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

Permit No.    MO-0115517
Owner:     Cargill Meat Solutions Corporation
Address:     825 East Douglas, Wichita, KS  67202
Continuing Authority:   Same as above
Address: Same as above
Facility Name:    Cargill Value Added Meats (Cargill Meat Solutions)
Facility Address:    1001 East Smith Street, California, MO  65018
Legal Description:   Sec. 27, T45N, R15W, Moniteau County
UTM Coordinates:   X=539147, Y=4275897
Receiving Stream:   100K Extent-Remaining Stream (C)
First Classified Stream and ID:  100K Extent-Remaining Stream (C) WBID #3960
USGS Basin & Sub-watershed No.:  10300102-1025

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

**FACILITY DESCRIPTION**

Outfall #001 - Poultry Processing – SIC #2015/2048

Stormwater from poultry processing facility and impacted stormwater from poultry transportation trucks flows through three detention basins, each with multi-cell wetland. Flows merge and discharge through Outfall #001. Domestic wastewater and process wastewater from industrial activities inside the facility are discharged to the California South WWTP (MO0023272). This permit does not authorize land application or discharge of process wastewater from inside the facility, domestic wastewater, or process waste sludge. A certified wastewater operator is not required at this facility.

Design flow is 0.04 million gallons per day (MGD).
Actual flow is dependent upon precipitation. Reported Average flow is 0.019 MGD. Reported Maximum flow is 0.075 MGD.

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.

August 1, 2020
Effective Date

Edward B. Galbraith, Director, Division of Environmental Quality

December 31, 2024
Expiration Date

Chris Wieberg, Director, Water Protection Program
A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

**OUTFALL #001**

*Stormwater*

**TABLE A-1**

**FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

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 **August 1, 2020** 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>BENCHMARKS</th>
<th>MONITORING REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>DAILY MAXIMUM</strong></td>
<td><strong>MONTHLY AVERAGE</strong></td>
<td><strong>MEASUREMENT FREQUENCY</strong></td>
</tr>
<tr>
<td><strong>LIMIT SET: M</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conventional</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. coli ‡</td>
<td>#/100mL</td>
<td>1030</td>
<td>206</td>
<td>once/month</td>
</tr>
</tbody>
</table>

**MONITORING REPORTS SHALL BE SUBMITTED MONTHLY; THE FIRST REPORT IS DUE SEPTEMBER 28, 2020. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.**

| **LIMIT SET: Q** | | | | |
| **PHYSICAL** | | | | |
| Flow | MGD | * | | once/quarter ◊ | 24 Hr Est. |
| Precipitation | inches | * | | once/quarter ◊ | measured |

| **CONVENTIONAL** | | | | |
| Biochemical Oxygen Demand | mg/L | * | | - | once/quarter ◊ | grab |
| Chemical Oxygen Demand | mg/L | ** | | 120 | once/quarter ◊ | grab |
| Oil & Grease | mg/L | * | | - | once/quarter ◊ | grab |
| pH † | SU | 6.5-9.0 | | - | once/quarter ◊ | grab |
| Total Suspended Solids | mg/L | ** | | 100 | once/quarter ◊ | grab |

**MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE OCTOBER 28, 2020. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.**

* Monitoring and reporting requirement only

** Monitoring and reporting requirement with benchmark. See Special Conditions for additional requirements.

‡ *E. coli:* final limitations and monitoring requirements are applicable only during the recreational season from April 1 through October 31. The Monthly Average Limit for *E. coli* is expressed as a geometric mean.

† pH: the facility will report the minimum and maximum values; pH is not to be averaged.

◊ Quarterly sampling

**MINIMUM QUARTERLY SAMPLING REQUIREMENTS**

<table>
<thead>
<tr>
<th>QUARTER</th>
<th>MONTHS</th>
<th>E. coli</th>
<th>ALL OTHER PARAMETERS</th>
<th>REPORT IS DUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>January, February, March</td>
<td>Not required to sample.</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>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>Sample at least once during any month of the quarter</td>
<td>October 28th</td>
</tr>
<tr>
<td>Fourth</td>
<td>October</td>
<td>Sample once during October</td>
<td>Sample at least once during any month of the quarter</td>
<td>January 28th</td>
</tr>
<tr>
<td></td>
<td>November, December</td>
<td>No sample required</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**B. STANDARD CONDITIONS**

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

1. Spills, Overflows, and Other Unauthorized Discharges.
   (a) Any spill, overflow, or other discharge(s) not specifically authorized above are unauthorized discharges.
   (b) Should an unauthorized discharge cause or permit any contaminants to discharge or enter waters of the state, the unauthorized discharge must be reported to the regional office as soon as practicable but no more than 24 hours after the discovery of the discharge. If the spill or overflow needs to be reported after normal business hours or on the weekend, the facility must call the Department’s 24 hour spill line at 573-634-2436.

   (a) Discharge Monitoring Reporting Requirements. The permittee must electronically submit compliance monitoring data via the eDMR system. Standard Conditions Part I, Section B, #7 indicates the eDMR system is currently the only Department approved reporting method for this permit.
   (b) Programmatic Reporting Requirements. All reports must be electronically submitted as an attachment to the eDMR system until such a time when the current or a new system is available to allow direct input of the data. After such a system has been made available by the Department, required data shall be directly input into the system by the next report due date
      (1) Schedule of Compliance Progress Reports; and
      (2) Any additional report required by the permit.
   (c) 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);
      (4) Low Erosivity Waivers, and Other Waivers from Stormwater Controls (LEWs).
   (d) Electronic Submission: access the eDMR system via: https://edmr.dnr.mo.gov/edmr/E2/Shared/Pages/Main/Login.aspx
   (e) Electronic Reporting Waivers. 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. The permittee may obtain an electronic reporting waiver by first submitting an eDMR Waiver Request Form: http://dnr.mo.gov/forms/780-2692-f.pdf. The Department will either approve or deny this electronic reporting waiver request within 120 calendar days. 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.

3. Stormwater Pollution Prevention Plan (SWPPP).
   The facility’s SIC code or description is found in 40 CFR 122.26(b)(14) and/or 10 CSR 20-6.200(2) and hence shall implement a Stormwater Pollution Prevention Plan (SWPPP) which must be prepared and implemented upon permit effective date. The SWPPP must be kept on-site and should not be sent to the Department unless specifically requested. The SWPPP must be reviewed and updated annually or if site conditions affecting stormwater change. The permittee shall select, install, use, operate, and maintain the Best Management Practices prescribed in the SWPPP in accordance with the concepts and methods described in: Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators, (EPA 833-B-09-002) published by the EPA in 2015 https://www.epa.gov/sites/production/files/2015-11/documents/swppp_guide_industrial_2015.pdf The purpose of the SWPPP and the Best Management Practices (BMPs) listed herein is the prevention of pollution of waters of the state. A deficiency of a BMP means it was not effective at preventing pollution [10 CSR 20-2.010(56)] to waters of the state. Corrective action describes the steps the facility took to eliminate the deficiency.
   The SWPPP must include:
   (a) A listing of specific contaminants and their control measures (or BMPs) and a narrative explaining how BMPs are implemented to control and minimize the amount of contaminants potentially entering stormwater.
   (b) A map with all outfalls and structural BMPs marked.
   (c) A schedule for at least once per month site inspections and brief written reports. The inspection report must include precipitation information for the entire period since last inspection, as well as observations and evaluations of BMP effectiveness. Throughout coverage under this permit, the facility must perform ongoing SWPPP review and revision to incorporate any site condition changes.
      i. Operational deficiencies must be corrected within seven (7) calendar days.
      ii. Minor structural deficiencies must be corrected within fourteen (14) calendar days.
      iii. Major structural deficiencies (deficiencies projected to take longer than 14 days to correct) must be reported as an uploaded attachment through the eDMR system with the DMRs. The initial report shall consist of the deficiency noted, the proposed remedies, the interim or temporary remedies (including proposed timing of the placement of the interim measures), and an estimate of the timeframe needed to wholly complete the repairs or construction. If required by the Department, the permittee shall work with the regional office to determine the best course of action. The permittee should consider temporary structures to control stormwater runoff. The facility shall correct the major structural deficiency as soon as reasonably achievable.
C. SPECIAL CONDITIONS (CONTINUED)

iv. All actions taken to correct the deficiencies shall be included with the written report, including photographs, and kept with the SWPPP. Additionally, corrective action of major structural deficiencies shall be reported as an uploaded attachment through the eDMR system with the DMRs.

v. BMP failure causing discharge through an unregistered outfall is considered an illicit discharge and must be reported in accordance with Standard Conditions Part I.

vi. Inspection reports must be kept on site with the SWPPP and maintained for a period of five (5) years. These must be made available to Department personnel upon request. Electronic versions of the documents and photographs are acceptable.

(d) A provision for designating an individual to be responsible for environmental matters and a provision for providing training to all personnel involved in housekeeping, material handling (including but not limited to loading and unloading), storage, and staging of all operational, maintenance, storage, and cleaning areas. Proof of training shall be submitted upon request by the Department.

4. Site-wide minimum Best Management Practices (BMPs). At a minimum, the permittee shall adhere to the following:
   (a) Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, warehouse activities, and other areas, and thereby prevent the contamination of stormwater from these substances.
   (b) Provide collection facilities and arrange for proper disposal of waste products including but not limited to petroleum waste products, and solvents.
   (c) Store all paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) so these materials are not exposed to stormwater or provide other prescribed BMPs such as plastic lids and/or portable spill pans to prevent the commingling of stormwater with container contents. Commingled water may not be discharged under this permit. Provide spill prevention control, and/or management sufficient to prevent any spills of these pollutants from entering waters of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater. Spill records should be retained on-site.
   (d) Provide good housekeeping practices on the site to keep trash from entry into waters of the state.
   (e) Provide sediment and erosion control sufficient to prevent or control sediment loss off of the property.

5. Secondary Containment.
   Before releasing water accumulated in secondary containment areas, it must be examined for odor and presence of sheen to protect the general criteria found at 10 CSR 20-7.031(4).
   (a) If odor or sheen is found, the pH shall be field-tested to ensure water is within the allowable 6.5-9.0 SU prior to discharge. The water shall not be discharged without treatment and shall be disposed of in accordance with legally approved methods, such as being sent to an accepting wastewater treatment facility.
   (b) 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.

6. 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 Clean Water Act Sections 301(b)(2)(C) and (D), §304(b)(2), and §307(a) (2), 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. 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.

7. All outfalls must be clearly marked in the field.

8. Report no discharge when a discharge does not occur during the report period. It is a violation of this permit to report no-discharge when a discharge has occurred.

9. Changes in Discharges of Toxic Pollutant.
   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) That 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 that discharge will exceed the highest of the following notification levels:
      (1) One hundred micrograms per liter (100 µg/L);
      (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile;
C. SPECIAL CONDITIONS (CONTINUED)

(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) That any 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 that 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 that 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 or the reporting limit of the laboratory. Reporting as “non-detect” without also including the detection/reporting 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 “<” symbol and the laboratory’s detection/reporting limit (e.g. <6).
   (d) See sufficiently sensitive method requirements in Standard Conditions Part I, Section A, #4 regarding proper detection limits used for sample analysis.
   (e) When calculating monthly averages, zero shall be used in place of any value(s) not detected. Where all data used in the average are below the MDL or RL, the highest MDL or RL shall be reported as “<#” for the average as indicated in item (c).

11. Failure to pay fees associated with this permit is a violation of the Missouri Clean Water Law (644.055 RSMo).

12. This permit does not cover land disturbance activities.

13. This permit does not authorize the placement of fill materials in flood plains, placement of solid materials into any waterway, the obstruction of stream flow, or changing the channel of a defined drainage course. The facility must contact the U.S. Army Corps of Engineers (Corps) to determine if a CWA §404 Department of Army permit or §401 water quality certification is required for the project.

   (a) This facility shall submit an appropriate and complete application to the Department no less than 180 days from the expiration date listed on page 1 of the permit.
   (b) Application materials shall include complete Form A and Form C. If the form names have changed, then the facility should assure they are submitting the correct forms as required by regulation.
   (c) The facility must sample the outfall and provide analysis for every parameter contained in the permit in accordance with 10 CSR 20-6.200(2)(C)1.E(I) and (II)
   (d) The facility may use the electronic submission system to submit the application to the Program.

D. NOTICE OF RIGHT TO APPEAL

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

Administrative Hearing Commission
U.S. Post Office Building, Third Floor
131 West High Street, P.O. Box 1557
Jefferson City, MO 65102-1557
Phone: 573-751-2422   Fax: 573-751-5018
Website: https://ahc.mo.gov
MISSOURI DEPARTMENT OF NATURAL RESOURCES  
FACT SHEET  
FOR THE PURPOSE OF RENEWAL  
OF  
MO-0115517  
CARGILL VALUE ADDED MEATS

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

As per [40 CFR Part 124.8(a)] and [10 CSR 20-6.020(1)(A)2.] a factsheet 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 Missouri State Operating Permit (MSOP or operating permit) listed below. A factsheet is not an enforceable part of an operating permit.

PART I. FACILITY INFORMATION

<table>
<thead>
<tr>
<th>Facility Type:</th>
<th>Industrial Stormwater</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIC Code(s):</td>
<td>2015</td>
</tr>
<tr>
<td>NAICS Code(s):</td>
<td>311615</td>
</tr>
<tr>
<td>Application Date:</td>
<td>06/27/2019</td>
</tr>
<tr>
<td>Expiration Date:</td>
<td>12/31/2019</td>
</tr>
<tr>
<td>Last Inspection:</td>
<td>03/17/2016</td>
</tr>
</tbody>
</table>

FACILITY DESCRIPTION:
The Cargill, Inc. Meat Solutions Group is a turkey processing facility located just east of California, Missouri, north of U.S. Highway 50. This location includes the operations of a poultry process, a feed mill, an offal off-loading facility, and a truck garage. This permit covers the area for the main facility (a hatchery is also located about one mile (1 mi) east of the main facility). As of a 2007 EPA inspection, the facility was producing about 28,000 whole turkeys per day (85% frozen), or a total of about 140 million pounds per year. The facility employed about 275 people at Cargill’s main processing facility. Offal and feathers from the processing plant are conveyed in separate pipes to the location of an old rendering plant, where it is loaded into trucks and transported to another facility for rendering. Wastewaters generated in the processing plant and the truck wash are pre-treated and discharged to the California South WWTP (MO023272), as is the domestic waste from showers and restrooms.

While the staging area from the covered sheds is largely protected from rainfall, this area does not prevent stormwater run-on and runoff through the staging area, resulting in impacted water. The trucks are off-loaded at the facility. Stormwater in this area appears to be impacted by animal waste from the turkey transportation activities, based on the sample results provided by the permittee which document elevated levels of E. coli.

Stormwater from the plant grounds and wastewater from the live turkey transportation and holding areas is captured in detention basins and wetlands treatment systems, consisting of three treatment trains (from separated drainage areas) each consisting of impoundments and constructed wetlands. Drainage Area A includes the parking lots and the storm drain inlets between the stormwater treatment system and the process buildings. This area has a higher risk of contamination then the second drainage area. Drainage Area B includes only overland flow from the graveled parking area for the turkey trucks and the maintenance shop. Drainage Area C contains further areas needing treatment, including the rendering plant and the wastewater treatment plant. Each drainage area then drains into a series of basins before discharging to a common final polishing pond and a common outfall (#001). The series of basins includes a forebay within the primary detention basin. The rock wall separating the two (2) parts of the detention basin allows for better collection and removal of solids before being treated. From the detention basin, treated water then flows through a constructed wetland basin. Detention of water within each series of basins is projected to be at least 30 to 40 days during high rain seasons. Flows from the stormwater treatment system can be stopped at four (4) locations in order to capture spills. The locations are at the discharge structure for each detention basin and prior to Outfall #001.

During the 10 day preview, the permittee noted an error in the application of the effluent limit guidelines (ELG) in in 40 CFR 432.110. References to the ELG have been removed, but benchmarks and limit remain in place based on sample results and potential pollutants.
of concern in the impacted stormwater. The permittee also commented on the receiving stream. The first receiving stream is a Class C stream (see map on page 5), which while marked on some maps as locally known as East Brush Creek, has a different stream identification than the East Brush Creek two miles downstream. As the stream designated uses did not change, nor did the classification, the remainder of the permit remains unaffected by this change. Also, the previous inspection information was incorrect and has been updated to reflect the most recent inspection, which was conducted on March 17, 2016 and determined the facility was in compliance with relevant Missouri Clean Water Law, associated regulations, as well as the current permit.

The charter number for the continuing authority for this facility is F00171254; this number was verified by the permit writer to be associated with the facility and precisely matches the continuing authority reported by the facility.

In accordance with 40 CFR 122.21(f)(6), the permittee reported the facility was previously covered by a general air permits under their installation IDs 135-0011 and 135-0004, but due to regulatory changes, are no longer required to maintain these permits. The plant is also subject to RMP regulations under EPA Facility ID #1000-0012-1717.

**PERMITTED FEATURES TABLE:**

<table>
<thead>
<tr>
<th>OUTFALL</th>
<th>AVERAGE FLOW</th>
<th>DESIGN FLOW</th>
<th>TREATMENT LEVEL</th>
<th>EFFLUENT TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>#001</td>
<td>Dependent upon precipitation</td>
<td>&lt;1.0 MGD</td>
<td>Best Management Practices, Basin, Wetlands</td>
<td>Stormwater and wastewater</td>
</tr>
</tbody>
</table>

**FACILITY PERFORMANCE HISTORY & COMMENTS:**
The electronic discharge monitoring reports were reviewed for the last five years. The permittee reported exceedances on E. coli. The permit writer increased monitoring on E. coli this permit cycle due the variability noted in the effluent. No other exceedances were noted, but at least one elevated level of TSS and COD were noted during the permit cycle.

**FACILITY MAP:**
WATER BALANCE DIAGRAM:
PART II. RECEIVING WATERBODY INFORMATION

RECEIVING WATERBODY’S WATER QUALITY:
The receiving waterbody has no relevant water quality data available. East Brush Creek, WBID# 811, approximately 2 miles downstream had a Use Attainment Assessment done in April 2019 which found the AQL use designation is not supported due to discharges from California North Lagoon.

303(d) LIST:
Section 303(d) of the federal Clean Water Act 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 (such as swimming), maintaining fish and other aquatic life, and providing drinking water for people, livestock, and wildlife. The 303(d) list helps state and federal agencies keep track of impaired waters not addressed by normal water pollution control programs. http://dnr.mo.gov/env/wpp/waterquality/303d/303d.htm
✓ Not applicable; this facility does not discharge to an impaired segment of a 303(d) listed stream.

TOTAL MAXIMUM DAILY LOAD (TMDL):
A TMDL is a calculation of the maximum amount of a given pollutant a water body can absorb before its water quality is affected; hence, the purpose of a TMDL is to determine the pollutant loading a specific waterbody can assimilate without exceeding water quality standards. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan or TMDL may be developed. The TMDL shall include the WLA calculation. http://dnr.mo.gov/env/wpp/tmdl/
✓ Applicable; East Brush Creek (WBID# 811) is associated with the 2006 EPA approved TMDL for ammonia, TSS, and BOD. This facility is also in the Missouri River watershed, which is under the 2006 EPA approved TMDL for chlordane and PCBs.
- The permit in lieu of TMDL names the sole source of the East Brush Creek impairment as California North Wastewater Treatment Plant. DMR records from this facility do not indicate high levels of ammonia, TSS, or BOD being discharged in stormwater at this site. Monitoring on this pollutant is continued. This facility is not considered to be a source of chlordane and PCBs.

UPSTREAM OR DOWNSTREAM IMPAIRMENTS:
The permit writer has reviewed upstream and downstream stream segments of this facility for impairments.
✓ This facility is located at the top of the watershed therefore no upstream is present at this location/outfalls.
✓ The permit writer has noted downstream of the facility the stream has a TMDL for ammonia. See TMDL section above.

APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:
Per Missouri’s Effluent Regulations [10 CSR 20-7.015(1)(B)], waters of the state are divided into seven categories. This facility is subject to effluent limitations derived on a site specific basis which are presented in each outfall’s effluent limitation table and further discussed in Part IV: Effluents Limits Determinations.
✓ All Other Waters

RECEIVING WATERBODY TABLE:

<table>
<thead>
<tr>
<th>OUTFALL</th>
<th>WATERBODY NAME</th>
<th>CLASS</th>
<th>WBID</th>
<th>DESIGNATED USES</th>
<th>DISTANCE TO SEGMENT</th>
<th>12-DIGIT HUC</th>
</tr>
</thead>
<tbody>
<tr>
<td>#001</td>
<td>100K Extent-Remaining Stream</td>
<td>C</td>
<td>3960</td>
<td>GEN, HHP, IRR, LWW, SCR, WBC-B, WWH (ALP)</td>
<td>0.0 mi</td>
<td>10300102-1025 Lower Missouri-Moreau</td>
</tr>
</tbody>
</table>
Classes are hydrologic classes as defined in 10 CSR 20-7.031(1)(F). L1: Lakes with drinking water supply - wastewater discharges are not permitted to occur to L1 watersheds per 10 CSR 20-7.015(3)(C); L2: major reservoirs; L3: all other public and private lakes; P: permanent streams; C: streams which may cease flow in dry periods but maintain pools supporting aquatic life; E: streams which do not maintain surface flow; and W: wetland. Losing streams are defined in 10 CSR 20-7.031(1)(O) and are designated on the Losing Stream dataset or determined by the Department to lose 30% or more of flow to the subsurface.

WBID = Waterbody Identification: Missouri Use Designation Dataset per 10 CSR 20-7.031(1)(Q) and (S) as 100K Extant-Remaining Streams or newer; data can be found as an ArcGIS shapefile on MSDIS at ftp://msdis.missouri.edu/pub/Inland_Water_Resources/MO_2014_WQS_Stream_Classifications_and_Use_shp.zip; New C streams described on the dataset per 10 CSR 20-7.031(2)(A)3. as 100K Extent Remaining Streams.

Per 10 CSR 20-7.031, the Department defines the Clean Water Commission’s water quality objectives in terms of “water uses to be maintained and the criteria to protect those uses.” The receiving stream and 1st classified receiving stream’s beneficial water uses are to be maintained in the receiving streams in accordance with [10 CSR 20-7.031(1)(C)]. Uses which may be found in the receiving streams table, above:

10 CSR 20-7.031(1)(C)1.: ALP = Aquatic Life Protection (formerly AQL; current uses are defined to ensure the protection and propagation of fish shellfish and wildlife, further subcategorized as: WWH = Warm Water Habitat; CLH = Cool Water Habitat; CDH = Cold Water Habitat; EAH = Ephemeral Aquatic Habitat; MAH = Modified Aquatic Habitat; LAH = Limited Aquatic Habitat. This permit uses ALP effluent limitations in 10 CSR 20-7.031 Table A1-A2 for all habitat designations unless otherwise specified.

10 CSR 20-7.031(1)(C)2.: Recreation in and on the water
WBC = Whole Body Contact recreation where the entire body is capable of being submerged;
WBC-A = whole body contact recreation supporting swimming uses and has public access;
WBC-B = whole body contact recreation not supported in WBC-A;
SCR = Secondary Contact Recreation (like fishing, wading, and boating)

10 CSR 20-7.031(1)(C)3. to 7.: 
HHP (formerly HHF) = Human Health Protection as it relates to the consumption of fish and drinking of water;
IRR = irrigation for use on crops utilized for human or livestock consumption
**LWW** = Livestock and Wildlife Watering (current narrative use is defined as **LWP** = Livestock and Wildlife Protection);
**DWS** = Drinking Water Supply
**IND** = industrial water supply

10 CSR 20-7.031(1)(C)8-11.: Wetlands (10 CSR 20-7.031 Tables A1-B3 currently does not have corresponding habitat use criteria for these defined uses): 
**WSA** = storm- and flood-water storage and attenuation; 
**WHP** = habitat for resident and migratory wildlife species; 
**WRC** = recreational, cultural, educational, scientific, and natural aesthetic values and uses; 
**WHC** = hydrologic cycle maintenance.

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

**RECEIVING WATERBODY MONITORING REQUIREMENTS:**
No receiving water monitoring requirements are recommended at this time.

**MIXING CONSIDERATIONS:**
Mixing zone and zone of initial dilution are not allowed per 10 CSR 20-7.031(5)(A.4.B.1)(a) and (b), as the base stream flow does not provide dilution to the effluent.

**PART III. RATIONALE AND DERIVATION OF PERMIT CONDITIONS**

**ALTERNATIVE EVALUATIONS FOR NEW FACILITIES:**
As per [10 CSR 20-7.015(4)(A)], discharges to losing streams shall be permitted only after other alternatives including land application, discharges to a gaining stream and connection to a regional wastewater treatment facility have been evaluated and determined to be unacceptable for environmental and/or economic reasons.

✓ Not applicable; the facility does not discharge to a losing stream as defined by [10 CSR 20-2.010(36)] & [10 CSR 20-7.031(1)(O)], and is an existing facility.

**ANTIBACKSLIDING:**
Federal Regulations [CWA §303(d)(4); CWA §402(c); 40 CFR Part 122.44(l)] require a reissued permit to be as stringent as the previous permit with some exceptions. Backsliding (a less stringent permit limitation) is only allowed under certain conditions.

✓ 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.

✓ Information is available which was either not available or not reviewed at the time of permit issuance (other than revised regulations, guidance, or test methods) which would have justified the application of a less stringent effluent limitation.

- A review of the facility operations, including the treatment system, as well as five years of eDMR data found no reasonable potential for temperature exceedances at this time. As such, the benchmark and monitoring for temperature were removed. Furthermore, data from the previous permit cycle was evaluated and no reasonable potential was found for Ammonia as Nitrogen or settleable solids. A review of five years of eDMR data also found no reasonable potential for BOD or oil and grease; as such, the benchmarks were removed, but monitoring continues to confirm continued effectiveness of BMPs at this facility.

✓ 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 (GC) 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. This permit assesses each general criteria as listed in the previous permit’s special conditions. 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 while maintaining permit conditions applicable to permittee disclosures and in accordance with 10 CSR 20-7.031(4) where no water contaminant by itself or in combination with other substances shall prevent the water of the state from meeting the following conditions:

(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 nothing disclosed by the permittee indicates putrescent wastewater would be discharged from the facility.
- For all outfalls, there is no RP for unsightly or harmful bottom deposits preventing full maintenance of beneficial uses because nothing disclosed by the permittee indicates unsightly or harmful bottom deposits would be discharged from the facility.

(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 permittee indicates oil will be present in sufficient amounts to impair beneficial uses. Oil and grease sampling results support this assertion and monitoring will continue to confirm the absence of oil and grease.
- 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 permittee 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 permittee indicates unsightly color or turbidity will be present in sufficient amounts to impair beneficial uses, but TSS benchmarks are established that will limit this potential cause of color change or turbidity.
- For all outfalls, there is a potential for offensive odor in sufficient amounts preventing full maintenance of beneficial uses but this permit includes limits for E. coli, associated with the animal waste and likely source of potential odor.

(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, including pH. Numeric effluent limitations are included for those pollutants could be discharged in toxic amounts. These effluent limitations are protective of human health, animals, and aquatic life.

(E) Waters shall maintain a level of water quality at their confluences to downstream waters that provides for the attainment and maintenance of the water quality standards of those downstream waters, including waters of another state.
- This criteria was not assessed for antibacksliding as this is a new requirement, approved by the EPA on July 30, 2019.

(F) 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 could cause human health hazards. The discharge is limited by numeric effluent limitations for those conditions could result in human health hazards. However, as E. coli is not categorized as a toxic, the permit writer has determined there may be a health hazard from incidental contact. E. coli limitations were added to protect from harmful incidental contact.

(G) 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 could be discharged in toxic amounts. These effluent limitations are protective of livestock and wildlife watering.

(H) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community.
- For all outfalls, there is no RP for physical changes impairing the natural biological community because nothing disclosed by the permittee indicates this is occurring.
- It has been established any chemical changes are covered by the specific numeric effluent limitations established in the permit.
- For all outfalls, there is no RP for hydrologic changes impairing the natural biological community because nothing disclosed by the permittee indicates this is occurring.

(I) 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. The permittee has a facility plan which controls for the solid waste materials handled on site.

- The previous permit special condition stated: “Any pesticide discharge from any point source shall comply with the requirements of Federal Insecticide, Fungicide and Rodenticide Act, as amended (7 U.S.C. 136 et. seq.) and the use of such pesticides shall be in a manner consistent with its label.”
- The previous permit special condition stated: “Release of a hazardous substance must be reported to the department in accordance with 10 CSR 24-3.010.”
ANTIDEGRADATION REVIEW:
Process water discharges with new, altered, or expanding flows, the Department is to document, by means of antidegradation review, if the use of a water body’s available assimilative capacity is justified. In accordance with Missouri’s water quality regulations for antidegradation [10 CSR 20-7.031(3)], degradation may be justified by documenting the socio-economic importance of a discharge after determining the necessity of the discharge. Facilities must submit the antidegradation review request to the Department prior to establishing, altering, or expanding discharges. See http://dnr.mo.gov/env/wpp/permits/antideg-implementation.htm
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Not applicable; the facility has not submitted information proposing expanded or altered process water discharge; no further degradation proposed therefore no further review necessary.

This permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) which must include an alternative analysis (AA) of the BMPs. The SWPPP must be developed, implemented, updated, and maintained at the facility. Failure to implement and maintain the chosen alternative, is a permit violation. The AA is a structured evaluation of BMPs to determine which are reasonable and cost effective. Analysis should include practices designed to be 1) non-degrading, 2) less degrading, or 3) degrading water quality. The chosen BMP will be the most reasonable 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 or benchmark exceedances. 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). For stormwater discharges with new, altered, or expanding discharges, the stormwater BMP chosen for the facility, through the AA performed by the facility, must be implemented and maintained at the facility. Failure to implement and maintain the chosen BMP alternative is a permit violation; see SWPPP.
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Applicable; the facility must review and maintain stormwater BMPs as appropriate.

Best Management Practices:
Minimum site-wide best management practices are established in this permit to assure all permittees are managing their sites equally to protect waters of the state from certain activities which could cause negative effects in receiving water bodies. While not all sites require a SWPPP because the SIC codes are specifically exempted in 40 CFR 122.26(b)(14), these best management practices are not specifically included for stormwater purposes. These practices are minimum requirements for all industrial sites to protect waters of the state. If the minimum best management practices are not followed, the facility may violate general criteria [10 CSR 20-7.031(4)]. Statutes are applicable to all permitted facilities in the state, therefore pollutants cannot be released unless in accordance with RSMo 644.011 and 644.016 (17).

Changes in Discharges of Toxic Pollutant:
This special condition reiterates the federal rules found in 40 CFR 122.44(f) and 122.42(a)(1). In these rules, the facility is required to report changes in amounts of toxic substances discharged. Toxic substances are defined in 40 CFR 122.2 as “…any pollutant listed as toxic under section 307(a)(1) or, in the case of “sludge use or disposal practices,” any pollutant identified in regulations implementing section 405(d) of the CWA.” Section 307 of the clean water act then refers to those parameters found in 40 CFR 401.15. The permittee should also consider any other toxic pollutant in the discharge as reportable under this condition.

Compliance and Enforcement:
Enforcement is the action taken by the Water Protection Program (WPP) to bring an entity into compliance with the Missouri Clean Water Law, its implementing regulations, and/or any terms and conditions of an operating permit. The primary purpose of the enforcement activity in the WPP is to resolve violations and return the entity to compliance.
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Not applicable; the permittee/facility is not currently under Water Protection Program enforcement action.

Domestic Wastewater, Sludge, and Biosolids:
Domestic wastewater is defined as wastewater (i.e., human sewage) originating primarily from the sanitary conveyances of bathrooms and kitchens. Domestic wastewater excludes stormwater, animal waste, process waste, and other similar waste.
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Not applicable; this facility discharges domestic wastewater to an off-site permitted wastewater treatment facility (POTW). 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.
Biosolids are solid materials resulting from domestic wastewater treatment meeting federal and state criteria for productive use (i.e. fertilizer) and after having pathogens removed.


- Not applicable; the facility does not manage domestic wastewater on-site.

**Effluent Limitations:**

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 in the permit. 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 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 facility does not have an associated ELG, as the production levels at this facility do not meet the ELG threshold for existing facilities.

**Electronic Discharge Monitoring Report (eDMR) Submission System:**

The U.S. Environmental Protection Agency (EPA) promulgated a final rule on October 22, 2015, to modernize Clean Water Act reporting for municipalities, industries, and other facilities by converting to an electronic data reporting system. The final rule requires regulated entities and state and federal regulators to use information technology to electronically report data required by the National Pollutant Discharge Elimination System (NPDES) permit program instead of filing paper reports. To comply with the federal rule, the Department is requiring all permittees to begin submitting discharge monitoring data and reports online.

Per 40 CFR 127.15 and 127.24, permitted facilities may request a temporary waiver for up to 5 years or a permanent waiver from electronic reporting from the Department. To obtain an electronic reporting waiver, a permittee must first submit an eDMR Waiver Request Form: [http://dnr.mo.gov/forms/780-2692-f.pdf](http://dnr.mo.gov/forms/780-2692-f.pdf). A request must be made for each facility. If more than one facility is owned or operated by a single entity, then the entity must submit a separate request for each facility based on its specific circumstances. An approved waiver is not transferable.

The Department must review and notify the facility within 120 calendar days of receipt if the waiver request has been approved or rejected [40 CFR 124.27(a)]. During the Department review period as well as after a waiver is granted, the facility must continue submitting a hard-copy of any reports required by their permit. The Department will enter data submitted in hard-copy from those facilities allowed to do so and electronically submit the data to the EPA on behalf of the facility.

To assist the facility in entering data into the eDMR system, the permit describes limit sets in each table in Part A of the permit. The data entry personnel should use these identifiers to assure data entry is being completed appropriately.

- The permittee/facility is currently using the eDMR data reporting system.

**General Criteria Considerations:**

In accordance with 40 CFR 122.44(d)(1), effluent limitations shall be placed into permits for pollutants determined to cause, have reasonable potential to cause, or to contribute to, an excursion above any water quality standard, including narrative water quality criteria. In order to comply with this regulation, the permit writer has completed a reasonable potential determination on whether discharges have reasonable potential to cause, or contribute to an excursion of the general criteria listed in 10 CSR 20-7.031(4). In instances where reasonable potential exists, the permit includes limitations within the permit to address the reasonable potential. In discharges where reasonable potential does not exist, the permit may include monitoring to later determine the discharge’s potential to impact the narrative criteria. Additionally, §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 allow any discharge of water contaminants from any water contaminant or point source located in Missouri 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. See Part IV for specific determinations.

**Groundwater Monitoring:**

Groundwater is a water of the state according to RSMo 644.016(27), is subject to regulations at 10 CSR 20-7.015(7) and 10 CSR 20-7.031(6), and must be protected accordingly.

- This facility is not required to monitor groundwater for the water protection program.

**Land Application:**

Land application of wastewater or sludge is performed by facilities to maintain a basin as no-discharge.

- Not applicable; this permit does not authorize operation of a land application system to disperse wastewater or sludge.
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 Statutes Chapter 256.400 Geology, Water Resources and Geodetic Survey Section). https://dnr.mo.gov/pubs/pub2236.htm
✓ Not applicable; this permittee cannot directly withdraw water from the state in excess of 70 gpm/0.1 MGD.

OIL/WATER SEPARATORS:
Oil water separator (OWS) tank systems are frequently found at industrial sites where process water and stormwater may contain oils and greases, oily wastewaters, or other immiscible liquids requiring separation. Food industry discharges typically require pretreatment prior to discharge to municipally owned treatment works. Per 10 CSR 26-2.010(2)(B), all oil water separator tanks must be operated according to manufacturer’s specifications and authorized in NPDES permits per 10 CSR 26-2.010(2) or may be regulated as a petroleum tank.
✓ Not applicable; the permittee has not disclosed the use of any oil water separators they wish to include under the NPDES permit at this facility and therefore oil water separator tanks are not authorized by this permit.

REASONABLE POTENTIAL (RP):
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 causing or have the reasonable potential to cause (or contribute to) an in-stream excursion above narrative or numeric water quality standards. Per 10 CSR 20-7.031(4), general criteria shall be applicable to all waters of the state at all times; however, acute toxicity criteria may be exceeded by permit in zones of initial dilution, and chronic toxicity criteria may be exceeded by permit in mixing zones. If the permit writer determines any given pollutant has the reasonable potential to cause or contribute to an in-stream excursion above the WQS, the permit must contain effluent limits for the pollutant per 40 CFR Part 122.44(d)(1)(iii) and the most stringent limits per 10 CSR 20-7.031(9)(A). Permit writers may use mathematical reasonable potential analysis (RPA) using the Technical Support Document for Water Quality Based Toxics Control (TSD) methods (EPA/505/2-90-001) as found in Section 3.3.2, or may also use reasonable potential determinations (RPD) as provided in Sections 3.1.2, 3.1.3, and 3.2 of the TSD.
✓ Not applicable; a mathematical RPA was not conducted for this facility. This permit establishes permit limits for stormwater and precipitation dependent wastewater. The Department has determined these discharges are not continuous discharges and are therefore not necessarily dependent on mathematical RPAs. However, the permit writer completed an RPD, a reasonable potential determination, using best professional judgment for all of the appropriate parameters in this permit. An RPD consists of reviewing application data and/or discharge monitoring data for the last five years and comparing those data to narrative or numeric water quality criteria.

SAMPLING FREQUENCY JUSTIFICATION:
Sampling and reporting frequency for E. coli was increased to monthly monitoring from quarterly in the previous permit. E. coli sampling and reporting frequency was increased due to permit limit exceedances and the variability noted in data. 40 CFR 122.45(d)(1) indicates all continuous discharges shall be permitted with daily maximum and monthly average limits. Continued quarterly monitoring was determined to be appropriate for the other parameters at this facility, at this time, because the non-continuous discharge is stormwater.

SAMPLING TYPE JUSTIFICATION:
Sampling type 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. As Ammonia, Oil & Grease, and Total Phosphorus samples must be immediately preserved with acid, these samples are to be collected as a grab.

SCHEDULE OF COMPLIANCE (SOC):
A schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements (actions, effluent limits, 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. SOCs are allowed under 40 CFR 122.47 and 10 CSR 20-7.031(11) providing certain conditions are met.
A SOC is not allowed:
• For effluent limitations based on technology-based standards established in accordance with federal requirements, if the deadline for compliance established in federal regulations has passed. 40 CFR § 125.3.
• For a newly constructed facility in most cases. Newly constructed facilities must meet applicable effluent limitations when discharge begins, because the facility has installed the appropriate control technology as specified in a permit or antidegradation review. A SOC is allowed for a new water quality based effluent limit not included in a previously public noticed permit or antidegradation review, which may occur if a regulation changes during construction.
• To develop a TMDL, UAA, or other study associated with development of a site specific criterion. A facility is not prohibited from conducting these activities, but a SOC may not be granted for conducting these activities.

In order to provide guidance in developing SOCs, and to attain a greater level of consistency, the Department issued a policy on development of SOCs on October 25, 2012. The policy provides guidance to permit writers on standard time frames for schedules for common activities, and guidance on factors to modify the length of the schedule.

✓ Not applicable; this permit does not contain a SOC, because E. coli limits were in the previous permit.

**Spills, Overflows, and Other Unauthorized Discharge Reporting:**

Per 260.505 RSMo, any emergency involving a hazardous substance must be reported to the Department’s 24 hour Environmental Emergency Response hotline at (573) 634-2436 at the earliest practicable moment after discovery. The Department may require the submittal of a written report detailing measures taken to clean up a spill. These reporting requirements apply whether or not 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)

Any other spills, overflows, or unauthorized discharges reaching waters of the state must be reported to the regional office during normal business hours, or after normal business hours, to the Department’s 24 hour Environmental Emergency Response spill line at 573-634-2436.

**Sludge – Industrial:**

Industrial sludge is solid, semi-solid, or liquid residue generated during the treatment of industrial process or non-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 any material derived from industrial sludge.

✓ Not applicable; industrial sludge is not discharged, but is hauled off-site.

**Standard Conditions:**

The standard conditions Part I attached to this permit incorporate all sections of 40 CFR 122.41(a) through (n) by reference as required by law. These conditions, in addition to the conditions enumerated within the standard conditions should be reviewed by the permittee to ascertain compliance with this permit, state regulations, state statues, federal regulations, and the Clean Water Act. Standard Conditions Part III, if attached to this permit, incorporate requirements dealing with domestic wastewater, sludge, and land application.

**Stormwater Permitting: Limitations and Benchmarks:**

Because of the fleeting nature of stormwater discharges, the Department, under the direction of EPA guidance, has 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), benchmark, or monitoring requirement as dictated by site specific conditions, the BMPs in place, past performance of the facility, and the receiving water’s current quality.

When a permitted feature or outfall consists of only stormwater, a benchmark may be implemented at the discretion of the permit writer, if there is no RP for water quality excursions.

✓ Applicable, this facility has stormwater-only outfalls where benchmarks or limitations were deemed appropriate contaminant measures.

**Stormwater Pollution Prevention Plan (SWPPP):**

In accordance with 40 CFR 122.44(k), Best Management Practices (BMPs) must be used 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 EPA’s *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (EPA 833-B-09-002) published by the EPA in 2015 [https://www.epa.gov/sites/production/files/2015-11/documents/swppp_guide_industrial_2015.pdf](https://www.epa.gov/sites/production/files/2015-11/documents/swppp_guide_industrial_2015.pdf), 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. Additional information can be found in *Stormwater Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices* (EPA 832-R-92-006; September 1992).

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 be required of other facilities where stormwater has been identified as necessitating 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 stream...
pollution from stormwater runoff. Developing a SWPPP provides opportunities to employ appropriate BMPs to minimize the risk of pollutants being discharged during storm events. 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.

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 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 benchmark value, 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 least once per month 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.

For new, altered, or expanded stormwater discharges, the SWPPP shall identify reasonable and effective BMPs while accounting for environmental impacts of varying control methods. The antidegradation analysis must document why no discharge or no exposure options are not feasible. The 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)]. For further guidance, consult the antidegradation implementation procedure (http://dnr.mo.gov/env/wpp/docs/AIP050212.pdf).

Alternative Analysis (AA) evaluation of the BMPs is a structured evaluation of BMPs which are reasonable and cost effective. The AA evaluation should include practices designed to be: 1) non-degrading; 2) less degrading; or 3) degrading water quality. The glossary of AIP defines these three terms. The chosen BMP will be the most reasonable and effective management strategy while ensuring the highest statutory and regulatory requirements are achieved and the highest quality water attainable for the facility is discharged. The AA evaluation must demonstrate why “no discharge” or “no exposure” is not a feasible alternative at the facility. This structured analysis of BMPs serves as the antidegradation review, fulfilling the requirements of 10 CSR 20-7.031(3) Water Quality Standards and Antidegradation Implementation Procedure (AIP), Section II.B.

If parameter-specific numeric benchmark exceedances continue to occur and the permittee feels there are no practicable or cost-effective BMPs which will sufficiently reduce a pollutant concentration in the discharge to the benchmark values established in the permit, the permittee can submit a request to re-evaluate the benchmark 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; 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, which includes an appropriate fee; the application is found at: https://dnr.mo.gov/forms/#WaterPollution

☑ Applicable; a SWPPP shall be developed and implemented for this facility.

**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 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.

**UNDERGROUND INJECTION CONTROL (UIC):**

The UIC program for all classes of wells in the State of Missouri is administered by the Missouri Department of Natural Resources and approved by EPA pursuant to section 1422 and 1425 of the Safe Drinking Water Act (SDWA) and 40 CFR 147 Subpart AA.
Injection wells are classified based on the liquids which are being injected. Class I wells are hazardous waste wells which are banned by RSMo 577.155; Class II wells are established for oil and natural gas production; Class III wells are used to inject fluids to extract minerals; Class IV wells are also banned by Missouri in RSMo 577.155; Class V wells are shallow injection wells; some examples are heat pump wells and groundwater remediation wells. Domestic wastewater being disposed of sub-surface is also considered a Class V well. In accordance with 40 CFR 144.82, construction, operation, maintenance, conversion, plugging, or closure of injection wells shall not cause movement of fluids containing any contaminant into Underground Sources of Drinking Water (USDW) if the presence of any contaminant may cause a violation of drinking water standards or groundwater standards under 10 CSR 20-7.031, or other health based standards, or may otherwise adversely affect human health. If the director finds the injection activity may endanger USDWs, the Department may require closure of the injection wells, or other actions listed in 40 CFR 144.12(c), (d), or (e). In accordance with 40 CFR 144.26, the permittee shall submit a Class V Well Inventory Form for each active or new underground injection well drilled, or when the status of a well changes, to the Missouri Department of Natural Resources, Geological Survey Program, P.O. Box 250, Rolla, Missouri 65402. The Class V Well Inventory Form can be requested from the Geological Survey Program or can be found at the following web address: http://dnr.mo.gov/forms/780-1774-f.pdf. Single family residential septic systems and non-residential septic systems used solely for sanitary waste and having the capacity to serve fewer than 20 persons a day are excluded from the UIC requirements (40 CFR 144.81(9)).

VARIANCE:
Per the Missouri Clean Water Law §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 §§644.006 to 644.141 or any standard, rule or regulation promulgated pursuant to Missouri Clean Water Law §§644.006 to 644.141.

WASTELOAD ALLOCATIONS (WLA) FOR LIMITS:
As per [10 CSR 20-2.010; definitions], the WLA is the amount of pollutant each discharger is allowed to discharge into the receiving stream without endangering water quality. Two general types of effluent limitations, technology-based effluent limits (TBELs) and water quality based effluent limits (WQBELs) are reviewed. If one limit does not provide adequate protection for the receiving water, then the other must be used per 10 CSR 20-7.015(9)(A). Total Maximum Daily Loads, if required for this facility, were also reviewed.

WASTELOAD ALLOCATION (WLA) MODELING:
Permittees may submit site specific studies to better determine the site specific wasteload allocations applied in permits.

WATER QUALITY STANDARD REVISION:
In accordance with section 644.058, RSMo, the Department is required to utilize an evaluation of the environmental and economic impacts of modifications to water quality standards of twenty-five percent or more when making individual site-specific permit decisions.

This operating permit does not contain requirements for a water quality standard that has changed twenty-five percent or more since the previous operating permit.
PART IV. EFFLUENT LIMITS DETERMINATIONS

OUTFALL #001 – WASTEWATER AND STORMWATER OUTFALL

EFFLUENT LIMITATIONS TABLE:

<table>
<thead>
<tr>
<th>PARAMETERS</th>
<th>Unit</th>
<th>DAILY MAXIMUM LIMIT</th>
<th>MONTHLY AVERAGE</th>
<th>BENCHMARK</th>
<th>PREVIOUS PERMIT LIMITS</th>
<th>MINIMUM SAMPLING FREQUENCY</th>
<th>REPORTING FREQUENCY</th>
<th>SAMPLE TYPE</th>
</tr>
</thead>
<tbody>
<tr>
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<td>24 HR. ESTIMATE</td>
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<tr>
<td>BOD</td>
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<td>-</td>
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<tr>
<td>COD</td>
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<tr>
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<tr>
<td>Oil &amp; Grease</td>
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<td>pH†</td>
<td>SU</td>
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<td>ONCE/QUARTER</td>
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<td></td>
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<tr>
<td>Settleable Solids (SS)</td>
<td>mL/L/hr</td>
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<tr>
<td>TSS</td>
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<td>SAME</td>
<td>ONCE/QUARTER</td>
<td>ONCE/QUARTER</td>
<td>GRAB</td>
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</tbody>
</table>

* monitoring and reporting requirement only
** monitoring with associated benchmark
† report the minimum and maximum pH values; pH is not to be averaged
‡ E. coli: final limitations and monitoring requirements are applicable only during the recreational season from April 1 through October 31. The Monthly Average Limit for E. coli is expressed as a geometric mean.

DERIVATION AND DISCUSSION OF LIMITS:

PHYSICAL:

Flow
In accordance with 40 CFR Part 122.44(i)(1)(ii), the estimated volume of effluent discharged from each outfall is needed to ensure compliance with permitted effluent limitations. If the permittee is unable to obtain estimated 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 estimated total flow in millions of gallons per day (MGD), monthly, in conjunction with sampling events.

Precipitation
Monitoring only requirement; measuring the amount of precipitation (10 CSR 20-6.200(2)(C)1.E(VI) during an event is necessary to ensure adequate stormwater and precipitation impacted process wastewater management exists at the site. Knowing the amount of potential runoff can provide the permittee a better understanding of any specific control measures be employed to ensure protection of water quality. The facility will provide the 24 hour accumulation value of precipitation from the day of sampling the other parameters.

CONVENTIONAL:

Biochemical Oxygen Demand - 5 Day (BOD₅)
Monitoring only. The highest sampling result for BOD during the last permit cycle was 34 mg/L, but all of the remaining sample results were below detection levels. There is no numeric water quality standard for BOD₅; however, increased oxygen demand may impact instream water quality. BOD₅ is also a valuable indicator parameter. BOD₅ monitoring allows the permittee to identify increases in BOD₅ may indicate materials/chemicals coming into contact with stormwater causing an increase in oxygen demand. Increases in BOD₅ 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.
Chemical Oxygen Demand (COD)
Monitoring with 120 mg/L daily maximum benchmark is carried over from the previous permit using the permit writer’s best professional judgment. The highest sampling result for COD during the last permit cycle was 112 mg/L. There is no numeric water quality standard for COD; however, increased oxygen demand may impact instream water quality. COD is also 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.

Escherichia coli (E. coli)
Limits continued from previous permit, with a daily maximum limit of 1030 bacteria/100 mL, with monthly average limits of 206 bacteria/100 mL. The previous permit established water quality limits for E. coli; a review of the data found that 7/20 sample results exceeded the permit limitations, including results up to 11,200 E. coli/100ml. As such, this permit continues a daily maximum limit of 1030 colony forming units per 100 mL and a monthly geometric mean limit of 206 bacteria per 100 mL during the recreational season from April 1 through October 31 only, to protect Whole Body Contact (B) designated use of the receiving stream, in accordance with 10 CSR 20-7.031 Table A-1.

Monitoring and reporting was increased to monthly sampling per permit writer’s best professional judgment. More frequent monitoring is necessary to better define the discharge, as the current data exhibited significant variability. Furthermore, more frequent sampling should help the permittee identify the source of the concern and the effectiveness of control measures. An effluent limit for both daily maximum and monthly geometric mean is required by 40 CFR 122.45(d). The geometric mean is calculated by multiplying all of the data points and then taking the n\text{th} root of this product, where n = \# of samples collected. For example: Five \textit{E. coli} samples were collected with results of 1, 4, 5, 6, and 10 (#/100 mL). Geometric mean = 5\text{th} root of (1)(4)(5)(6)(10) = 5\text{th} root of 1,200 = 4.1 #/100 mL.

Oil & Grease
Based upon a review of data collected during the previous permit cycle, this permit contains monitoring only for this parameter. 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”. Additionally, 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.

\textbf{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. The stormwater is impacted by animal waste, which may affect pH.

Total Suspended Solids (TSS)
Monitoring with a benchmark of 100 mg/L is continued from the previous permit. The highest sampling result for TSS during the last permit cycle was 80 mg/L. There is no numeric water quality standard for TSS; however, sediment discharges can negatively impact aquatic life habitat. TSS is also a valuable indicator parameter. 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.
PART V. ADMINISTRATIVE REQUIREMENTS

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

PERMIT SYNCHRONIZATION:
The Department of Natural Resources is currently undergoing a synchronization process for operating permits. Permits are normally issued on a five-year term, but to achieve synchronization many permits will need to be issued for less than the full five years allowed by regulation. The intent is all permits within a watershed will move through the Watershed Based Management (WBM) cycle together will all expire in the same fiscal year, http://dnr.mo.gov/env/wpp/cpp/docs/watershed-based-management.pdf. This will allow further streamlining by placing multiple permits within a smaller geographic area on public notice simultaneously, thereby reducing repeated administrative efforts. This will also allow the Department to explore a watershed based permitting effort at some point in the future. Renewal applications must continue to be submitted within 180 days of expiration, however, in instances where effluent data from the previous renewal is less than two years old, such data may be re-submitted to meet the requirements of the renewal application. If the permit provides a schedule of compliance for meeting new water quality based effluent limits beyond the expiration date of the permit, the time remaining in the schedule of compliance will be allotted in the renewed permit.

✓ This permit will maintain synchronization by expiring the end of the 4th quarter, 2024.

PUBLIC NOTICE:
The Department shall give public notice a draft permit has been prepared and its issuance is pending. http://dnr.mo.gov/env/wpp/permits/pn/index.html. Additionally, public notice will be issued if a public hearing is to be held because of a significant degree of interest in or with water quality concerns related to a draft permit. No public notice is required when a request for a permit modification or termination is denied; however, the requester and permittee must be notified of the denial in writing.

The Department must issue public notice of a pending operating permit or of a new or reissued statewide general permit. The public comment period is the length of time not less than 30 days following the date of the public notice which interested persons may submit written comments about the proposed permit.

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

✓ The Public Notice period for this operating permit was May 15, 2020 through June 15, 2020. No comments were received.

DATE OF FACT SHEET: MARCH 31, 2020

COMPLETED BY:
HEATHER PETERS, ENVIRONMENTAL SUPERVISOR
MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
OPERATING PERMITS SECTION - INDUSTRIAL UNIT
(573) 526-5449
Heather.peters@dnr.mo.gov
These Standard Conditions incorporate permit conditions as required by 40 CFR 122.41 or other applicable state statutes or regulations. These minimum conditions apply unless superseded by requirements specified in the permit.

Part I – General Conditions

Section A – Sampling, Monitoring, and Recording

1. Sampling Requirements.
   a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
   b. All samples shall be taken at the outfall(s) or Missouri Department of Natural Resources (Department) approved sampling location(s), and unless specified, before the effluent joins or is diluted by any other body of water or substance.

2. Monitoring Requirements.
   a. Records of monitoring information shall include:
      i. The date, exact place, and time of sampling or measurements;
      ii. The individual(s) who performed the sampling or measurements;
      iii. The date(s) analyses were performed;
      iv. The individual(s) who performed the analyses;
      v. The analytical techniques or methods used; and
      vi. The results of such analyses.
   b. If the permittee monitors any pollutant more frequently than required by the permit at the location specified in the permit using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring shall be included in the calculation and reported to the Department with the discharge monitoring report data (DMR) submitted to the Department pursuant to Section B, paragraph 7.

3. Sample and Monitoring Calculations. Calculations for all sample and monitoring results which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in the permit.

4. Test Procedures. The analytical and sampling methods used shall conform to the reference methods listed in 10 CSR 20-7.015 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 that the selected methods are able to quantify the presence of pollutants in a given discharge at concentrations that are 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 minimum level is at or below the level of the applicable water quality criterion for the pollutant 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 that 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. These methods are also required for parameters that are listed as monitoring only, as the data collected may be used to determine if limitations need to be established. A permittee is responsible for working with their contractors to ensure that the analysis performed is sufficiently sensitive.

5. Record Retention. Except for records of monitoring information required by the permit related to the permittee’s sewage sludge use and disposal activities, which shall be retained for a period of at least five (5) years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

6. Illegal Activities.
   a. The Federal Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under the permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than two (2) years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than four (4) years, or both.
   b. The Missouri Clean Water Law provides that any person or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained pursuant to sections 644.006 to 644.141 shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than six (6) months, or by both. Second and successive convictions for violation under this paragraph by any person shall be punished by a fine of not more than $50,000 per day of violation, or by imprisonment for not more than two (2) years, or both.

Section B – Reporting Requirements

1. Planned Changes.
   a. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility when:
      i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
      ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42; and
      iii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;
   b. Any facility expansions, production increases, or process modifications which will result in a new or substantially different discharge or sludge characteristics must be reported to the Department 60 days before the facility or process modification begins. Notification may be accomplished by application for a new permit. If the discharge does not violate effluent limitations specified in the permit, the facility is to submit a notice to the Department of the changed discharge at least 30 days before such changes. The Department may require a construction permit and/or permit modification as a result of the proposed changes at the facility.

   a. The permittee shall report any noncompliance which may endanger health or the environment. Relevant information shall be provided orally or via the current electronic method approved by the Department, within 24 hours from the time the permittee becomes aware of the circumstances, and shall be reported to the appropriate Regional Office during normal business hours or the Environmental Emergency Response hotline at 573-634-2436 outside of normal business hours. A written submission shall also be provided within five (5) business days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
b. The following shall be included as information which must be reported within 24 hours under this paragraph:
   i. Any unanticipated bypass which exceeds any effluent limitation in the permit.
   ii. Any upset which exceeds any effluent limitation in the permit.
   iii. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit required to be reported within 24 hours.

c. The Department may waive the written report on a case-by-case basis for reports under paragraph 2. b. of this section if the oral report has been received within 24 hours.

3. **Anticipated Noncompliance.** The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The notice shall be submitted to the Department 60 days prior to such changes or activity.

4. **Compliance Schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date. The report shall provide an explanation for the instance of noncompliance and a proposed schedule or anticipated date, for achieving compliance with the compliance schedule requirement.

5. **Other Noncompliance.** The permittee shall report all instances of noncompliance not reported under paragraphs 2, 3, and 6 of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph 2. a. of this section.

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

7. **Discharge Monitoring Reports.**
   a. Monitoring results shall be reported at the intervals specified in the permit.
   b. Monitoring results must be reported to the Department via the current method approved by the Department, unless the permittee has been granted a waiver from using the method. If the permittee has been granted a waiver, the permittee must use forms provided by the Department.
   c. Monitoring results shall be reported to the Department no later than the 28th day of the month following the end of the reporting period.

**Section C – Bypass/Upset Requirements**

1. **Definitions.**
   a. **Bypass:** the intentional diversion of waste streams from any portion of a treatment facility, except in the case of blending.
   b. **Severe Property Damage:** substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
   c. **Upset:** an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

2. **Bypass Requirements.**
   a. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2. b. and 2. c. of this section.

   b. Notice. i. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.
   ii. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Section B – Reporting Requirements, paragraph 5 (24-hour notice).

3. **Prohibition of bypass.**
   i. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:
      1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
      2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
   3. The permittee submitted notices as required under paragraph 2. b. of this section.
   ii. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three (3) conditions listed above in paragraph 2. c. i. of this section.

**Section D – Administrative Requirements**

1. **Duty to Comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Missouri Clean Water Law and Federal Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.
   a. The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
   b. The Federal Clean Water Act provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed $25,000 per day for each violation. The Federal Clean Water Act provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement...
imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(ii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions.

c. Any person may be assessed an administrative penalty by the EPA Director for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed $10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $25,000. Penalties for Class II violations are not to exceed $10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $125,000.

d. It is unlawful for any person to cause or permit any discharge of water contaminants from any water contaminant or point source located in Missouri 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. In the event the commission or the director determines that any provision of sections 644.006 to 644.141 of the Missouri Clean Water Law or any standard, rules, limitations or regulations promulgated pursuant thereto, or permits issued by, or any final abatement order, other order, or determination made by the commission or the director, or any filing requirement pursuant to sections 644.006 to 644.141 of the Missouri Clean Water Law or any other provision which this state is required to enforce pursuant to any federal water pollution control act, is being, was, or is in imminent danger of being violated, the commission or director may cause to have instituted a civil action in any court of competent jurisdiction for the injunctive relief to prevent any such violation or further violation or for the assessment of a penalty not to exceed $10,000 per day for each day, or part thereof, the violation occurred and continues to occur, or both, as the court deems proper. Any person who willfully or negligently commits any violation in this paragraph shall, upon conviction, be punished by a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than one year, or both. Second and successive convictions for violation of the same provision of this paragraph by any person shall be punished by a fine of not more than $50,000 per day of violation, or by imprisonment for not more than two (2) years, or both.

2. Duty to Reapply.
   a. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.
   b. A permittee with a currently effective site-specific permit shall submit an application for renewal at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Department. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)
   c. A permittees with currently effective general permit shall submit an application for renewal at least 30 days before the existing permit expires, unless the permittee has been notified by the Department that an earlier application must be made. The Department may grant permission for a later submission date. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)

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

4. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

5. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

6. Permit Actions.
   a. Subject to compliance with statutory requirements of the Law and Regulations and applicable Court Order, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:
      i. Violations of any terms or conditions of this permit or the law;
      ii. Having obtained this permit by misrepresentation or failure to disclose fully any relevant facts;
      iii. A change in any circumstances or conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge; or
   b. Any reason set forth in the Law or Regulations.
   c. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

7. Permit Transfer.
   a. Subject to 10 CSR 20-6.010, an operating permit may be transferred upon submission to the Department of an application to transfer signed by the existing owner and the new owner, unless prohibited by the terms of the permit. Until such time the permit is officially transferred, the original permittee remains responsible for complying with the terms and conditions of the existing permit.
   b. The Department may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Missouri Clean Water Law or the Federal Clean Water Act.
   c. The Department, within 30 days of receipt of the application, shall notify the new permittee of its intent to revoke or reissue or transfer the permit.

8. Toxic Pollutants. The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Federal Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

9. Property Rights. This permit does not convey any property rights of any sort, or any exclusive privilege.
10. **Duty to Provide Information.** The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

11. **Inspection and Entry.** The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the Department), upon presentation of credentials and other documents as may be required by law, to:
   a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;
   b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
   c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
   d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Federal Clean Water Act or Missouri Clean Water Law, any substances or parameters at any location.

12. **Closure of Treatment Facilities.**
   a. Persons who cease operation or plan to cease operation of waste, wastewater, and sludge handling and treatment facilities shall close the facilities in accordance with a closure plan approved by the Department.
   b. Operating Permits under 10 CSR 20-6.010 or under 10 CSR 20-6.015 are required until all waste, wastewater, and sludges have been disposed of in accordance with the closure plan approved by the Department and any disturbed areas have been properly stabilized. Disturbed areas will be considered stabilized when perennial vegetation, pavement, or structures using permanent materials cover all areas that have been disturbed. Vegetative cover, if used, shall be at least 70% plant density over 100% of the disturbed area.

13. **Signatory Requirement.**
   a. All permit applications, reports required by the permit, or information requested by the Department shall be signed and certified. (See 40 CFR 122.22 and 10 CSR 20-6.010)
   b. The Federal Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six (6) months per violation, or by both.
   c. The Missouri Clean Water Law provides that any person who knowingly makes any false statement, representation or certification in any application, record, report, plan, or other document filed or required to be maintained pursuant to sections 644.006 to 644.141 shall, upon conviction, be punished by a fine of not more than ten thousand dollars, or by imprisonment for not more than six months, or by both.

14. **Severability.** The provisions of the permit are severable, and if any provision of the permit, or the application of any provision of the permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of the permit, shall not be affected thereby.
APPLICATION TO RENEW MISSOURI STATE OPERATING PERMIT
MO-0115517

Cargill
MEAT SOLUTIONS CORPORATION

California Processing Plant and Feed Mill
1001 East Smith Street,
California, MO 65018

PREPARED BY:

ECCI
13000 Cantrell Road
Telephone: (501) 975-8100

June 2019
APPLICATION TO RENEW MISSOURI STATE OPERATING PERMIT MO-0115517

Cargill™
MEAT SOLUTIONS CORPORATION
California Processing Plant and Feed Mill
1001 East Smith Street,
California, MO 65018

June 2019

PREPARED BY: [Signature]
PENNYE L. BRAY, REM, REPA
ECCI, SENIOR PROJECT MANAGER

REVIEWED BY: [Signature]
RODNEY K. BREUER, P.E.
ECCI, PRINCIPAL
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Attachments

Attachment A: MDNR Form A
Attachment B: MDNR Form C
Attachment C: Flow Schematic
Attachment D: Site Layout
Attachment E: Secretary of State Business Entity Detail (Good Standing)
Cargill Meat Solutions Corporation
California, Missouri Processing Plant and Feed Mill Complex
Permit MO-0115517 Renewal Application

1.0 INTRODUCTION
Cargill Meat Solutions Corporation (Cargill), California, Missouri Processing Plant and Feed Mill Complex was issued a National Pollutant Discharge Elimination System (NPDES) Permit (MO-0115517) by the Missouri Department of Natural Resources (MDNR) with an effective date of February 1, 2015. The permit will expire on December 31, 2019. The permit serves as both a Federal NPDES Permit and a Missouri State Operating Permit. Permit MO-0115517 authorizes the Cargill - California, Missouri complex to discharge stormwater associated with industrial activities to an unnamed tributary to East Brush Creek in accordance with the terms and conditions set forth in the permit.

MO-0115517, Standard Condition, Part 1.D.2. a of the permit requires the permittee to reapply and obtain a new permit to continue the regulated activity beyond the expiration date of the permit. As per, Standard Condition, Part 1.D.2.b a complete permit application is to be submitted to the MDNR at least 180 days prior to the permit expiration. This application fulfills this requirement.

2.0 PROCESS DESCRIPTION
The Cargill California Missouri complex includes a poultry slaughtering and processing plant and an animal feed mill. The industrial activities at the complex are classified under Standard Industrial Classification Code (SIC) 2015 (Poultry Processing) and 2048 (prepared feeds, "not elsewhere classified.") This SIC code includes the manufacturing of poultry feeds, supplements, and concentrates.
The Cargill complex comprises 42 acres with the processing plant occupying the majority of the south and western sides of the property. A series of retention basins and wetland cells, occupying approximately 12 acres of the total acreage are located on the northern portion of the property and the feed mill is located on the eastern side. There is also a storage building, previously occupied by the truck maintenance contractor, northwest corner of the property. Maintenance of the truck fleet currently takes place at an offsite location. The processing plant area includes the kill/processing plant building, an offal/wastewater treatment facility, offal plant, and live haul holding sheds.

The operations at the facility include receiving and temporary holding of live turkeys, slaughtering, defeathering, evisceration and processing of whole birds. The facility also includes an offal/wastewater processing building and animal feed mill facility. The final products are packaged whole turkeys (processing plant) and pelletized animal feed (Feed Mill).

Shipping and receiving takes place via truck at both the Processing Plant and the Feed Mill. Live turkeys are received into the facility at the northwestern gate where the trailers are weighed and then staged in the receiving/staging area (cooling sheds). The turkeys are then processed through the facility and shipped out in refrigerated trailers. Offal and feathers are conveyed to the old offal building via designated pipes, where it is loaded into trucks for transfer offsite to a rendering facility. The primary raw material at the processing plant is live turkeys. However, additional materials used include, compressor oils, refrigeration oils, ammonia, sanitation chemicals and miscellaneous hydraulic and lubricating oils (maintenance.) All processing activities take place indoors with no exposure to stormwater.

The feed mill processes both dry and liquid raw materials to form the animal feed. All shipping and receiving takes place by truck. The dry feed materials are unloaded in the covered truck unloading area where the materials are then conveyed to the various storage silos prior to processing through the mill. Animal fat and other liquid feed additives and ingredients are received at the truck platform on the northwest side
of the mill adjacent to the tank farm. The materials are received directly from the various tanker trucks into the respective storage tanks.

The manufacturing process involves processing the grains through hammer mill grinders for particle size reduction. The milled grain, various liquid feed ingredients, and other raw materials are then transferred to a scale hopper, weighed, and dumped into a mixer unit. After mixing, the ingredients are unloaded into a surge hopper and transferred to several mash storage bins. The feed mix is then pelletized at an elevated temperature in the pellet mill. After manufacture, the pellets are sent to a cooler unit for cooling to ambient temperature. The feed pellets next undergo screening operations for particle-sizing. After screening, the pellets are coated with fat, blended, and transferred to a bulk storage station. The finished poultry feed products are then loaded onto trucks for delivery to company farms. All the manufacturing operations take place indoors with no exposure to stormwater.

3.0 AQUEOUS WASTESTREAMS

The industrial activities at the complex are classified under Standard Industrial Classification Code (SIC) 2015 (Poultry Processing) and 2048 (prepared feeds, "not elsewhere classified.")

3.1 Process Wastewater

The facility generates process wastewater primarily through sanitation activities, chiller discharge, boiler blowdown, ice melt basting operations and the live haul truck wash. The facility process wastewater and truck wash water are treated onsite in the pretreatment facility and discharged to the City of California, Missouri wastewater treatment facility. No process related wastewater is discharged under the terms of MO-0115517. A mass balance diagram showing the facility water use and discharge volumes is shown in Attachment C.
3.2 Sanitary/Domestic Wastewater
Sanitary sewage and domestic wastewaters are generated from the facility restrooms, and locker rooms. These waste streams generate approximately 5,000 gallons per day (GPD) which is conveyed to the City of California municipal wastewater treatment system.

3.3 Stormwater Runoff
Stormwater runoff from the processing plant and the feed mill discharges into a series of retention basins and wetland cells prior to discharge via Outfall 001 under the terms and conditions of MO-0115517.

4.0 DISCHARGE TREATMENT SYSTEMS

4.1 Process/Sanitary Wastewater
Process wastewater is treated in the onsite pretreatment plant prior to discharge to the City wastewater system. The onsite treatment consists of equalization, offal separation, polymer addition and dissolved air floatation (DAF). The offal is removed and transferred offsite for disposal. The sludge is removed from the DAF and transferred offsite for removal. In general, the facility discharges approximately 887,569 gpd of wastewater to the Municipal treatment system. There is no discharge of process related wastewaters to the stormwater conveyance system.

The discharges from the facility restrooms, and lockers rooms are all routed directly to the City sewer system with no treatment.

4.2 Stormwater Treatment System
In general, the stormwater drainage is directed away from the processing plant and active feed mill areas to drains and drainage ditches that convey the flow to the north to a system of detention basins and wetland cells. There are three primary drainage areas that flow to three detention basins each with a multi-cell wetland.
Drainage Area A encompasses the facility parking lots and the storm drain inlets along the process buildings. This area contains the greatest risk of stormwater contamination for the facility operations. Drainage Area B includes only the runoff from the gravel parking area and the former Truck Shop, now used for storage. This area also includes the fueling island and fuel storage area. Drainage Area C encompasses the majority of the eastern half of the facility property. This drainage area includes the eastern end of the processing facility, the entire feed mill area, the wastewater pretreatment facility, former rendering facility (feather and sludge processing) and the truck wash facility.

Detention Basins A and B each discharge to a five-wetland cell system, while Basin C discharges to a three-cell wetland. The flow from the wetland cells discharges to a swale that directs the flow to a third detention pond/constructed wetland for polishing prior to final discharge through a culvert (Outfall 001) into an unnamed tributary to East Brush Creek north of the property. Each Detention Bay/Wetland system is estimated to have a 30 to 40-day detention period during high rainfall periods. The unnamed tributary flows for approximately 2.2 miles before becoming confluent with East Brush Creek which flows through the city of California prior to becoming confluent with Moniteau Creek before discharging to the Missouri River.

The site location is shown on the topographic map in Figure 1.
Figure 1 – Site Location Map

Boundaries Not Exact
USGS 7.5 Minute Topographic Map
California North, Missouri Quadrangle
Figure 3 – Site Location (County) Map
Missouri Department of Natural Resources  
Water Protection Program  
Form A - Application for Nondomestic Permit Under Missouri Clean Water Law

Please read all the accompanying instructions before completing this form. Submittal of an incomplete application may result in the application being returned.

If your facility is eligible for a no-exposure exemption:
Fill out the No Exposure Certification Form (Mo 780-2826): [https://dnr.mo.gov/forms/780-2828-f.pdf](https://dnr.mo.gov/forms/780-2828-f.pdf)

1. Reason for Application:
   - a. This facility is now in operation under Missouri State Operating Permit (permit) MO – 0115517, is submitting an application for renewal, and there is no proposed increase in design wastewater flow. Annual fees will be paid when invoiced and there is no additional permit fee required for renewal.
   - b. This facility is now in operation under permit MO – ————-—, is submitting an application for renewal, and there is a proposed increase in design wastewater flow. Antidegradation Review may be required. Annual fees will be paid when invoiced and there is no additional permit fee required for renewal.
   - c. This facility is submitting an application for a new permit (for a new facility). Antidegradation Review may be required. New permit fee is required.
   - d. This facility is now in operation under Missouri State Operating Permit (permit) MO – ————-—, and is requesting a modification to the permit. Antidegradation Review may be required. Modification fee is required.

2. Facility

<table>
<thead>
<tr>
<th>Name</th>
<th>Telephone Number with Area Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cargill Value Added Meats (Cargill Meat Solutions)</td>
<td>(573) 796-2123</td>
</tr>
<tr>
<td>Address (Physical)</td>
<td>City</td>
</tr>
<tr>
<td>1001 East Smith Street</td>
<td>California</td>
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3. Owner

<table>
<thead>
<tr>
<th>Name</th>
<th>Telephone Number with Area Code</th>
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<tbody>
<tr>
<td>Cargill Meat Solutions Corporation</td>
<td>(316) 291-3478</td>
</tr>
<tr>
<td>Address (Mailing)</td>
<td>City</td>
</tr>
<tr>
<td>825 E. Douglas</td>
<td>Wichita</td>
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4. Continuing Authority

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<td>(316) 281-3478</td>
</tr>
<tr>
<td>Address (Mailing)</td>
<td>City</td>
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<tr>
<td>825 E. Douglas</td>
<td>Wichita</td>
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5. Operator Certification

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<tr>
<td>Cargill Meat Solutions Corp. - Michael Gengler, Plant Manager</td>
<td>NA</td>
<td>(573) 796-7135</td>
</tr>
<tr>
<td>Address (Mailing)</td>
<td>City</td>
<td>State</td>
</tr>
<tr>
<td>1001 East Smith Street</td>
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6. Facility Contact

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<tbody>
<tr>
<td>Heather Allen</td>
<td>EHS Manager</td>
<td>(573) 796-7145</td>
</tr>
<tr>
<td>E-Mail Address</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heather_A <a href="mailto:llen@cargill.com">llen@cargill.com</a></td>
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7. Downstream Landowner(S) Attach additional sheets as necessary.

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<tr>
<th>Name</th>
<th>City</th>
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<tbody>
<tr>
<td>James Murphy</td>
<td>California</td>
<td>MO</td>
<td>65018</td>
</tr>
<tr>
<td>Address</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>59441 Gordon Road</td>
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Mo 780-1479 (02-19)
8. ADDITIONAL FACILITY INFORMATION

8.1 Legal Description of Outfalls. (Attach additional sheets if necessary.)

For Universal Transverse Mercator (UTM), use Zone 15 North referenced to North American Datum 1983 (NAD83)

<table>
<thead>
<tr>
<th>UTM Coordinates Easting (X):</th>
<th>Northing (Y):</th>
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<tr>
<td>001 001 001 001 001</td>
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8.2 Primary Standard Industrial Classification (SIC) and Facility North American Industrial Classification System (NAICS) Codes.

<table>
<thead>
<tr>
<th>Primary SIC 2015</th>
<th>SIC 2048</th>
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<tr>
<td>and NAICS 31115</td>
<td>and NAICS 31119</td>
</tr>
</tbody>
</table>

9. ADDITIONAL FORMS AND MAPS NECESSARY TO COMPLETE THIS APPLICATION

A. Is this permit for a manufacturing, commercial, mining, solid/hazardous waste, or silviculture facility? YES ☑ NO ☐
   If yes, complete Form C.

B. Is the facility considered a “Primary Industry” under EPA guidelines (40 CFR Part 122, Appendix A)? YES ☐ NO ☑
   If yes, complete Forms C and D.

C. Is wastewater land applied? YES ☑ NO ☐
   If yes, complete Form I.

D. Are sludge, biosolids, ash, or residuals generated, treated, stored, or land applied? YES ☑ NO ☐
   If yes, complete Form R.

E. Have you received or applied for any permit or construction approval under the CWA or any other environmental regulatory authority? YES ☑ NO ☐
   If yes, please include a list of all permits or approvals for this facility.

F. Do you use cooling water in your operations at this facility? YES ☑ NO ☐
   If yes, please indicate the source of the water:

G. Attach a map showing all outfalls and the receiving stream at 1" = 2,000' scale.

10. 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. **One of the following must be checked in order for this application to be considered complete.** Please visit [http://dmr.mo.gov/env/wps/edmr.htm](http://dmr.mo.gov/env/wps/edmr.htm) to access the Facility Participation Package.

- ☐ You have completed and submitted with this permit application the required documentation to participate in the eDMR system.
- ☑ You have previously submitted the required documentation to participate in the eDMR system and/or you are currently using the eDMR system.
- ☐ You have submitted a written request for a waiver from electronic reporting. See instructions for further information regarding waivers.

11. FEES

Permit fees may be paid by attaching a check, or online by credit card or eCheck through the JetPay system. Use the URL provided to access JetPay and make an online payment: [https://magic.collectorsolutions.com/magic-ui/payers/mo-natural-resources/](https://magic.collectorsolutions.com/magic-ui/payers/mo-natural-resources/)

12. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**NAME AND OFFICIAL TITLE (TYPE OR PRINT)**
Michael Gengier, General Manager

**TELEPHONE NUMBER WITH AREA CODE**
(573) 796-7135

**SIGNATURE**

**DATE SIGNED**
6-25-19

**MO 780-1479 (02-19)**
GENERAL INFORMATION (PLEASE SEE INSTRUCTIONS)

1.0 NAME OF FACILITY
Cargill Meat Solutions Corporation

1.1 THIS FACILITY IS OPERATING UNDER MISSOURI STATE OPERATING PERMIT (MSOP) NUMBER:
MO-0115517

1.2 IS THIS A NEW FACILITY? PROVIDE CONSTRUCTION PERMIT (CP) NUMBER IF APPLICABLE.
NA

1.3 Describe the nature of the business, in detail. Identify the goods and services provided by the business. Include descriptions of all raw, intermediate, final products, byproducts, or waste products used in the production or manufacturing process, stored outdoors, loaded or transferred and any other pertinent information for potential sources of wastewater or stormwater discharges. The operations at the facility include receiving and temporary storage of live turkeys, slaughtering, defeathering, evisceration and processing of whole birds. The facility also includes an offal/wastewater processing building and animal feed mill facility. The primary raw materials at the processing plant are raw turkeys. The primary raw materials used in the feed mill operations are animal fats, grains (wheat, corn, etc.) and vitamin and mineral additives. The final products are packaged whole turkeys (processing plant) and pelleted animal feed (feed mill). The introduction to the permit application contains a detailed description of the facility operations.

FLOWS, TYPE, AND FREQUENCY

2.0 Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in item B. Construct a water balance on the line drawing by showing average and maximum flows between intakes, operations, treatment units, evaporation, public sewers, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

2.1 For each outfall (1) below, provide: (2) a description of all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, stormwater runoff, and any other process or non-process wastewater, (3) the average flow and maximum flow (put max in parentheses) contributed by each operation and the sum of those operations, (4) the treatment received by the wastewater, and (5) the treatment type code. Continue on additional sheets if necessary.

<table>
<thead>
<tr>
<th>1. OUTFALL NO.</th>
<th>2. OPERATION(S) CONTRIBUTING FLOW: INCLUDE ALL PROCESSES AND SUB PROCESSES AT EACH OUTFALL</th>
<th>3. AVERAGE FLOW AND (MAXIMUM FLOW), INCLUDE UNITS</th>
<th>4. TREATMENT DESCRIPTION</th>
<th>5. TREATMENT CODES FROM TABLE A</th>
</tr>
</thead>
<tbody>
<tr>
<td>001 Stormwater Runoff</td>
<td>0.019 MGD Avg.</td>
<td>settling</td>
<td>1U</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.075 MGD Max</td>
<td>disinfection (UV-sunlight)</td>
<td>2H</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>discharge to surface</td>
<td>4A</td>
<td></td>
</tr>
</tbody>
</table>

Attach additional pages if necessary.
2.2 INTERMITTENT DISCHARGES
Except for stormwater runoff, leaks, or spills, are any of the discharges described in items 2.0 or 2.1 intermittent or seasonal?

<table>
<thead>
<tr>
<th>1. OUTFALL NUMBER</th>
<th>2. OPERATION(S) CONTRIBUTING FLOW</th>
<th>3. FREQUENCY</th>
<th>4. FLOW</th>
<th>C. DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All flow is stormwater</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.3 PRODUCTION
A. Does an effluent limitation guideline (ELG) promulgated by EPA under section 304 of the Clean Water Act apply to your facility? Indicate the part and subparts applicable.

- Yes 40 CFR 432.8406 Subpart(s) K.G. No (go to section 2.5)

B. Are the limitations in the effluent guideline(s) expressed in terms of production (or other measure of operation)? Describe in C below.

- Yes (complete C.) No (go to section 2.5)

C. If you answered "yes" to B, list the quantity representing an actual measurement of your maximum level of production, expressed in the terms and units used in the applicable effluent guideline and indicate the affected outfalls.

<table>
<thead>
<tr>
<th>A. OUTFALL(S)</th>
<th>B. QUANTITY PER DAY</th>
<th>C. UNITS OF MEASURE</th>
<th>D. OPERATION, PRODUCT, MATERIAL, ETC. (specify)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>There is no discharge of process related wastewater under the terms of this permit. Process related wastewater is pretreated onsite and discharged to the City of California POTW. Consequently, this section is not applicable.</td>
</tr>
</tbody>
</table>

2.4 IMPROVEMENTS
A. Are you required by any federal, state, or local authority to meet any implementation schedule for the construction, upgrading, or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

- Yes (complete the following table) No (go to 2.6)

<table>
<thead>
<tr>
<th>1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.</th>
<th>2. AFFECTED OUTFALLS</th>
<th>3. BRIEF DESCRIPTION OF PROJECT</th>
<th>4. FINAL COMPLIANCE DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>A. REQUIRED B. PROJECTED</td>
</tr>
</tbody>
</table>

B. Optional: provide below or attach additional sheets describing water pollution control programs or other environmental projects which may affect discharges. Indicate whether each program is underway or planned, and indicate actual or planned schedules for construction. This may include proposed BMP projects for stormwater.
2.5 SLUDGE MANAGEMENT
Describe the removal of any industrial or domestic biosolids or sludges generated at your facility. Include names and contact information for any haulers used. Note the frequency, volume, and methods (incineration, landfilling, composting, etc) used. See Form A for additional forms which may need to be completed.
There is no sludge generated from the stormwater treatment system. Sludge generated by the process wastewater system is transferred off site for beneficial reuse.

DATA COLLECTION AND REPORTING REQUIREMENTS FOR APPLICANTS

3.0 EFFLUENT (AND INTAKE) CHARACTERISTICS (SEE INSTRUCTIONS)

A. & B. See instructions before continuing – complete one Table 1 for each outfall (and intake) – annotate the outfall (intake) number or designation in the space provided. The facility is not required to complete intake data unless required by the department or rule.

C. Use the space below to list any pollutants listed in the instructions section 3.0 C. Table B which you know or have reason to believe is discharged or may be discharged from any outfall not listed in parts 3.0 A or B on Table 1. For every pollutant listed, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

<table>
<thead>
<tr>
<th>1. POLLUTANT</th>
<th>2. SOURCE</th>
<th>3. OUTFALL(S)</th>
<th>4. ANALYTICAL RESULTS (INCLUDE UNITS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.1 Whole Effluent Toxicity Testing
A. To your knowledge, have any Whole Effluent Toxicity (WET) tests been performed on the facility discharges (or on receiving waters in relation to your discharge) within the last three years?
☐ Yes (go to 3.1 B) ☑ No (go to 3.2)

3.1 B
Disclose wet testing conditions, including test duration (chronic or acute), the organisms tested, and the testing results. Provide any results of toxicity identification evaluations (TIE) or toxicity reduction evaluations (TRE) if applicable. Please indicate the conclusions of the test(s) including any pollutants identified as causing toxicity and steps the facility is taking to remedy the toxicity.

NA

3.2 CONTRACT ANALYSIS INFORMATION
Were any of the analyses reported herein, above, or on Table 1 performed by a contract laboratory or consulting firm?
☑ Yes (list the name, address, telephone number, and pollutants analyzed by each laboratory or firm.) ☐ No (go to 4.0)

<table>
<thead>
<tr>
<th>A. LAB NAME</th>
<th>B. ADDRESS</th>
<th>C. TELEPHONE (area code and number)</th>
<th>D. POLLUTANTS ANALYZED (list or group)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Surveys &amp; Services</td>
<td>1113 Fay Street Columbia, MO 65201</td>
<td>(573) 449-2846</td>
<td>All</td>
</tr>
</tbody>
</table>
4.0 STORMWATER

4.1
Do you have industrial stormwater discharges from the site? If so, attach a site map outlining drainage areas served by each outfall. Indicate the following attributes within each drainage area: pavement or other impervious surfaces; buildings; outdoor storage areas; material loading and unloading areas; outdoor industrial activities; structural stormwater control measures; hazardous waste treatment, storage, and disposal units; and wells or springs in the area.

<table>
<thead>
<tr>
<th>OUTFALL NUMBER</th>
<th>TOTAL AREA DRAINED (PROVIDE UNITS)</th>
<th>TYPES OF SURFACES (VEGETATED, STONE, PAVED, ETC)</th>
<th>BEST MANAGEMENT PRACTICES EMPLOYED; INCLUDE STRUCTURAL BMPS AND TREATMENT DESIGN FLOW FOR BMPS; DESCRIBE HOW FLOW IS MEASURED</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>42 acres</td>
<td>42% grass/basins/wetlands</td>
<td>The facility has developed and implemented a Stormwater Pollution Prevention Plan (SWPPP), specific to the facility operations. The majority of the industrial activities at the facility take place indoors. However, the live haul holding/cooling sheds are located outside the main buildings but are covered with roofs to minimize exposure. Stormwater runoff from the roof and outdoor areas flows to a series of detention basins/wetland cells for settling and filtration prior to discharge. Site map is attached.</td>
</tr>
</tbody>
</table>

4.2 STORMWATER FLOWS
Provide the date of sampling with the flows, and how the flows were estimated.
The facility is required to measure the flow on a quarterly basis. Flow is measured using a jar and a timer.

SIGNATORY REQUIREMENTS

6.0 CERTIFICATION
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (TYPE OR PRINT)
Michael Gengler, General Manager

TELEPHONE NUMBER WITH AREA CODE
(573) 796-7135

SIGNATURE (SEE INSTRUCTIONS)
[Signature]

DATE SIGNED
6-25-19
**Table 1**

**Effluent (And Intake) Characteristics**

<table>
<thead>
<tr>
<th>EFFLUENT (AND INTAKE) CHARACTERISTICS</th>
<th>THIS OUTFALL IS: Effluent (stormwater)</th>
<th>OUTFALL NO. 001</th>
</tr>
</thead>
</table>

### 3.0 PART A – You must provide the results of at least one analysis for every pollutant in Part A. Complete one table for each outfall or proposed outfall. See instructions.

#### 1. POLLUTANT

<table>
<thead>
<tr>
<th>POLLUTANT</th>
<th>1. MAXIMUM DAILY VALUE</th>
<th>2. MAXIMUM 30 DAY VALUES</th>
<th>3. LONG TERM AVERAGE VALUES</th>
<th>D. NO. OF ANALYSES</th>
<th>3. UNITS (specify if blank)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1) CONCENTRATION</td>
<td>(2) MASS</td>
<td>(1) CONCENTRATION</td>
<td>(2) MASS</td>
<td>(1) CONCENTRATION</td>
</tr>
<tr>
<td>A. Biochemical Oxygen Demand, 5-day (BOD5)</td>
<td>34</td>
<td>NA</td>
<td>34</td>
<td>NA</td>
<td>9.1</td>
</tr>
<tr>
<td>B. Chemical Oxygen Demand (COD)</td>
<td>112</td>
<td>NA</td>
<td>112</td>
<td>NA</td>
<td>34.4</td>
</tr>
<tr>
<td>C. Total Organic Carbon (TOC)</td>
<td>7.8</td>
<td>NA</td>
<td>7.8</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>D. Total Suspended Solids (TSS)</td>
<td>80</td>
<td>NA</td>
<td>80</td>
<td>NA</td>
<td>20.6</td>
</tr>
<tr>
<td>E. Ammonia as N</td>
<td>2.2</td>
<td>NA</td>
<td>2.2</td>
<td>NA</td>
<td>1.07</td>
</tr>
<tr>
<td>F. Flow</td>
<td>VALUE: 0.0755</td>
<td>VALUE: 0.0755</td>
<td>VALUE: 0.019</td>
<td>9</td>
<td>MILLIONS OF GALLONS PER DAY (MGD)</td>
</tr>
<tr>
<td>G. Temperature (winter)</td>
<td>VALUE: 53.6</td>
<td>VALUE: 53.6</td>
<td>VALUE: 50.36</td>
<td>5</td>
<td>°F</td>
</tr>
<tr>
<td>H. Temperature (summer)</td>
<td>VALUE: 78.8</td>
<td>VALUE: 78.8</td>
<td>VALUE: 69.8</td>
<td>4</td>
<td>°F</td>
</tr>
<tr>
<td>I. pH</td>
<td>MINIMUM: 7.1</td>
<td>MAXIMUM: 8</td>
<td>AVERAGE: 7.51</td>
<td>9</td>
<td>STANDARD UNITS (SU)</td>
</tr>
</tbody>
</table>

### 3.0 PART B – Mark “X” in column 2A for each pollutant you know or have reason to believe is present. Mark “X” in column 2B for each pollutant you believe to be absent. If you mark Column 2A for any pollutant, you must provide the results for at least one analysis for the pollutant. Complete one table for each outfall (intake). Provide results for additional parameters not listed here in Part 3.0 C.

#### 1. POLLUTANT AND CAS NUMBER (if available)

<table>
<thead>
<tr>
<th>POLLUTANT</th>
<th>2. MARK “X”</th>
<th>3. VALUES</th>
<th>4. UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A. BELIEVED PRESENT</td>
<td>B. BELIEVED ABSENT</td>
<td>A. MAXIMUM DAILY VALUE</td>
</tr>
<tr>
<td></td>
<td>CONCENTRATION</td>
<td>MASS</td>
<td>CONCENTRATION</td>
</tr>
<tr>
<td>A. Alkalinity (CaCO₃)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Bromide (24959-67-9)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Chloride (16887-00-6)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Chlorine, Total Residual</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Color</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. Conductivity</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. Cyanide, Amenable to Chlorination</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

MO 780-1514 (02-19)

Page 5 of 13
### Subpart 1 – Conventional and Non-Conventional Pollutants (Continued)

<table>
<thead>
<tr>
<th>Pollutant Description</th>
<th>2. Mark &quot;X&quot;</th>
<th>A. Maximum Daily Value</th>
<th>B. Maximum 30 Day Value</th>
<th>C. Long Term Average Value</th>
<th>D. No. of Analyses</th>
<th>A. Concentration</th>
<th>B. Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td>G. E. coli</td>
<td>X</td>
<td>4450</td>
<td>4450</td>
<td>1536</td>
<td>6</td>
<td>#/100 ml</td>
<td>NA</td>
</tr>
<tr>
<td>H. Fluoride</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I. Nitrate plus Nitrate (as N)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>J. Kjeldahl, Total (as N)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K. Nitrogen, Total Organic (as N)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L. Oil and Grease</td>
<td>X</td>
<td>&lt;2.0</td>
<td>NA</td>
<td>&lt;2.0</td>
<td>NA</td>
<td>9 mg/L</td>
<td>NA</td>
</tr>
<tr>
<td>M. Phenols, Total</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N. Phosphorus (as P), Total (7723-14-0)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O. Sulfate (as SO₄)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P. Sulfide (as S)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q. Sulfite (as SO₃)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R. Surfactants</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S. Trihalomethanes, Total</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Subpart 2 – Metals

<table>
<thead>
<tr>
<th>Pollutant Description</th>
<th>2. Mark &quot;X&quot;</th>
<th>A. Maximum Daily Value</th>
<th>B. Maximum 30 Day Value</th>
<th>C. Long Term Average Value</th>
<th>D. No. of Analyses</th>
<th>A. Concentration</th>
<th>B. Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td>1M. Aluminum, Total Recoverable (7429-90-5)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2M. Antimony, Total Recoverable (7440-36-9)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2M. Arsenic, Total Recoverable (7440-38-2)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4M. Barium, Total Recoverable (7440-39-3)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5M. Beryllium, Total Recoverable (7440-41-7)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9M. Boron, Total Recoverable (7440-42-8)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7M. Cadmium, Total Recoverable (7440-43-9)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8M. Chromium III Total Recoverable (15065-83-1)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9M. Chromium VI, Dissolved (18540-29-9)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10M. Cobalt, Total Recoverable (7440-48-4)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** E. Coli data presented above was generated from quarterly monitoring results from 2017, 2018 and the first monitoring period of 2019. See attached addendum for further explanation regarding the E. coli values.
<table>
<thead>
<tr>
<th>POLLUTANT AND CAS NUMBER (if available)</th>
<th>MARK &quot;X&quot;</th>
<th>VALUES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A. BELIEVED PRESENT</td>
<td>A. MAXIMUM DAILY VALUE</td>
<td>B. MAXIMUM 30 DAY VALUE</td>
</tr>
<tr>
<td></td>
<td>B. BELIEVED ABSENT</td>
<td>CONCENTRATION</td>
<td>MASS</td>
</tr>
<tr>
<td>Subpart 2 – Metals (Continued)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11M, Copper, Total Recoverable (7440-50-8)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12M, Iron, Total Recoverable (7439-85-6)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13M, Lead, Total Recoverable (7439-92-1)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14M, Magnesium, Total Recoverable (7439-95-4)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15M, Manganese, Total Recoverable (7439-96-5)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15M, Mercury, Total Recoverable (7439-97-6)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17M, Methylmercury (22967926)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18M, Molybdenum, Total Recoverable (7439-98-7)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19M, Nickel, Total Recoverable (7440-02-9)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
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MO 780-1514 (02-19)
Page 7 of 13
Addendum Form 780-1514-f

Explanation of E. Coli Values

The Cargill California, Missouri facility is required to monitor E. coli values during the 2nd, 3rd and 4th quarters of each year. The maximum daily value shown was reported during the July-September 2018 monitoring period. The average value shown is based on the monitoring data from 2017, 2018 and 2019 (to date). Cargill has been working with the engineering firm that designed the wetland cells to determine the best course of action to address the E. coli values. It was determined that the cell depth had been compromised due to excessive rain events and flooding resulting in decreased detention time required for the E. coli to be adequately destroyed. Maintenance activities were conducted to return the cells to their design depth in May 2018. The facility also hired a licensed contractor to conduct targeted spraying for duckweed. Samples collected during the last quarter of 2018 indicated much lower levels of E. coli. The facility intends to continue these maintenance activities on a routine schedule as needed to ensure compliance with the facility permit.
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- Secretary of State Home Page

**Missouri Online Business Filing**

Gen. Business - For Profit Details as of 4/29/2019

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**General Information**

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