http://extension.missouri.edu/main/DisplayCategory.aspx?C=74) (WQ422 through WQ449).

✔ This permit does not authorize land application of biosolids.

**SLUDGE – INDUSTRIAL:**

Industrial sludge is solid, semi-solid, or liquid residue generated during the treatment of industrial process wastewater in a treatment works; including but not limited to, scum or solids removed in primary, secondary, or advanced wastewater treatment process; scum and solids filtered from water supplies and backwashed; and a material derived from industrial sludge.

✔ Not applicable; this permit does not authorize land application of industrial sludge.

**SPILL REPORTING:**

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. [http://dnr.mo.gov/env/esp/spillbill.htm](http://dnr.mo.gov/env/esp/spillbill.htm).

Underground and above ground storage devices for petroleum products, vegetable oils and animal fats are subject to control under SPCC and are expected to be managed under those provisions. Substances regulated by federal law under the Resource Conservation and Recovery Act (RCRA) or the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) which are transported, stored, or used for maintenance, cleaning or repair shall be managed according to the provisions of RCRA and CERCLA. These storage devices are not covered under this general permit because to do so would create a double jeopardy for the permitted facility. Permit requirements cover those fueling areas and storage devices which fall below the threshold of SPCC, RCRA and CERCLA regulations.

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

In accordance with 40 CFR 122.44(k), BMPs must be implemented to control or abate the discharge of pollutants when:

1. Authorized under section 304(e) of the Clean Water Act (CWA) for the control of toxic pollutants and hazardous substances from ancillary industrial activities;
2. Authorized under section 402(p) of the CWA for the control of stormwater discharges;
3. Numeric effluent limitations are infeasible; or
4. The practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA.

In accordance with the Developing Your Stormwater Pollution Prevention Plan, a Guide for Industrial Operators, (EPA 833-B-09-002) published by the United States Environmental Protection Agency (EPA) in June 2015 ([https://www.epa.gov/npdes/industrial-stormwater-guidance](https://www.epa.gov/npdes/industrial-stormwater-guidance)), BMPs are measures or practices used to reduce the amount of pollution entering waters of the state from a permitted facility. BMPs may take the form of a process, activity, or physical structure. Additionally in accordance with the Stormwater Management, a SWPPP is a series of steps and activities to (1) identify sources of pollution or contamination, and (2) select and carry out actions which prevent or control the pollution of storm water discharges.

A SWPPP must be prepared by the permittee if the SIC code is found in 40 CFR 122.26(b)(14) and/or 10 CSR 20-6.200(2). A SWPPP may also be required of other facilities where stormwater has been identified as needing better management. The purpose of a SWPPP is to comply with all applicable stormwater regulations by creating an adaptive management plan to control and mitigate stormwater runoff. The following paragraph outlines the general steps the permittee should take to determine which BMPs will work to achieve the benchmark values or limits in the permit. This section is not intended to be all encompassing or restrict the use of any physical BMP or operational and maintenance procedure assisting in pollution control. Additional steps or revisions to the SWPPP may be required to meet the requirements of the permit.

The selection of control measures to prevent or reduce the discharge of pollutants in stormwater shall be specified in the SWPPP. For new, altered, or expanded stormwater discharges, the SWPPP shall identify the reasonable and effective BMPs, taking into account environmental impacts and costs. This analysis must document why no discharge or no exposure options are not feasible at the facility. This selection and documentation of appropriate control measures shall serve as an alternative analysis of technology and fulfill the requirements of Antidegradation [10 CSR 20-7.031(3) and 10 CSR 20-7.015(9)(A)5.]. Existing facilities with established SWPPPs and BMPs need not conduct an additional alternatives analysis unless new BMPs are established to address benchmark exceedances.
Areas which should be included in the SWPPP are identified in 40 CFR 122.26(b)(14). Once the potential sources of stormwater pollution have been identified, a plan should be formulated to best control the amount of pollutant being released and discharged by each activity or source. This should include, but is not limited to, minimizing exposure to stormwater, good housekeeping measures, proper facility and equipment maintenance, spill prevention and response, vehicle traffic control, and proper materials handling. Once a plan has been developed, the facility will employ the control measures determined to be adequate to achieve the benchmark values or effluent limitations discussed above. The facility will conduct monitoring and inspections of the BMPs to ensure they are working properly and re-evaluate any BMP not achieving compliance with permitting requirements. For example, if sample results from an outfall show values of TSS above the effluent limit, the BMP being employed is deficient in controlling stormwater pollution. Corrective action should be taken to repair, improve, or replace the failing BMP. This internal evaluation is required at set frequencies but should be continued more frequently if BMPs continue to fail. If failures do occur, continue this trial and error process until appropriate BMPs have been established.

EPA developed factsheets on the pollutants of concern for specific industries along with the BMPs to control and minimize stormwater (https://www.epa.gov/npdes/stormwater-discharges-industrial-activities). Along with EPA’s factsheets, the International Stormwater BMP database (www.bmpdatabase.org/index.htm) may provide guidance on BMPs appropriate for specific industries.

If failures continue to occur and the permittee feels there are no practicable or cost-effective BMPs to sufficiently reduce a pollutant concentration in the discharge to the benchmark value or effluent limit established in the permit, the permittee can submit a request to re-evaluate the values. This request needs to include:

1. A detailed explanation of why the facility is unable to comply with the permit conditions and unable to establish BMPs to achieve the benchmark values or limits;
2. Financial data of the company and documentation of cost associated with BMPs for review; and
3. The SWPPP, which should contain adequate documentation of BMPs employed, failed BMPs, corrective actions, and all other required information.

This will allow the Department to conduct a cost analysis on control measures and actions taken by the facility to determine cost-effectiveness of BMPs. The request shall be submitted in the form of an operating permit modification; the application is found at: http://dnr.mo.gov/forms/index.html.

 vouchers

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

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

 Not Applicable: This permit is not drafted under premises of a petition for variance.

**WASTELOAD ALLOCATIONS (WLA) FOR LIMITATIONS:**
Per 10 CSR 20-2.010(78), the amount of pollutant each discharger is allowed by the Department to release into a given stream after the Department has determined total amount of pollutant which may be discharged into the stream without endangering its water quality.

 Not Applicable: no mixing is allowed under general permits, so Water Quality Standards are used in place of Wasteload Allocations.

**WATER QUALITY STANDARDS:**
Per 10 CSR 20-7.031(4), General Criteria shall be applicable to all waters of the state at all times, including mixing zones. Additionally, 40 CFR 122.44(d)(1) directs the Department to include in each NPDES permit conditions to achieve water quality established under Section 303 of the CWA, including state narrative criteria for water quality.

**WHOLE EFFLUENT TOXICITY (WET) TEST:**
Per 10 CSR 20-7.031(1)(FF), a toxicity test conducted under specified laboratory conditions on specific indicator organism; and per 40 CFR 122.2, the aggregate toxic effect of an effluent measured directly by a toxicity test. A WET test is a quantifiable method of determining if a discharge from a facility may be causing toxicity to aquatic life by itself, in combination with, or through synergistic responses when mixed with receiving water.

 Not Applicable: At this time, permittees are not required to conduct a WET test. This permit is for stormwater only.
Part IV – Effluent Limitations Determination

EPA Multi-sector General Permit (MSGP)
The MSGP was used to research and support best professional judgment decisions made in establishing technology-based benchmarks for this general permit which are consistent with national standards. EPA applies the requirements in Sector C, Subsector C1 to stormwater discharges associated with industrial activity from agricultural chemical facilities. The permit writer determined the standards established by the MSGP are achievable and consistent with federal regulations. Monitoring will allow the facility to demonstrate achievement of the benchmarks through the use of BMPs and corrective actions.

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

Effluent limitations derived and established for this permit are based on current operations of the facility and applied per 10 CSR 20-7.015(9)(A). Any flow through the outfall is considered a discharge and must be sampled and reported as provided below. Future permit action due to facility modification may contain new operating permit terms and conditions which supersede the terms and conditions, including effluent limitations, of this operating permit. Daily maximums and monthly averages are required per 40 CFR 122.45(d)(1) for continuous discharges (not from a POTW).

**Effluent Limitations for Table A:**
Secondary Containment Discharges, constructed prior to August 30, 2008 only

<table>
<thead>
<tr>
<th>PARAMETERS</th>
<th>Unit</th>
<th>DAILY MAX</th>
<th>MONTHLY AVG</th>
<th>PREVIOUS PERMIT LIMITS</th>
<th>MINIMUM SAMPLING FREQUENCY</th>
<th>MINIMUM REPORTING FREQUENCY</th>
<th>SAMPLE TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BULK PESTICIDE SECONDARY CONTAINMENTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flow</td>
<td>GPD</td>
<td>*</td>
<td>*</td>
<td>SAME</td>
<td>ONCE/DISCHARGE</td>
<td>ONCE/DISCHARGE</td>
<td>24 HR. EST</td>
</tr>
<tr>
<td>Bulk agrichemicals stored or handled within the last three years</td>
<td>µg/L</td>
<td>***</td>
<td>--</td>
<td>SAME</td>
<td>***</td>
<td>ONCE/DISCHARGE</td>
<td>GRAB</td>
</tr>
<tr>
<td>pH †</td>
<td>SU</td>
<td>6.5-9.0</td>
<td>--</td>
<td>SAME</td>
<td>***</td>
<td>ONCE/DISCHARGE</td>
<td>GRAB</td>
</tr>
<tr>
<td>SETTLEABLE SOLIDS</td>
<td>mL/L/hr</td>
<td>1.5</td>
<td>1.0</td>
<td>SAME</td>
<td>***</td>
<td>ONCE/DISCHARGE</td>
<td>GRAB</td>
</tr>
<tr>
<td>BULK FERTILIZER SECONDARY CONTAINMENTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flow</td>
<td>GPD</td>
<td>*</td>
<td>*</td>
<td>SAME</td>
<td>ONCE/DISCHARGE</td>
<td>ONCE/DISCHARGE</td>
<td>24 HR EST</td>
</tr>
<tr>
<td>Bulk agrichemicals stored or handled within the last three years</td>
<td>µg/L</td>
<td>***</td>
<td>--</td>
<td>SAME</td>
<td>***</td>
<td>ONCE/DISCHARGE</td>
<td>GRAB</td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>mg/L</td>
<td>1.5</td>
<td>1.0</td>
<td>SAME</td>
<td>***</td>
<td>ONCE/DISCHARGE</td>
<td>GRAB</td>
</tr>
<tr>
<td>Nitrate as N</td>
<td>mg/L</td>
<td>10.0</td>
<td>10.0</td>
<td>SAME</td>
<td>***</td>
<td>ONCE/DISCHARGE</td>
<td>GRAB</td>
</tr>
<tr>
<td>pH †</td>
<td>SU</td>
<td>6.5-9.0</td>
<td>--</td>
<td>SAME</td>
<td>***</td>
<td>ONCE/DISCHARGE</td>
<td>GRAB</td>
</tr>
<tr>
<td>Phosphorus, Total as P</td>
<td>mg/L</td>
<td>1.0</td>
<td>1.0</td>
<td>SAME</td>
<td>***</td>
<td>ONCE/DISCHARGE</td>
<td>GRAB</td>
</tr>
<tr>
<td>Settleable Solids</td>
<td>mL/L/hr</td>
<td>1.5</td>
<td>1.0</td>
<td>SAME</td>
<td>***</td>
<td>ONCE/DISCHARGE</td>
<td>GRAB</td>
</tr>
</tbody>
</table>

* Monitoring and reporting requirement only
† Report the minimum and maximum pH values; pH is not to be averaged
*** See permit for more information, must comply with 10 CSR 20-7.031 Table A

**Derivation and Discussion of Limitations:**

**Bulk Pesticide Secondary Containments:**

Flow
In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification. The facility will report the total flow in gallons per day (GPD).

<table>
<thead>
<tr>
<th>PARAMETERS</th>
<th>Unit</th>
<th>DAILY MAX</th>
<th>MONTHLY AVG</th>
<th>PREVIOUS PERMIT LIMITS</th>
<th>MINIMUM SAMPLING FREQUENCY</th>
<th>MINIMUM REPORTING FREQUENCY</th>
<th>SAMPLE TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BULK PESTICIDE SECONDARY CONTAINMENTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flow</td>
<td>GPD</td>
<td>*</td>
<td>*</td>
<td>SAME</td>
<td>ONCE/DISCHARGE</td>
<td>ONCE/DISCHARGE</td>
<td>24 HR. EST</td>
</tr>
<tr>
<td>Bulk agrichemicals stored or handled within the last three years</td>
<td>µg/L</td>
<td>***</td>
<td>--</td>
<td>SAME</td>
<td>***</td>
<td>ONCE/DISCHARGE</td>
<td>GRAB</td>
</tr>
<tr>
<td>pH †</td>
<td>SU</td>
<td>6.5-9.0</td>
<td>--</td>
<td>SAME</td>
<td>***</td>
<td>ONCE/DISCHARGE</td>
<td>GRAB</td>
</tr>
<tr>
<td>SETTLEABLE SOLIDS</td>
<td>mL/L/hr</td>
<td>1.5</td>
<td>1.0</td>
<td>SAME</td>
<td>***</td>
<td>ONCE/DISCHARGE</td>
<td>GRAB</td>
</tr>
<tr>
<td>BULK FERTILIZER SECONDARY CONTAINMENTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flow</td>
<td>GPD</td>
<td>*</td>
<td>*</td>
<td>SAME</td>
<td>ONCE/DISCHARGE</td>
<td>ONCE/DISCHARGE</td>
<td>24 HR EST</td>
</tr>
<tr>
<td>Bulk agrichemicals stored or handled within the last three years</td>
<td>µg/L</td>
<td>***</td>
<td>--</td>
<td>SAME</td>
<td>***</td>
<td>ONCE/DISCHARGE</td>
<td>GRAB</td>
</tr>
<tr>
<td>Ammonia as N</td>
<td>mg/L</td>
<td>1.5</td>
<td>1.0</td>
<td>SAME</td>
<td>***</td>
<td>ONCE/DISCHARGE</td>
<td>GRAB</td>
</tr>
<tr>
<td>Nitrate as N</td>
<td>mg/L</td>
<td>10.0</td>
<td>10.0</td>
<td>SAME</td>
<td>***</td>
<td>ONCE/DISCHARGE</td>
<td>GRAB</td>
</tr>
<tr>
<td>pH †</td>
<td>SU</td>
<td>6.5-9.0</td>
<td>--</td>
<td>SAME</td>
<td>***</td>
<td>ONCE/DISCHARGE</td>
<td>GRAB</td>
</tr>
<tr>
<td>Phosphorus, Total as P</td>
<td>mg/L</td>
<td>1.0</td>
<td>1.0</td>
<td>SAME</td>
<td>***</td>
<td>ONCE/DISCHARGE</td>
<td>GRAB</td>
</tr>
<tr>
<td>Settleable Solids</td>
<td>mL/L/hr</td>
<td>1.5</td>
<td>1.0</td>
<td>SAME</td>
<td>***</td>
<td>ONCE/DISCHARGE</td>
<td>GRAB</td>
</tr>
</tbody>
</table>
**Bulk Agrichemicals Stored or Handled**

Limits and monitoring continued from last permit. Prior to discharging, the permittee shall collect a sample of the captured stormwater in each secondary containment used for bulk agrichemical handling or storage. If the sample results exceed the discharge limitations specified in Table A of this permit or the water quality standards in 10 CSR 20-7.031 Tables A1 & A2, discharge is not authorized. Analytical values and all associated laboratory reports will be reported via the eDMR system as attachments.

For individual pollutants listed in the water quality standards (10 CSR 20-7.031 Tables A1 & A2), the concentration at the monitoring point shall not exceed the most stringent of the aquatic life standards, human health standards, drinking water supply standards (DWS), or health advisory levels. For pollutants with an effluent limit below the method detection limit (MDL) of all available EPA approved methods (40 CFR part 136), the permittee will conduct the analysis in accordance with the most sensitive method available and report actual analytical values or “less than” sign and the detection limit, whichever is more.

If the secondary containment is constructed of concrete, the samples shall be analyzed for the applicable parameters in Table A in the permit and any additional bulk agrichemicals found in 10 CSR 20-7.031 Tables A1 & A2 stored or handled in the respective area within the last year.

If the secondary containment is an earthen storage structure constructed of soil, clay, or other permeable materials, the discharge samples shall be analyzed for the applicable parameters in Table A and any additional bulk agrichemicals found in 10 CSR 20-7.031 Tables A1 & A2 stored or handled in the respective area within the last three years.

If the analysis of three consecutive samples taken at rain events (separated by 72 hours of dry weather) do not show contamination from a discontinued or no longer used product, then the permittee is no longer required to test for that chemical if:

(a) The secondary containment is concrete and the chemical has not been used at any time in the previous year, or
(b) The containment is of soil, clay, or other permeable materials and the chemical has not been used in the previous three years. If use of the product is reintroduced, then the requirements for sampling are reinstated.
(c) The laboratory reports for these three analyses shall be submitted as an attachment via the eDMR system.

Certain parameters may have an established Practical Quantitation Limit (PQL) which is above the current water quality standards. The PQL is the minimum value which can be reported with confidence by a laboratory. This value is often 2 to 5 times the Method Detection Limit (MDL) of the analysis. The PQL may vary from laboratory to laboratory. The permittee must ensure the use of the most sensitive 40 CFR part 136 approved method, or, if no approved method is available, the most sensitive standardized method available. The use of PQLs does not authorize the discharge of pollutants in excess of the water quality standards.

Other potentially toxic substances for which sufficient toxicity data are not available may not be released to waters of the state until safe levels are demonstrated through adequate bioassay studies [10 CSR 20-7.031(4)]. Other bulk pesticides and other potentially toxic substances for which safe levels are demonstrated through adequate bioassay studies may be released to waters of the state, provided that the concentration at the monitoring point shall not exceed the demonstrated safe levels.

**pH**

6.5 to 9.0 SU – instantaneous grab sample. Water quality limits [10 CSR 20-7.031(5)(E)] are applicable to this outfall, continued from the previous permit.

**Settleable Solids**

Daily maximum limit of 1.5 mL/L/hr and a monthly average of 1.0 mL/L/hr, continued from previous permit. There is no numeric water quality standard for SS; however, sediment discharges can negatively impact aquatic life. Increased settleable solids are known to interfere with multiple stages of the life cycle in many benthic organisms. Settleable solids are also a valuable indicator parameter. Solids monitoring allows the permittee to identify increases in sediment and solids indicating uncontrolled materials leaving the site. The effluent limitations in the previous permit have been reevaluated and found to be protective of the receiving stream.

**Bulk Fertilizer Secondary Containments:**

**Flow**

In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification. The facility will report the total flow in gallons per day (GPD).
Bulk Agrichemicals Stored or Handled
New to this category for this permit. It is understood fertilizer manufacturing facilities may be storing chemicals not listed in Table A, and will therefore also be subject to monitoring and limitations for other pollutants found in 10 CSR 20-7.031 Tables A1 & A2. Prior to discharging, the permittee shall collect a sample of the captured stormwater in each secondary containment used for bulk agrichemical handling or storage. If the sample results exceed the discharge limitations specified in Table A of this permit or the water quality standards in 10 CSR 20-7.031 Tables A1 & A2, discharge is not authorized. Analytical values and all associated laboratory reports will be reported via the eDMR system as attachments.

For individual pollutants listed in the water quality standards (10 CSR 20-7.031 Tables A1 & A2), the concentration at the monitoring point shall not exceed the most stringent of the aquatic life standards, human health standards, drinking water supply standards (DWS), or health advisory levels. For pollutants with an effluent limit below the method detection limit (MDL) of all available EPA approved methods (40 CFR part 136), the permittee will conduct the analysis in accordance with the most sensitive method available and report actual analytical values or “less than” sign and the detection limit, whichever is more.

If the secondary containment is constructed of concrete, the samples shall be analyzed for the applicable parameters in Table A in the permit and any additional bulk agrichemicals found in 10 CSR 20-7.031 Tables A1 & A2 stored or handled in the respective area within the last year.

If the secondary containment is an earthen storage structure constructed of soil, clay, or other permeable materials, the discharge samples shall be analyzed for the applicable parameters in Table A and any additional bulk agrichemicals found in 10 CSR 20-7.031 Tables A1 & A2 stored or handled in the respective area within the last three years.

If the analysis of three consecutive samples taken at rain events (separated by 72 hours of dry weather) do not show contamination from a discontinued or no longer used product, then the permittee is no longer required to test for that chemical if:
(a) The secondary containment is concrete and the chemical has not been used at any time in the previous year, or
(b) The containment is of soil, clay, or other permeable materials and the chemical has not been used in the previous three years. If use of the product is reintroduced, then the requirements for sampling are reinstated.
(c) The laboratory reports for these three analyses shall be submitted as an attachment via the eDMR system.

Certain parameters may have an established Practical Quantitation Limit (PQL) which is above the current water quality standards. The PQL is the minimum value which can be reported with confidence by a laboratory. This value is often 2 to 5 times the Method Detection Limit (MDL) of the analysis. The PQL may vary from laboratory to laboratory. The permittee must ensure the use of the most sensitive 40 CFR part 136 approved method, or, if no approved method is available, the most sensitive standardized method available. The use of PQLs does not authorize the discharge of pollutants in excess of the water quality standards.

Other potentially toxic substances for which sufficient toxicity data are not available may not be released to waters of the state until safe levels are demonstrated through adequate bioassay studies [10 CSR 20-7.031(4)]. Other bulk pesticides and other potentially toxic substances for which safe levels are demonstrated through adequate bioassay studies may be released to waters of the state, provided that the concentration at the monitoring point shall not exceed the demonstrated safe levels.

**Ammonia, Total as N**
Daily maximum limit of 1.5 mg/L, with a monthly average limit of 1.0 mg/L. This limit is continued from the previous permit and is protective of receiving streams. Ammonia is a pollutant of concern in secondary containment structures that hold bulk fertilizers, as nitrogen is a primary ingredient of fertilizers, and ammonia is a component of total nitrogen. No data is available to determine technology capabilities of the permittees; the previous permit stated these limits were determined to be achievable after review of data, therefore these limits are retained.

**Nitrate as N**
Daily maximum limit of 10 mg/L, with a monthly average limit of 10 mg/L. This limit is continued from the previous permit and is protective of the DWS and GRW WQSSs of 10 mg/L. Nitrate is a pollutant of concern in secondary containment structures that hold bulk fertilizers, as nitrogen is a primary ingredient of fertilizers, and nitrate is a component of total nitrogen.

**pH**
6.5 to 9.0 SU – instantaneous grab sample. Water quality limits [10 CSR 20-7.031(5)(E)] are applicable to this outfall, continued from the previous permit.

**Phosphorous, Total as P**
Daily maximum limit of 1.0 mg/L, with a monthly average limit of 1.0, continued from the previous permit. There was one reported exceedance of this limit in the previous permit cycle. Limits are retained to protect the general criteria in the receiving water bodies, as well as to prevent backsliding on limitations. Phosphorus is often a component of fertilizer products, and is thus a pollutant of concern.
**Settleable Solids**

Daily maximum limit of 1.5 mL/L/hr and a monthly average of 1.0 mL/L/hr, continued from previous permit. There is no numeric water quality standard for SS; however, sediment discharges can negatively impact aquatic life. Increased settleable solids are known to interfere with multiple stages of the life cycle in many benthic organisms. Settleable solids are also a valuable indicator parameter. Solids monitoring allows the permittee to identify increases in sediment and solids indicating uncontrolled materials leaving the site. The effluent limitations in the previous permit have been reevaluated and found to be protective of the receiving stream.

**Effluent Limitations Table B:**

**Stormwater from Operational Areas**

<table>
<thead>
<tr>
<th>PARAMETERS</th>
<th>UNIT</th>
<th>DAILY MAXIMUM LIMIT</th>
<th>BENCHMARK</th>
<th>PREVIOUS PERMIT LIMITS</th>
<th>MINIMUM SAMPLING FREQUENCY</th>
<th>MINIMUM REPORTING FREQUENCY</th>
<th>SAMPLE TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow</td>
<td>GPD</td>
<td>*</td>
<td>--</td>
<td>SAME</td>
<td>ONCE/QUARTER</td>
<td>ONCE/QUARTER</td>
<td>24 HR. ESTIMATE</td>
</tr>
<tr>
<td>COD</td>
<td>mg/L</td>
<td>**</td>
<td>120</td>
<td>SAME</td>
<td>ONCE/QUARTER</td>
<td>ONCE/QUARTER</td>
<td>GRAB</td>
</tr>
<tr>
<td>Nitrogen, Total</td>
<td>mg/L</td>
<td>*</td>
<td>--</td>
<td>SAME</td>
<td>ONCE/QUARTER</td>
<td>ONCE/QUARTER</td>
<td>GRAB</td>
</tr>
<tr>
<td>Oil &amp; Grease</td>
<td>mg/L</td>
<td>**</td>
<td>10</td>
<td>SAME</td>
<td>ONCE/QUARTER</td>
<td>ONCE/QUARTER</td>
<td>GRAB</td>
</tr>
<tr>
<td>pH †</td>
<td>SU</td>
<td>**</td>
<td>6.5-9.0</td>
<td>SAME</td>
<td>ONCE/QUARTER</td>
<td>ONCE/QUARTER</td>
<td>GRAB</td>
</tr>
<tr>
<td>Phosphorus, Total As P</td>
<td>mg/L</td>
<td>**</td>
<td>2.0</td>
<td><em>/</em></td>
<td>ONCE/QUARTER</td>
<td>ONCE/QUARTER</td>
<td>GRAB</td>
</tr>
<tr>
<td>TSS</td>
<td>mg/L</td>
<td>**</td>
<td>100</td>
<td>SAME</td>
<td>ONCE/QUARTER</td>
<td>ONCE/QUARTER</td>
<td>GRAB</td>
</tr>
<tr>
<td>Lead, TR</td>
<td>µg/L</td>
<td>**</td>
<td>122</td>
<td>NEW</td>
<td>ONCE/QUARTER</td>
<td>ONCE/QUARTER</td>
<td>GRAB</td>
</tr>
<tr>
<td>Zinc, TR</td>
<td>µg/L</td>
<td>**</td>
<td>160</td>
<td>NEW</td>
<td>ONCE/QUARTER</td>
<td>ONCE/QUARTER</td>
<td>GRAB</td>
</tr>
</tbody>
</table>

* Monitoring and reporting requirement only
** Monitoring with associated benchmark
† Report the minimum and maximum pH values; pH is not to be averaged
NEW Parameter not established in previous state operating permit
TR Total Recoverable

**Derivation and Discussion of Benchmarks:**

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

**Flow**

In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification. The facility will report the total flow in millions of gallons per day (MGD).

**Chemical Oxygen Demand (COD)**

Monitoring with 120 mg/L daily maximum benchmark is continued from the previous permit. COD is a pollutant of concern in stormwater, and is a valuable indicator parameter. COD monitoring allows the permittee to identify increases in COD may indicate materials/chemicals coming into contact with stormwater causing an increase in oxygen demand. Increases in COD may indicate a need for maintenance or improvement of BMPs. The benchmark value falls within the range of values implemented in other permits having similar industrial activities and is achievable through proper BMP controls.

**Nitrogen, Total**

Monitoring only is required for this permit, continued from the previous permit. Nitrogen is a pollutant of concern at sites that manufacture fertilizers and other agricultural chemicals.
Oil & Grease
Monitoring with a daily maximum benchmark of 10 mg/L, continued from the previous permit. Oil and grease is considered a conventional pollutant. Oil and grease is a comprehensive test which measures for gasoline, diesel, crude oil, creosote, kerosene, heating oils, heavy fuel oils, lubricating oils, waxes, and some asphalt and pitch. The test can also detect some volatile organics such as benzene, toluene, ethylbenzene, or toluene, but these constituents are often lost during testing due to their boiling points. It is recommended to perform separate testing for these constituents if they are a known pollutant of concern at the site, i.e. aquatic life toxicity or human health is a concern. Results do not allow for separation of specific pollutants within the test, they are reported, totaled, as “oil and grease”. Per 10 CSR 20-7.031 Table A1: Criteria for Designated Uses; 10 mg/L is the standard for protection of aquatic life. This standard will also be used to protect the general criteria found at 10 CSR 20: 7.031 (4). 10 mg/L is the level at which sheen is expected to form on receiving waters. Oils and greases of different densities will possibly form sheen or unsightly bottom deposits at levels which vary from 10 mg/L. To protect the general criteria, it is the responsibility of the permittee to visually observe the discharge and receiving waters for sheen or bottom deposits. The benchmark is achievable through proper operational and maintenance of BMPs and falls within the range of values implemented in other permits having similar industrial activities.

\[ \text{pH} \]
6.5 to 9.0 SU benchmark – instantaneous grab sample, continued from the previous permit. This range of pH is known to be achievable at sites using standard stormwater BMP measures. The permit writer reviewed data from the last permit cycle and determined all facilities that reported were in compliance with the benchmark.

**Phosphorus, Total as P**
Monitoring only, continued from the previous permit. Phosphorus is a pollutant of concern in the effluent of agrichemical facilities.

**Total Suspended Solids (TSS)**
Monitoring with a daily maximum benchmark of 100 mg/L, continued from the previous permit. Sediment discharges can negatively impact aquatic life habitat. TSS is also a valuable indicator parameter in stormwater. TSS monitoring allows the permittee to identify increases in TSS indicating uncontrolled materials leaving the site. Increased suspended solids in runoff can lead to decreased available oxygen for aquatic life and an increase of surface water temperatures in a receiving stream. Suspended solids can also be carriers of toxins, which can adsorb to the suspended particles; therefore, total suspended solids are a valuable indicator parameter for other pollution. The benchmark is achievable through proper operational and maintenance of BMPs and falls within the range of values implemented in other industrial permits.

**Lead, Total Recoverable**
Monitoring only, added per the permit writer’s best professional judgment. This is added for monitoring as it is a pollutant of concern for the industry, as found in the EPA Multi-sector General Permit (MSGP). Lead is often a trace ingredient in pesticide and fertilizer formulations.

**Zinc, Total Recoverable**
Monitoring only, added per the permit writer’s best professional judgment. This is added for monitoring as it is a pollutant of concern for the industry, as found in the EPA MSGP. Zinc is often an ingredient in pesticide and fertilizer formulations.

**Part V – Sampling and Reporting Requirements**

**Sampling Frequency:**
Quarterly sampling ensures seasonal variations in stormwater discharges are adequately characterized as it pertains to the ability of BMPs to meet established benchmark values. The permit requires the facility to develop and maintain a SWPPP which identifies BMPs used on the site to control and reduce the discharge of water contaminants via stormwater as a result of the regulated industrial activity. In absence of gathered data, the Department is unable to determine if the installed BMPs are being adequately maintained and protecting water quality, therefore monitoring is continued quarterly from the previous permit.

**Sampling Type Justification:**
Sampling type was continued from the previous permit. The sampling types are representative of the discharges, and are protective of water quality. Discharges with altering effluent should have composite sampling; discharges with uniform effluent can have grab samples. Grab samples are usually appropriate for stormwater. Parameters which must have grab sampling are: pH, ammonia, *E. coli*, total residual chlorine, free available chlorine, hexavalent chromium, dissolved oxygen, total phosphorus, volatile organic compounds, and others.
**SUFFICIENTLY SENSITIVE ANALYTICAL METHODS:**
Please review Standard Conditions Part 1, section A, number 4. The analytical and sampling methods used shall conform to the reference methods listed in 10 CSR 20-7.015 and/or 40 CFR 136 unless alternates are approved by the Department. The facility shall use sufficiently sensitive analytical methods for detecting, identifying, and measuring the concentrations of pollutants. The facility shall ensure the selected methods are able to quantify the presence of pollutants in a given discharge at concentrations low enough to determine compliance with Water Quality Standards in 10 CSR 20-7.031 or effluent limitations unless provisions in the permit allow for other alternatives. A method is “sufficiently sensitive” when: 1) the method quantifies the pollutant below the level of the applicable water quality criterion or; 2) the method minimum level is above the applicable water quality criterion, but the amount of pollutant in a facility’s discharge is high enough the method detects and quantifies the level of pollutant in the discharge, or 3) the method has the lowest minimum level of the analytical methods approved under 10 CSR 20-7.015 and or 40 CFR 136. These methods are also required for parameters listed as monitoring only, as the data collected may be used to determine if numeric limitations need to be established. A permittee is responsible for working with their contractors to ensure the analysis performed is sufficiently sensitive. 40 CFR 136 lists the approved methods accepted by the Department. Tables A1-B3 at 10 CSR 20-7.031 shows water quality standards.

**Part VI – Administrative Requirements**

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

**PUBLIC MEETING:**
A public meeting was held November 14, 2018.

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

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

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

- The Public Notice period for this permit was from February 08, 2019 to March 11, 2019. This permit was changed after public notice in response to comments received during the public notice period, which are posted below. The permit was also changed to clarify eDMR requirements for reporting bulk agrichemicals used or handled in Table A.

Comment #1:
On page 3, Applicability ¶3, the word “accumulated” is unnecessary because if stormwater is in secondary containment, it has by definition accumulated. Subparagraph (a) is incomplete because it does not reference effluent limits in Table A. Paragraph (c) does not apply to “Facilities” but the new tanks and buildings at the facilities which makes this sentence confusing. In regard to the introductory sentence, the use of the word “uncontaminated” stormwater is erroneous because stormwater that is contaminated up to levels listed in Table A may to be discharged. Therefore, the word “uncontaminated” should be deleted. Finally, subparagraph (e) seems to be already discussed in ¶2. Therefore, it is unnecessary. I recommend a complete rewrite of paragraph 3.

Response:
The Department has amended the condition as follows:

3. This permit:
   a. Authorizes discharges of accumulated uncontaminated stormwater from secondary containments constructed prior to or on August 30, 2008, except as detailed in A.8. through A.12. below, and in compliance with the limitations found with Table A. For SIC code #2874, no contaminated non-process wastewater (as described in A.2. above) shall be discharged from secondary containments.
   b. Does not authorize discharges from new or expanded secondary containments constructed after August 30, 2008. Facilities that added or are adding new tanks, new buildings, etc. to secondary containment constructed prior to August 30, 2008, but do not increase the secondary containment size, are authorized to discharge those containments.
The use of “accumulated” in this case is necessary, as the permit does not authorize the release of any stormwater from the secondary containment structure, but only that water which has accumulated in the structure. The permittee is not authorized to transfer water into the secondary containment and then discharge it. It must accumulate there through precipitation. In reference to the use of the word contaminated, per RSMo 644.016(24), a water contaminant is defined as: “Any particulate matter or solid matter or liquid or any gas or vapor or any combination thereof, or any temperature change which is in or enters any waters of the state either directly or indirectly by surface runoff, by sewer, by subsurface seepage or otherwise, which causes or would cause pollution upon entering waters of the state, or which violates or exceeds any of the standards, regulations or limitations set forth in sections 644.006 to 644.141 or any federal water pollution control act, or is included in the definition of pollutant in such federal act.” This permit refers to uncontaminated stormwater precisely because any discharge from the secondary containments is required to be stormwater which is not known to contain spilled or leaked product. It should be clean stormwater. If it is known to be contaminated, it should not be discharged. It is not expected to, and should not, exceed limitations of the permit, and should thus be considered uncontaminated. Contaminated stormwater is not authorized for discharge under this permit.

Comment #2:

On page 4, Applicability ¶ 10. Subsection (d) lists requirements that are already in the regulations and do not need to be restated. Subparagraphs (a) and (b) could be combined to read as follows “this permit authorizes only no-discharge facilities . . . to operate. (b) Any discharge from a no-discharge facility will be considered a violation of this permit unless a catastrophic...”

Response:
The Department believes it is helpful to permittees to restate the applicable regulations in some places in the permit. This particular regulation details construction of “no-discharge” agrichemical facilities. As this condition directly relates to no-discharge facilities, restating the regulation is relevant. The permit writer agrees that it would be possible to combine subparagraphs (a) and (b); however for clarity, they will be left separate. No changes were made to the permit in response to this comment.

Comment #3:

Page 5, Table A. I recommend after the abbreviations SP and SF these be spelled out within parenthesis. For example, “SP (secondary pesticide)”. In addition, under Table B parenthetically explain the abbreviation “OA”. Why does Table A and Table B measure solids in different ways? Table A requires monitoring for settleable solids in Table B requires monitoring for total suspended solids. Why the difference?

Response:
The abbreviations have been spelled out. Table A is for stormwater from secondary containments, which offer settling for stormwater. It is likely if the residence time in the secondary containment is sufficient, settleable solids should be negligible or absent. The monitoring of settleable solids is considered to be sufficient for the secondary containments, as the permit writer believes the settleable solids will be indicators of total solids in the discharge. Table B monitors site stormwater in general, where the treatment mechanisms are not specific. Some outfalls may have no treatment. Total suspended solids measures all solids suspended in the stormwater, and actually includes the settleable solid fraction which is mobile in the stormwater at the time of monitoring. Total suspended solids is a well-accepted and supported indicator parameter in stormwater and is used at a variety of sites across a number of industries.

Comment #4:

Page 6, Notes under Table B. The next to the last paragraph says if three consecutive samples “do not show detections of a discontinued . . . product”, monitoring is no longer required. We request the word detections be deleted and replaced with “do not show concentrations above effluent limits” because some detection levels are far below the water quality standard or effluent limitations.

Response:
The intent of this monitoring is to show the use of the product has been discontinued and it is no longer found in the containment structure. Non-detects are an appropriate requirement to show no use and no presence in the containment structure. No changes were made in the permit in response to this comment.

Comment #5:

Page 6, Notes. The last sentence on the page says the use of PQLs does not authorize the discharge of pollutants in excess of the water quality standards. This sentence is unlawful and invalidates the permit shield. In the department’s previous response to comment it says this is language used in all permits. I beg to differ. The department had previously removed the narrative water quality standards from all permits because it also undermined and invalidated the permit shield. This sentence does the same thing.
Response:
The permit does not authorize discharge of pollutants above the water quality standards. This is a permit requirement. Earlier in this same paragraph, the permit states, “For individual pollutants listed in the water quality standards (10 CSR 20-7.031 Tables A1 & A2), the concentration at the monitoring point shall not exceed the most stringent of the aquatic life standards, human health standards, drinking water supply standards (DWS), or health advisory levels. For pollutants with an effluent limit below the method detection limit (MDL) of all available EPA approved methods (40 CFR part 136), the permittee will conduct the analysis in accordance with the most sensitive method available and report actual analytical values or ‘less than’ sign and the detection limit, whichever is more.” As this is a permit requirement, the statement you commented on clarifies that, regardless of the test method, the facility is not authorized to discharge the pollutants above the water quality standards as required earlier in the paragraph. This language is standard in many permits, and is frequently seen associated with chlorine, which has an established PQL above the water quality standards. No changes were made to the permit in response to this comment.

Comment #6:
Page 8, Permit Requirement ¶ 14. In this paragraph there are three descriptions of BMPs: reasonable, practicable and feasible. Should there be consistency on how the practicability or feasibility of BMPS must be?

Response:
The Department did not choose to specify which BMP measures are practicable, feasible, or reasonable for the facilities under this permit. The decision is left to the facility to determine site appropriate BMPs that address the requirements of the permit. The nature of a general permit makes determining site specific BMPs within the permit language difficult to implement. Rather than require every facility install and maintain the same BMPs, the permit allows the facility to determine which BMPs are practicable, feasible, and reasonable at the site.