

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

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

Permit No. MO-0135127

Owner: Branson Airport, LLC
Address: 4000 Branson Airport Blvd., Hollister, MO 65672

Continuing Authority: same as above
Address: same as above

Facility Name: Branson Airport, LLC
Facility Address: 4000 Branson Airport Blvd., Hollister, MO 65672

Legal Description: see page two
UTM Coordinates: see page two

Receiving Stream: Tributary to Thorp Creek (see page two)
First Classified Stream and ID: Turkey Creek (C) WBID # 2443
USGS Basin & Sub-watershed No.: Turkey Creek 11010003-0102

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

FACILITY DESCRIPTION

See page two.
A certified wastewater operator is not required.

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

AUGUST 1, 2015
Effective Date

Sara Parker Pauley, Director, Department of Natural Resources

DECEMBER 31, 2019
Expiration Date

John Madras, Director, Water Protection Program

FACILITY DESCRIPTION (CONTINUED)

OUTFALL #001

Wastewater treatment facility; SIC # 4581& 4952 — Bar Screens / flow equalization / anoxic basin / oxic basin / post-anoxic basin / tertiary filters / chemical addition to facilitate phosphorus removal / ultraviolet disinfection / effluent pump station

Legal Description: NW¼, SW¼, NE¼, Sec. 10, T21N, R21W, Taney County

UTM X = 482501 Y = 4043481

Receiving Stream: Tributary to Thorp Creek (Losing)

First Classified Stream and ID: Turkey Creek (C) (2443)

Design organic population equivalent is 106.

Design average daily flow is 10,650 gallons per day.

Average flow < 5000 gallons per day.

Design sludge production is 2 dry tons per year. Sludge disposal by contract hauler.

OUTFALL #002

Airport; SIC # 4581 — Oil/water separator and stormwater discharge only.

Legal Description: NE ¼, SE ¼, NW ¼, Sec. 10, T21N, R21W, Taney County

UTM X = 482378 Y = 4043400

Receiving Stream: Tributary to Thorp Creek (Losing)

First Classified Stream and ID: Turkey Creek (C) (2443)

Design flow is 250,000 gallons per day. Actual flow is dependent upon rainfall.

OUTFALL #003

Airport; SIC # 4581 — De-icing pad area; stormwater discharge only; not for use during de-icing activities

Legal Description: SE ¼, NW ¼, NW ¼, Sec. 10, T21N, R21W, Taney County

UTM X = 482011 Y = 4043609

Receiving Stream: Tributary to Turkey Creek

First Classified Stream and ID: Turkey Creek (C) (2443)

Design flow is 44,000 gallons per day. Actual flow is dependent upon rainfall.

OUTFALL #004

Airport; SIC # 4581 — East-side taxiway runoff; stormwater discharge only

Legal Description: SE ¼, NW ¼, NW ¼, Sec. 10, T21N, R21W, Taney County

UTM X = 481922 Y = 4043536

Receiving Stream: Tributary to Turkey Creek

First Classified Stream and ID: Turkey Creek (C) (2443)

Design flow is 250,000 gallons per day. Actual flow is dependent upon rainfall.

OUTFALL #005

Airport; SIC # 4581 — Runway runoff and west-side of taxiway runoff; stormwater discharge only

Legal Description: NE ¼, SE ¼, NW ¼, Sec. 10, T21N, R21W, Taney County

UTM X = 481721 Y = 4043824

Receiving Stream: Tributary to Turkey Creek

First Classified Stream and ID: Turkey Creek (C) (2443)

Design flow is 500,000 gallons per day. Actual flow is dependent upon rainfall.

OUTFALL #006

Airport; SIC # 4581 — Stormwater retention basin below de-icing pad, stormwater discharge

Legal Description: NW ¼, NW ¼, NW ¼, Sec. 10, T21N, R21W, Taney County

UTM X = 481891 Y = 4043847

Receiving Stream: Tributary to Turkey Creek

First Classified Stream and ID: Turkey Creek (C) (2443)

Design flow is 250,000 gallons per day. Actual flow is dependent upon rainfall.

OUTFALL #007

Airport; SIC # 4581 — De-Icing Storage Tanks

Discharge from this outfall is not authorized, and shall be subject to 40 CFR 122.41(m) and reported according to 40 CFR 122.41(m)(3)(i) & (ii).

Legal Description: SE ¼, NW ¼, NW ¼, Sec. 10, T21N, R21W, Taney County

UTM X = 482011 Y = 4043609

Receiving Stream: Tributary to Turkey Creek

First Classified Stream and ID: Turkey Creek (C) (2443)

Design flow is 0. Actual flow is 0.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

| OUTFALL #001 <i>wastewater treatment facility</i> | | TABLE A-1 INTERIM 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 interim effluent limitations shall become effective on August 1, 2015 , and remain in effect through July 31, 2016 . Such discharges shall be controlled, limited and monitored by the permittee as specified below: | | | | | | |
| EFFLUENT PARAMETERS | UNITS | INTERIM EFFLUENT LIMITATIONS | | | MONITORING REQUIREMENTS | |
| | | DAILY MAXIMUM | WEEKLY AVERAGE | MONTHLY AVERAGE | MEASUREMENT FREQUENCY | SAMPLE TYPE |
| Flow | MGD | * | | * | 3x/week | 24 hr. total |
| Biochemical Oxygen Demand ₅ | mg/L | 15 | | 10 | once/month | grab |
| Total Suspended Solids | mg/L | 20 | | 15 | once/month | grab |
| Ammonia as N (April 1 – Sept 30) (Oct 1 – March 31) | mg/L | 6.8 7.5 | | 2.6 2.9 | once/month | grab |
| <i>Escherichia coli</i> (Note 3) | #/100 ml | 126 | | 126 | once/month | grab |
| Oil & Grease | mg/L | * | | * | once/quarter ‡ | grab |
| Aluminum (total recoverable) (Note 2) | µg/L | 750 | | 370 | once/month | grab |
| Iron (total recoverable) (Note 2) | µg/L | 600 | | 300 | once/month | grab |
| Nitrogen, total N | mg/L | * | | * | once/quarter ‡ | grab |
| Phosphorous, total P | mg/L | * | | 0.5 | once/month | grab |
| EFFLUENT PARAMETER(S) | UNITS | DAILY MINIMUM | DAILY MAXIMUM | MONTHLY AVERAGE MINIMUM | MEASUREMENT FREQUENCY | SAMPLE TYPE |
| pH | SU | 6.5 | 9.0 | | once/month | grab |
| Dissolved Oxygen | mg/L | * | | 5.0 | once/month | grab |
| MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>OCTOBER 28, 2015</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS. | | | | | | |

(see notes and other descriptions on page 7)

| OUTFALL #001 <i>wastewater treatment facility</i> | TABLE A-2 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, 2016 , and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below: | | | | | |
| EFFLUENT PARAMETERS | UNITS | FINAL EFFLUENT LIMITATIONS | | | MONITORING REQUIREMENTS | |
| | | DAILY MAXIMUM | WEEKLY AVERAGE | MONTHLY AVERAGE | MEASUREMENT FREQUENCY | SAMPLE TYPE |
| Flow | MGD | * | | * | 3x/week | 24 hr. total |
| Biochemical Oxygen Demand ₅ | mg/L | 15 | | 10 | once/month | grab |
| Total Suspended Solids | mg/L | 20 | | 15 | once/month | grab |
| Ammonia as N (April 1 – Sept 30) (Oct 1 – March 31) | mg/L | 3.6 | | 1.4 | once/month | grab |
| | | 7.5 | | 2.9 | | |
| <i>Escherichia coli</i> (Note 3) | #/100 ml | 126 | | 126 | once/month | grab |
| Oil & Grease | mg/L | * | | * | once/quarter ‡ | grab |
| Aluminum (total recoverable) (Note 2) | µg/L | 750 | | 227 | once/month | grab |
| Iron (total recoverable) (Note 2) | µg/L | 493 | | 246 | once/month | grab |
| Nitrogen, total N | mg/L | * | | * | once/quarter ‡ | grab |
| Phosphorous, total P | mg/L | * | | 0.5 | once/month | grab |
| EFFLUENT PARAMETER(S) | UNITS | DAILY MINIMUM | DAILY MAXIMUM | MONTHLY AVERAGE MINIMUM | MEASUREMENT FREQUENCY | SAMPLE TYPE |
| pH | SU | 6.5 | 9.0 | | once/month | grab |
| Dissolved Oxygen | mg/L | * | | 5.0 | once/month | grab |
| MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE OCTOBER 28, 2016. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS. | | | | | | |

(see notes and other descriptions on page 7)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (CONTINUED)

| OUTFALL #002 <i>oil/water separator</i> | | TABLE A-3 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, 2015 , and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below: | | | | | | |
| EFFLUENT PARAMETERS | UNITS | FINAL EFFLUENT LIMITATIONS | | | MONITORING REQUIREMENTS | |
| | | DAILY MAXIMUM | WEEKLY AVERAGE | MONTHLY AVERAGE | MEASUREMENT FREQUENCY | SAMPLE TYPE |
| Flow | MGD | * | | | once/quarter ‡ | 24 hr. total |
| Precipitation | Inches | * | | | once/quarter ‡ | 24 hr. total |
| Oil & Grease | mg/L | 10 | | | once/quarter ‡ | grab |
| Chemical Oxygen Demand (COD) | mg/L | 30 | | | once/quarter ‡ | grab |
| Settleable Solids (Note 1) | mL/L/hr | * | | | once/quarter ‡ | grab |
| Gasoline Range Organics (GRO) | µg/L | * | | | once/quarter ‡ | grab |
| Benzene | µg/L | 5 | | | once/quarter ‡ | grab |
| Ethylbenzene | µg/L | 320 | | | once/quarter ‡ | grab |
| Toluene | µg/L | 1000 | | | once/quarter ‡ | grab |
| Xylenes, total | µg/L | 10,000 | | | once/quarter ‡ | grab |
| EFFLUENT PARAMETERS | UNITS | DAILY MINIMUM | DAILY MAXIMUM | | MEASUREMENT FREQUENCY | SAMPLE TYPE |
| pH | SU | 6.5 | 9.0 | | once/quarter ‡ | grab |
| MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE <u>OCTOBER 28, 2015</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS. | | | | | | |

(see notes and other descriptions on page 7)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (CONTINUED)

| OUTFALLS #003, #004, #005, & #006 <i>stormwater only</i> | | TABLE A-4 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, 2015 , and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below: | | | | | | |
| EFFLUENT PARAMETERS | UNITS | FINAL EFFLUENT LIMITATIONS | | | MONITORING REQUIREMENTS | |
| | | DAILY MAXIMUM | WEEKLY AVERAGE | MONTHLY AVERAGE | MEASUREMENT FREQUENCY | SAMPLE TYPE |
| Flow [∞] | gal/day | * | | | once/quarter ‡ | 24 hr. estimate |
| Precipitation [∞] | inches | * | | | once/quarter ‡ | 24 hr. total |
| Oil & Grease [∞] | mg/L | 10 | | | once/quarter ‡ | grab [∞] |
| Total Suspended Solids (Note 1) [∞] | mg/L | * | | | once/quarter ‡ | grab [∞] |
| Settleable Solids (Note 1) [∞] | mL/L/hr | * | | | once/quarter ‡ | grab [∞] |
| Chemical Oxygen Demand [∞] | mg/L | 40 | | | once/quarter ‡ | grab [∞] |
| Benzene (Note 1) [∞] | µg/L | * | | | once/quarter ‡ | grab [∞] |
| Ethylbenzene (Note 1) [∞] | µg/L | * | | | once/quarter ‡ | grab [∞] |
| Toluene (Note 1) [∞] | µg/L | * | | | once/quarter ‡ | grab [∞] |
| Xylenes, total (Note 1) [∞] | µg/L | * | | | once/quarter ‡ | grab [∞] |
| EFFLUENT PARAMETERS | UNITS | DAILY MINIMUM | DAILY MAXIMUM | | MEASUREMENT FREQUENCY | SAMPLE TYPE |
| pH [∞] | SU | 6.5 | 9.0 | | once/quarter ‡ | grab [∞] |
| MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE <u>OCTOBER 28, 2015</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS. | | | | | | |

(see notes and other descriptions on page 7)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (CONTINUED)

- * Monitoring requirement only.
- ∞ All samples shall be collected from a discharge resulting from a precipitation event greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable precipitation event with a discharge. If a precipitation event does not occur within the reporting period, report as no discharge. The total amount of precipitation should be noted from the event from which the samples were collected.
- ‡ See table below for quarterly sampling.

| Quarterly Minimum Sampling Requirements | | | |
|---|-----------------------------|--|------------------------|
| Quarter | Months | Effluent Parameters | Report is Due |
| First | January, February, March | Sample at least once during any month of the quarter | April 28 th |
| Second | April, May, June | Sample at least once during any month of the quarter | July 28th |
| Third | July, August, September | Sample at least once during any month of the quarter | October 28th |
| Fourth | October, November, December | Sample at least once during any month of the quarter | January 28th |

- Note 1 This parameter incorporates a benchmark value associated with Best Management Practices (BMPs). See Special Condition #13 for benchmark value.
- Note 2 If no aluminum or iron was used in a given sampling period, actual analysis is not necessary. Report “0 µg/L”.
- Note 3 Effluent limits of 126 #/100 mL daily maximum and monthly average for *E. coli* are applicable year round due to losing stream designation. No more than 10% of samples shall exceed 126 #/100 mL daily maximum.

B. STANDARD CONDITIONS

In addition to specified conditions stated herein, this permit is subject to the attached PART I AND PART III standard conditions dated AUGUST 1, 2014 AND MARCH 1, 2015 respectively, and hereby incorporated as though fully set forth herein.

C. SPECIAL CONDITIONS

1. This permit establishes final ammonia limitations based on Missouri’s current Water Quality Standard. On August 22, 2013, the U.S. Environmental Protection Agency (EPA) published a notice in the Federal Register announcing the final national recommended ambient water quality criteria for protection of aquatic life from the effects of ammonia in freshwater. The EPA’s guidance, *Final Aquatic Life Ambient Water Quality Criteria for Ammonia – Fresh Water 2013*, is not a rule, nor automatically part of a state’s water quality standards. States must adopt new ammonia criteria consistent with EPA’s published ammonia criteria into their water quality standards to protect the designated uses of water bodies. The Department of Natural Resources has initiated stakeholder discussions on how to best incorporate these new criteria into the State’s rules. A date for when this rule change will occur has not been determined. Also, refer to Section IV of this permit’s factsheet for further information including estimated future effluent limits for this facility. It is recommended the permittee view the Department’s 2013 EPA criteria Factsheet located at <http://dnr.mo.gov/pubs/pub2481.htm>
2. This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.
 - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri’s Water Quality Standards.
 - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri’s list of waters of the state not fully achieving the state’s water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

C. SPECIAL CONDITIONS (CONTINUED)

3. All outfalls must be clearly marked in the field. The facility has six months from date of issuance to obtain and permanently position a sign for outfall #007 (new).
4. Water Quality Standards
 - (a) To the extent required by law, discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
 - (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (1) 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;
 - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (5) There shall be no significant human health hazard from incidental contact with the water;
 - (6) There shall be no acute toxicity to livestock or wildlife watering;
 - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (8) 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.
5. Changes in Discharges of Toxic Substances
The permittee shall notify the Director as soon as it knows or has reason to believe:
 - (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (i) One hundred micrograms per liter (100 µg/L);
 - (ii) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (iii) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (iv) The level established by the Director in accordance with 40 CFR 122.44(f).
 - (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
6. Report as no-discharge when a discharge does not occur during the report period.
7. The facility will "close" the gate valve discharging to outfall #003 prior to any deicing activities occurring. The facility will allow all liquid associated with de-icing activities (including concomitant snow/ice/precipitation) to drain into the holding tanks before diverting flow back to outfall #003.
8. The facility will maintain a minimum margin of safety of five percent total tank capacity in the de-icing holding tanks.
9. Reporting of Non-Detects
 - (a) An analysis conducted by the permittee or their contracted laboratory shall be conducted in such a way that the precision and accuracy of the analyzed result can be enumerated.
 - (b) The permittee shall not report a sample result as "Non-Detect" without also reporting the detection limit of the test. Reporting as "Non Detect" without also including the detection limit will be considered failure to report, which is a violation of this permit.
 - (c) The permittee shall provide the "Non-Detect" sample result using the less than sign and the minimum detection limit (e.g. <10).
 - (d) The permittee shall use one-half of the detection limit for the non-detect result when calculating and reporting monthly averages.
 - (e) See Standard Conditions Part I, Section A, #4 regarding proper detection limits used for sample analysis.

C. SPECIAL CONDITIONS (CONTINUED)

10. It is a violation of the Missouri Clean Water Law to fail to pay fees associated with this permit (644.055 RSMo).
11. 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.
12. The permittee shall implement a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP must be prepared and implemented upon permit issuance. 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, if needed, every five (5) years or as site conditions 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 the following document: Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators, (Document number EPA 833-B-09-002) published by the United States Environmental Protection Agency (USEPA) in February 2009.
 The SWPPP must include the following:
 - (a) A listing of specific Best Management Practices (BMPs) and a narrative explaining how BMPs will be implemented to control and minimize the amount of potential contaminants that may enter stormwater. The BMPs at the facility should be designed to meet this value during rainfall event up to the 10 year, 24 hour rain event.
 - (b) The SWPPP must include a schedule for 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. Deficiencies must be corrected within seven (7) days and the actions taken to correct the deficiencies shall be included with the written report, including photographs. 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.
 - (c) A provision for designating an individual to be responsible for environmental matters.
 - (d) A provision for providing training to all personnel involved in material handling and storage, and housekeeping of maintenance and cleaning areas. Proof of training shall be submitted on request of the department.
13. This permit stipulates pollutant benchmarks applicable to your discharge. The benchmarks do not constitute direct numeric effluent limitations; therefore, a benchmark exceedance alone is not a permit violation. Benchmark monitoring and visual inspections shall be used to determine the overall effectiveness of SWPPP and to assist you in knowing when additional corrective action may be necessary to protect water quality. If a sample exceeds a benchmark concentration you must review your SWPPP and your BMPs to determine what improvements or additional controls are needed to reduce that pollutant in your stormwater discharge(s).

| OUTFALLS #002, #003, #004, #005, AND #006 | |
|--|------------------|
| PARAMETER | BENCHMARK |
| Settleable Solids (SS) | 1.0 mL/L/hr |
| Total Suspended Solids (TSS) | 50 mg/L |
| Benzene | 5 |
| Ethylbenzene | 320 |
| Toluene | 1000 |
| Xylenes, total | 10,000 |

Any time a benchmark exceedance occurs a Corrective Action Report (CAR) must be completed. A CAR is a document that records the efforts undertaken by the facility to improve BMPs to meet benchmarks in future samples. CARs must be retained with the SWPPP and available to the department upon request. If the efforts taken by the facility are not sufficient and subsequent exceedances of a benchmark occur, the facility must contact the department if a benchmark value cannot be achieved. Failure to take corrective action to address a benchmark exceedance and failure to make measureable progress towards achieving the benchmarks is a permit violation.

C. SPECIAL CONDITIONS (CONTINUED)

14. Permittee shall adhere to the following minimum Best Management Practices (BMPs):
 - (a) Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, or warehouse activities and thereby prevent the contamination of storm water 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 that these materials are not exposed to storm water or provide other prescribed BMPs such as plastic lids and/or portable spill pans to prevent the commingling of storm water 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.
 - (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. This could include the use of straw bales, silt fences, or sediment basins, if needed, to comply with effluent limits.
 - (f) Ensure that adequate provisions are provided to prevent surface water intrusion into the storage basin, to divert stormwater runoff around the storage basin, and to protect embankments from erosion.
15. The purpose of the SWPPP and the BMPs listed herein is the prevention of pollution of waters of the state. A deficiency of a BMP means it was not effective in preventing pollution [10 CSR 20-2.010(56)] of waters of the state, and corrective actions means the facility took steps to eliminate the deficiency.
16. Before releasing water accumulated in secondary containment areas it must be examined for hydrocarbon odor and presence of a sheen. On-site remediation may take place prior to testing. If the presence of hydrocarbons is indicated, this water must be taken to the on-site oil/water separator or tested for Total Petroleum Hydrocarbons (TPH). The analytical method for testing TPH must comply with EPA approved testing methods listed in [40 CFR 136] and the water must be tested prior to release to ensure compliance with water quality standards. If the concentration for TPH exceeds 10mg/L, the water shall be taken to a WWTP for treatment.
17. If the oil-water separator is non-functional, discharge is not allowed from outfall #002.
18. Release of a hazardous substance must be reported to the department in accordance with 10 CSR 24-3.010. A record of each reportable spill shall be retained with the SWPPP and made available to the department upon request.
19. The facility must be sufficiently secured to restrict entry by children, livestock and unauthorized persons as well as to protect the facility from vandalism.
20. At least one gate must be provided to access the wastewater treatment facility and provide for maintenance and mowing. The gate shall remain closed except when temporarily opened by; the permittee to access the facility, perform operational monitoring, sampling, maintenance, mowing, or for inspections by the Department. The gate shall be closed and locked when the facility is not staffed.
21. At least one warning sign shall be placed on each side of the facility enclosure in such positions as to be clearly visible from all directions of approach. There shall also be one sign placed for every five hundred feet (150 m) of the perimeter fence. A sign shall also be placed on each gate. Minimum wording shall be SEWAGE TREATMENT FACILITY - KEEP OUT. Signs shall be made of durable materials with characters at least two inches high and shall be securely fastened to the fence, equipment or other suitable locations. The facility has six months from date of issuance to complete this requirement.
22. An Operation and Maintenance (O&M) manual for the wastewater treatment plant shall be maintained by the permittee and made available to the operator. The O&M manual shall include key operating procedures and a brief summary of the operation of the facility. The operator has six months from date of permit issuance to complete this requirement.
23. An all-weather access road to the treatment facility shall be maintained.
24. The discharge from the wastewater treatment facility shall be conveyed to the receiving stream via a closed pipe or a paved or rip-rapped open channel. Sheet or meandering drainage is not acceptable. The outfall sewer shall be protected against the effects of floodwater, ice or other hazards as to reasonably insure its structural stability and freedom from stoppage. The outfall shall be maintained so that a sample of the effluent can be obtained at a point after the final treatment process and before the discharge mixes with the receiving waters.

D. DE-ICING HOLDING TANK CONDITIONS

1. Bypasses are to be reported no more than 72 hours after the release to the Southwest Regional Office during normal business hours or the department's Environmental Emergency Response hotline at 573-634-2436 outside of normal business hours.
2. A holding tank is not a wastewater treatment device. Discharge of untreated water poses a significant risk to the environment. At no time shall a discharge be allowed to occur from the holding tank, collection system, or appurtenances. The permittee will take whatever steps are necessary to ensure wastewater is collected and properly disposed of at a permitted treatment facility to prevent a discharge.
3. High-level alarms and associated telemetry equipment on the holding tank shall be maintained in good working order. High-level alarms shall be positioned in a location to allow adequate time for the operator of the facility to have the accumulated liquid removed before an unpermitted discharge would occur. The alarms and telemetry system shall be tested at least once per quarter.
4. Once per year, the permittee shall report to the department the following information:
 - Date(s) the facility was pumped
 - Name, business address, and phone number of the contract hauler
 - Copy of the written contract between permittee and contract hauler
 - Documentation of approval from permitted facility receiving wastewater from contract hauler
 - Volume of liquid removed
 - Destination of the pumped effluent
 - Documentation that high-level alarms and telemetry system have been testedThe above information shall summarize activities conducted for the prior calendar year. The first report is due JANUARY 28, 2016.

5. Land application of effluent or sludge from the holding tank is not authorized by this permit. Land application may occur after treatment if authorized by the Missouri State Operating Permit for the facility receiving the wastewater or sludge.

E. SCHEDULE OF COMPLIANCE

The facility shall attain compliance with final effluent limitations for ammonia, aluminum, and iron at outfall #001 as soon as reasonably achievable or no later than **one year** after the effective date of this permit.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
FACT SHEET
FOR THE PURPOSE OF RENEWAL
OF
MO-0135127
BRANSON AIRPORT LLC

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollution Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States, and the release of storm water 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.

As per [40 CFR Part 124.8(a)] and [10 CSR 20-6.020(1)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 (operating permit) listed below. A factsheet is not an enforceable part of an operating permit. This factsheet is for an industrial facility.

Part I. FACILITY INFORMATION

Facility Type: Airport, Stormwater, and Wastewater Treatment Facility
Facility SIC Code(s): 4581, 4952
Application Date: 01/10/2014
Expiration Date: 04/21/2014
Last Inspection: 05/18/2011 (not in compliance)

FACILITY MAP



FACILITY DESCRIPTION

The Branson Airport has one runway and a partial parallel taxiway. It is found in the Turkey Creek Watershed. Runoff from the northeast portion of the facility runs northeast then westerly to Thorp Creek which discharges to Turkey Creek. The waste water treatment facility discharges to a portion of a tributary to Thorp Creek which is losing (red line on map above). Because the entire facility is found within two miles of the losing stream, the facility is held to losing-stream standards. The southwestern side of the runway drains away to Turkey Creek. There are no outfalls on the southwestern portion of the runway as no regulated activities occur which would flow westerly to Turkey Creek. The facility states they do not have over 100,000 gallons of glycol-based deicing or 100 tons or more of urea deicing stored on site. Outfall #007 is the outfall which drains the de-icing holding tank. This outfall is no discharge. A contractor pumps and hauls the spent glycol products from the two tanks.

OUTFALL TABLE

| OUTFALL | DESIGN FLOW (CFS) | TREATMENT LEVEL | EFFLUENT TYPE |
|---------|-------------------|---------------------|---|
| #001 | 0.0165 | tertiary | domestic waste water treatment facility |
| #002 | 0.3875 | oil/water separator | treated stormwater |
| #003 | 0.3875 | none | stormwater |
| #004 | 0.3875 | none | stormwater |
| #005 | 0.3875 | none | stormwater |
| #006 | 0.3875 | none | stormwater |
| #007 | 0 | none; holding tank | de-icing product runoff |

FACILITY PERFORMANCE HISTORY & COMMENTS

This facility was initially permitted as a new facility April 22, 2009 with a modification in 2013. The facility has had numerous water quality exceedances, however, many of them were due to unreasonably low limits which were addressed in the modification.. It also appears the facility is using too much aluminum for the treatment of phosphorous removal as evidenced below. Also not shown are thirteen “exceedances” of ethylbenzene because the detection limit value was above the permit limit (reported <1 µg/L when limit was 0.262 and 0.526 µg/L). The facility should review the laboratory used to analyze for this parameter and assure they are using sufficiently sensitive methods found in 40 CFR 136.

The facility was determined to fit the criteria of “significant non-compliance” during the last inspection. However, the report also goes on to state the permittee has already submitted written responses and correspondence as to how they are attempting to identify any possible sources of the chemical oxygen demand exceedances. Several upgrades to the WWTF and a permit modification have greatly decreased the water quality violations over the last year and a half. Aluminum remains an issue. This permit addresses aluminum limits and slightly raises phosphorous limits in an attempt to decrease pollution to waters of the state by aluminum. The permit contains a schedule of compliance for ammonia, aluminum, and iron limits. The facility will, within one year or less, meet new monthly maximums: total recoverable aluminum 370 µg/L was reduced to 227 µg/L because of the high reasonable potential to cause pollution to waters of the state.

EXCEEDANCES TABLE

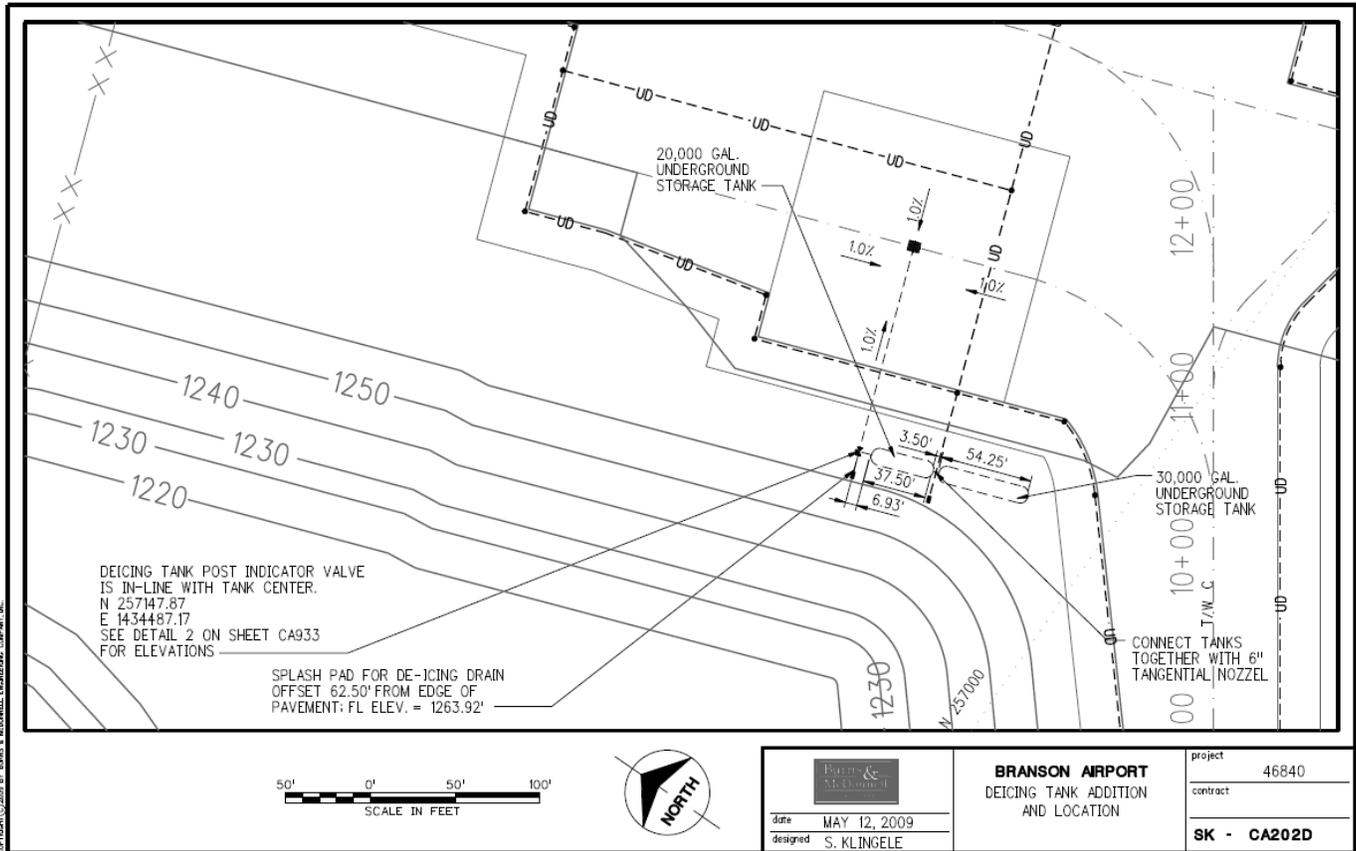
| Outfall | Monitoring Period | Parameter | Units | Limit | Limit | Reported Value | Limit | Limit | Reported Value |
|---------|-------------------|------------------------------------|-------|-------|------------|----------------|-------|-------------------|----------------|
| 001 | 02/28/2010 | Aluminum, total (as Al) | mg/L | 0.75 | Daily Max. | 0.69 | 0.37 | Monthly Avg. | 0.69 |
| 001 | 12/31/2014 | Aluminum, total recoverable | mg/L | 0.75 | Daily Max. | 2.33 | 0.37 | Monthly Avg. | 2.33 |
| 001 | 11/30/2014 | Aluminum, total recoverable | mg/L | 0.75 | Daily Max. | 2.33 | 0.37 | Monthly Avg. | 2.33 |
| 001 | 08/31/2014 | Aluminum, total recoverable | mg/L | 0.75 | Daily Max. | 2.8 | 0.37 | Monthly Avg. | 2.8 |
| 001 | 04/30/2014 | Aluminum, total recoverable | mg/L | 0.75 | Daily Max. | 4.87 | 0.37 | Monthly Avg. | 4.87 |
| 001 | 03/31/2014 | Aluminum, total recoverable | mg/L | 0.75 | Daily Max. | 0.58 | 0.37 | Monthly Avg. | 0.58 |
| 001 | 10/31/2013 | Aluminum, total recoverable | mg/L | 0.75 | Daily Max. | 15.3 | 0.37 | Monthly Avg. | 15.3 |
| 001 | 09/30/2013 | Aluminum, total recoverable | mg/L | 0.75 | Daily Max. | 6.78 | 0.37 | Monthly Avg. | 6.78 |
| 001 | 07/31/2013 | Aluminum, total recoverable | mg/L | 0.75 | Daily Max. | 1.56 | 0.37 | Monthly Avg. | 1.56 |
| 001 | 01/31/2010 | Ammonia (as N) + unionized ammonia | mg/L | 7.5 | Daily Max. | 17 | 2.9 | Monthly Avg. | 17 |
| 001 | 03/31/2010 | Dissolved Oxygen (DO) | mg/L | 5.0 | Daily Min. | 5.64 | 6.3 | Monthly Avg. Min. | 5.64 |

| Outfall | Monitoring Period | Parameter | Units | Limit | Limit | Reported Value | Limit | Limit | Reported Value |
|---------|-------------------|-----------------------------------|-------|-------|--------------|----------------|-------|-------------------|----------------|
| 001 | 08/31/2009 | Dissolved Oxygen (DO) | mg/L | 5.0 | Daily Min. | 5.55 | 6.3 | Monthly Avg. Min. | 5.55 |
| 001 | 07/31/2009 | Dissolved Oxygen (DO) | mg/L | 5.0 | Daily Min. | 4.61 | 6.3 | Monthly Avg. Min. | 4.61 |
| 001 | 06/30/2009 | Dissolved Oxygen (DO) | mg/L | 5.0 | Daily Min. | 4.73 | 6.3 | Monthly Avg. Min. | 4.73 |
| 001 | 12/31/2009 | Iron, total (as Fe) | mg/L | 0.3 | Monthly Avg. | 0.9 | 0.6 | Daily Max. | 0.9 |
| 001 | 11/30/2009 | Iron, total (as Fe) | mg/L | 0.3 | Monthly Avg. | 0.9 | 0.6 | Daily Max. | 0.9 |
| 001 | 03/31/2012 | Nitrite plus nitrate total (as N) | mg/L | 10 | Monthly Avg. | 27 | 20.1 | Daily Max. | 29 |
| 001 | 02/29/2012 | Nitrite plus nitrate total (as N) | mg/L | 10 | Monthly Avg. | 26.702 | 20.1 | Daily Max. | 42.146 |
| 001 | 01/31/2012 | Nitrite plus nitrate total (as N) | mg/L | 10 | Monthly Avg. | 52 | 20.1 | Daily Max. | 58 |
| 001 | 12/31/2011 | Nitrite plus nitrate total (as N) | mg/L | 10 | Monthly Avg. | 20 | 20.1 | Daily Max. | 33 |
| 001 | 11/30/2011 | Nitrite plus nitrate total (as N) | mg/L | 10 | Monthly Avg. | 36 | 20.1 | Daily Max. | 53 |
| 001 | 10/31/2011 | Nitrite plus nitrate total (as N) | mg/L | 10 | Monthly Avg. | 31.223 | 20.1 | Daily Max. | 33.372 |
| 001 | 09/30/2011 | Nitrite plus nitrate total (as N) | mg/L | 10 | Monthly Avg. | 25.9 | 20.1 | Daily Max. | 49.94 |
| 001 | 08/31/2011 | Nitrite plus nitrate total (as N) | mg/L | 10 | Monthly Avg. | 31.14 | 20.1 | Daily Max. | 35.1 |
| 001 | 07/31/2011 | Nitrite plus nitrate total (as N) | mg/L | 10 | Monthly Avg. | 31.613 | 20.1 | Daily Max. | 47.451 |
| 001 | 06/30/2011 | Nitrite plus nitrate total (as N) | mg/L | 10 | Monthly Avg. | 47.36 | 20.1 | Daily Max. | 47.36 |
| 001 | 05/31/2011 | Nitrite plus nitrate total (as N) | mg/L | 10 | Monthly Avg. | 24.2 | 20.1 | Daily Max. | 37.3 |
| 001 | 04/30/2011 | Nitrite plus nitrate total (as N) | mg/L | 10 | Monthly Avg. | 15.376 | 20.1 | Daily Max. | 21.029 |
| 001 | 10/31/2013 | Nitrogen, ammonia total (as N) | mg/L | 6.8 | Daily Max. | 3.78 | 2.6 | Monthly Avg. | 3.78 |
| 001 | 08/31/2013 | Nitrogen, ammonia total (as N) | mg/L | 3.3 | Daily Max. | 3.47 | 1.2 | Monthly Avg. | 1.18 |
| 001 | 07/31/2013 | Nitrogen, ammonia total (as N) | mg/L | 3.3 | Daily Max. | 25.9 | 1.2 | Monthly Avg. | 13.9 |
| 001 | 05/31/2013 | Nitrogen, ammonia total (as N) | mg/L | 6.8 | Daily Max. | 4.6 | 2.6 | Monthly Avg. | 4.6 |
| 001 | 03/31/2013 | Nitrogen, ammonia total (as N) | mg/L | 6.8 | Daily Max. | 52.5 | 2.6 | Monthly Avg. | 52.5 |
| 001 | 02/28/2013 | Nitrogen, ammonia total (as N) | mg/L | 7.5 | Daily Max. | 35.6 | 2.9 | Monthly Avg. | 35.6 |
| 001 | 01/31/2013 | Nitrogen, ammonia total (as N) | mg/L | 7.5 | Daily Max. | 23 | 2.9 | Monthly Avg. | 16.8 |
| 001 | 04/30/2013 | Nitrogen, nitrate total (as NO3) | mg/L | 20 | Daily Max. | 31.23 | 10 | Monthly Avg. | 31.23 |
| 001 | 03/31/2013 | Nitrogen, nitrate total (as NO3) | mg/L | 20 | Daily Max. | 26.1 | 10 | Monthly Avg. | 26.1 |
| 001 | 11/30/2012 | Nitrogen, nitrate total (as NO3) | mg/L | 20 | Daily Max. | 19.2 | 10 | Monthly Avg. | 19.2 |
| 001 | 10/31/2012 | Nitrogen, nitrate total (as NO3) | mg/L | 20 | Daily Max. | 50 | 10 | Monthly Avg. | 25.5 |
| 001 | 09/30/2012 | Nitrogen, nitrate total (as NO3) | mg/L | 20 | Daily Max. | 37 | 10 | Monthly Avg. | 31.5 |
| 001 | 08/31/2012 | Nitrogen, nitrate total (as NO3) | mg/L | 20 | Daily Max. | 67.8 | 10 | Monthly Avg. | 64.4 |
| 001 | 07/31/2012 | Nitrogen, nitrate total (as NO3) | mg/L | 20 | Daily Max. | 50.4 | 10 | Monthly Avg. | 43 |
| 001 | 06/30/2012 | Nitrogen, nitrate total (as NO3) | mg/L | 20 | Daily Max. | 45.1 | 10 | Monthly Avg. | 45.1 |
| 001 | 05/31/2012 | Nitrogen, nitrate total (as NO3) | mg/L | 20 | Daily Max. | 62.3 | 10 | Monthly Avg. | 48.5 |
| 001 | 04/30/2012 | Nitrogen, nitrate total (as NO3) | mg/L | 20 | Daily Max. | 30.7 | 10 | Monthly Avg. | 30.7 |
| 001 | 04/30/2011 | pH | SU | 6.5 | Minimum | 6.35 | 9 | Maximum | 6.35 |
| 001 | 03/31/2013 | Phosphorus, total (as P) | mg/L | * | Daily Max. | 0.21 | 0.2 | Monthly Avg. | 0.21 |
| 001 | 09/30/2009 | Phosphorus, total (as P) | mg/L | | | | 0.2 | Average | 0.22 |
| 002 | 06/30/2011 | Chemical Oxygen Demand (COD) | mg/L | 15 | Daily Max. | 8.2 | 7 | Monthly Avg. | 8.2 |
| 002 | 03/31/2011 | Chemical Oxygen Demand (COD) | mg/L | 15 | Daily Max. | 32.7 | 7 | Monthly Avg. | 32.7 |
| 002 | 12/31/2010 | Chemical Oxygen Demand (COD) | mg/L | 15 | Daily Max. | 12 | 7 | Monthly Avg. | 12 |
| 002 | 09/30/2010 | Chemical Oxygen Demand (COD) | mg/L | 15 | Daily Max. | 13 | 7 | Monthly Avg. | 13 |
| 002 | 03/31/2010 | Chemical Oxygen Demand (COD) | mg/L | 15 | Daily Max. | 12.2 | 7 | Monthly Avg. | 12.2 |
| 002 | 12/31/2009 | Chemical Oxygen Demand (COD) | mg/L | 15 | Daily Max. | 12.3 | 7 | Monthly Avg. | 12.3 |
| 002 | 06/30/2009 | Chemical Oxygen Demand (COD) | mg/L | 15 | Daily Max. | 9.6 | 7 | Monthly Avg. | 9.6 |
| 002 | 06/30/2009 | Ethylbenzene | mg/L | 0.526 | Daily Max. | 1.4 | 0.262 | Monthly Avg. | 1.4 |
| 003 | 03/31/2013 | Chemical Oxygen Demand (COD) | mg/L | 60 | Daily Max. | 300 | 30 | Monthly Avg. | 300 |
| 003 | 08/31/2011 | Chemical Oxygen Demand (COD) | mg/L | 15 | Daily Max. | 15.8 | 7 | Monthly Avg. | 15.8 |
| 004 | 06/30/2012 | Chemical Oxygen Demand (COD) | mg/L | 60 | Daily Max. | 49 | 30 | Monthly Avg. | 49 |

| Outfall | Monitoring Period | Parameter | Units | Limit | Limit | Reported Value | Limit | Limit | Reported Value |
|---------|-------------------|------------------------------|-------|-------|------------|----------------|-------|--------------|----------------|
| 004 | 06/30/2011 | Chemical Oxygen Demand (COD) | mg/L | 15 | Daily Max. | 25 | 7 | Monthly Avg. | 25 |
| 004 | 03/31/2011 | Chemical Oxygen Demand (COD) | mg/L | 15 | Daily Max. | 8.1 | 7 | Monthly Avg. | 8.1 |
| 004 | 12/31/2010 | Chemical Oxygen Demand (COD) | mg/L | 15 | Daily Max. | 11 | 7 | Monthly Avg. | 11 |
| 004 | 09/30/2010 | Chemical Oxygen Demand (COD) | mg/L | 15 | Daily Max. | 59 | 7 | Monthly Avg. | 59 |
| 004 | 06/30/2010 | Chemical Oxygen Demand (COD) | mg/L | 15 | Daily Max. | 25.1 | 7 | Monthly Avg. | 25.1 |
| 004 | 12/31/2009 | Chemical Oxygen Demand (COD) | mg/L | 15 | Daily Max. | 11.4 | 7 | Monthly Avg. | 11.4 |
| 004 | 09/30/2009 | Chemical Oxygen Demand (COD) | mg/L | 15 | Daily Max. | 24.5 | 7 | Monthly Avg. | 24.5 |
| 004 | 06/30/2009 | Chemical Oxygen Demand (COD) | mg/L | 15 | Daily Max. | 12.9 | 7 | Monthly Avg. | 12.9 |
| 005 | 09/30/2009 | BOD, 5-day, 20 deg. C | mg/L | 20 | Daily Max. | 11.22 | 10 | Monthly Avg. | 11.22 |
| 005 | 12/31/2011 | Chemical Oxygen Demand (COD) | mg/L | 15 | Daily Max. | 13 | 7 | Monthly Avg. | 13 |
| 005 | 06/30/2011 | Chemical Oxygen Demand (COD) | mg/L | 15 | Daily Max. | 10 | 7 | Monthly Avg. | 10 |
| 005 | 03/31/2011 | Chemical Oxygen Demand (COD) | mg/L | 15 | Daily Max. | 8.8 | 7 | Monthly Avg. | 8.8 |
| 005 | 09/30/2010 | Chemical Oxygen Demand (COD) | mg/L | 15 | Daily Max. | 11 | 7 | Monthly Avg. | 11 |
| 005 | 06/30/2010 | Chemical Oxygen Demand (COD) | mg/L | 15 | Daily Max. | 18.9 | 7 | Monthly Avg. | 18.9 |
| 005 | 12/31/2009 | Chemical Oxygen Demand (COD) | mg/L | 15 | Daily Max. | 17.9 | 7 | Monthly Avg. | 17.9 |
| 005 | 09/30/2009 | Chemical Oxygen Demand (COD) | mg/L | 15 | Daily Max. | 38.2 | 7 | Monthly Avg. | 38.2 |
| 005 | 06/30/2009 | Chemical Oxygen Demand (COD) | mg/L | 15 | Daily Max. | 29.4 | 7 | Monthly Avg. | 29.4 |
| 006 | 06/30/2011 | Chemical Oxygen Demand (COD) | mg/L | 15 | Daily Max. | 17.2 | 7 | Monthly Avg. | 17.2 |

DE-ICING CONTAINMENT

During freezing temperatures, the airport is equipped with ethylene glycol and propylene glycol to spray on to airplanes prior to takeoff. The aircraft parks in the designated square and is sprayed. This area is graded to exclude precipitation outside of the square. During these activities, the gate valve on outfalls #003 is closed. This closure diverts the de-icing agents and any snow or ice melt into the holding tanks, described as outfall #007. Outfall #007 was added at this permit renewal. No discharge is allowed from the holding tanks. Outfall #003 and #007 have the same outlet. The source of the discharge is outfall #003 if the gate valve is "open" and outfall #007 if the gate valve is "closed". The holding tanks are equipped with fluid level telemetry and a high level alarm which alarms when the tanks are at 95 percent capacity. The tanks may also be "sticked" to obtain a manual fluid level measurement; maximum capacity for the two tanks is rated at 50,000 gallons (but there is an approximate 6,000 gallon reserve built into the system). The southern tank holds 30,000 gallons, and the northern tank holds 20,000 gallons and are connected by a six inch tangential hose. A contract hauler is used to empty the tanks when needed and the liquid is taken to a large wastewater treatment facility capable of handling this type of liquid waste. Should this outfall discharge, the discharge will almost certainly remain on-site as the basin between the taxiway and parking area is over 60 feet deep, at least 60 feet wide, and over 1500 feet long.



Part II. RECEIVING STREAM INFORMATION

RECEIVING WATER BODY'S WATER QUALITY

The waste water treatment facility discharges to a losing tributary to Thorp Creek. There are no contemporaneous water quality studies associated with this facility. Uses to be maintained for the receiving waters are general criteria 10 CSR 20-7.031(4) and groundwater criteria 10 CSR 20-7.031(6).

APPLICABLE DESIGNATIONS OF WATERS OF THE STATE

As per Missouri's Effluent Regulations [10 CSR 20-7.015], the waters of the state are divided into the below listed seven categories. Each category lists effluent limitations for specific parameters, which are presented in each outfall's Effluent Limitation Table and further discussed in the Derivation & Discussion of Limits sections.

- Missouri or Mississippi River:
- Lake or Reservoir:
- Losing Stream:
- Metropolitan No-Discharge:
- Special Stream:
- Subsurface Water:
- All Other Waters:

As per Missouri’s Stormwater Regulations [10 CSR 20.6.200(6)(B)2.], the department shall establish effluent limits as necessary to protect waters of the state. Effluent limitations for stormwater are established using best professional judgment based on the category and designated uses of the receiving stream.

10 CSR 20-7.031 Missouri Water Quality Standards, the Department defines the Clean Water Commission water quality objectives in terms of “water uses to be maintained and the criteria to protect those uses.” The receiving stream and 1st classified receiving stream’s beneficial water uses to be maintained are located in the Receiving Stream Table located below in accordance with [10 CSR 20-7.031(3)].

10 CSR 70-7.031(13) covers losing stream settings. Outfalls #001 and #002 discharge to a losing stream.

RECEIVING STREAMS TABLE

| OUTFALL | WATERBODY NAME | CLASS | WBID | DESIGNATED USES | DISTANCE TO CLASSIFIED SEGMENT | 12-DIGIT HUC |
|---------|-----------------------------------|-------|------|-----------------|--|-------------------------------|
| #001 | Tributary to Thorp Creek (losing) | n/a | 3960 | GEN | 0.0 mi to losing 1.9 mi to Thorp Creek | Turkey Creek 11010003-0102 |
| #002 | Tributary to Thorp Creek (losing) | n/a | 3960 | GEN | 0.01 mi to losing 2.0 mi to Thorp Creek | |
| #003 | Tributary to Thorp Creek | n/a | 3960 | GEN | 1.22 mi to Thorp Creek | |
| #004 | Tributary to Thorp Creek | n/a | 3960 | GEN | 1.23 mi to Thorp Creek | |
| #005 | Tributary to Thorp Creek | n/a | 3960 | GEN | 1.03 mi to Thorp Creek | |
| #006 | Tributary to Thorp Creek | n/a | 3960 | GEN | 1.08 mi to Thorp Creek | |
| #007 | Tributary to Thorp Creek | n/a | 3960 | GEN | 1.22 mi to Thorp Creek | |

AQL= Protection of Warm Water Aquatic Life and Human Health-Fish Consumption; C= Streams may cease flow in dry periods; CDF= Cold Water Fishery; CLF= Cool Water Fishery; DWS= Drinking Water Supply; E= Ephemeral stream; GEN= General; GRW = Groundwater; HUC= Hydrologic Unit Code; IND= Industrial; IRR=Irrigation; LWW= Livestock & Wildlife Watering; P= Permanent; SCR= Secondary Contact Recreation; W= Wetland; WBC= Whole Body Contact Recreation; WBID= Water Body Identification Number

MIXING CONSIDERATIONS

No mixing for Losing Streams and unclassified streams.
 Mixing Zone: Not Allowed [10 CSR 20-7.031(5)(A)4.B.(I)(a)].
 Zone of Initial Dilution: Not Allowed [10 CSR 20-7.031(5)(A)4.B.(I)(b)].

RECEIVING STREAM MONITORING REQUIREMENTS

No receiving water monitoring requirements at this time.

Part III. RATIONALE AND DERIVATION OF EFFLUENT LIMITATIONS & 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)(N)], or is an existing facility. (This facility discharges to a losing stream but is an existing facility.)

ANTI-BACKSLIDING

A provision in the Federal Regulations [CWA §303(d)(4); CWA §402(c); 40 CFR Part 122.44(I)] that requires a reissued permit to be as stringent as the previous permit with some exceptions.

- ✓ Limitations in this operating permit for the reissuance of this permit conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Act, and 40 CFR Part 122.44.
 - ✓ The Department determines that technical mistakes or mistaken interpretations of law were made in issuing the permit under section 402(a)(1)(b).

- ✓ Aluminum. The facility was required to sample for aluminum at outfall #001 using a 24 hour composite sampler during the last permit cycle. However, the facility discharges less than 5000 gallons per day therefore is not subject to composite sampling as it incurs additional unnecessary costs to the facility. This change in sample type will not diminish the characterization of wastes entering waters of the state and remains protective of waters of the state.
- ✓ Ammonia. Outfall #001 had ammonia limits based on four seasons in the previous permit: spring- 6.8/2.6 mg/L; summer- 3.3/1.2 mg/L; fall- 6.8/2.6 mg/L, and winter- 7.5/2.9 mg/L. Current guidance from the department has revised the limits and changed to only two seasons. This permit will remain protective of aquatic life while instituting the new directive: summer- 3.6 mg/L daily maximum/ 1.4 mg/L monthly average maximum and winter- 7.5 mg/L daily maximum/ 2.9 maximum monthly average for final effluent limitations.
For the stormwater outfalls, (#002 to #006), ammonia was removed because urea is not used onsite for deicing.
- ✓ Benchmarks. The previous permit limits for outfalls #004, #005, and #006 were established in error, based on limits for industrial wastewater but these outfalls are exclusively stormwater outfalls. This renewal establishes limits and benchmarks appropriate for stormwater discharges for outfalls #003 through #006. There will be no changes to industrial activities onsite or the composition of the stormwater discharge as a result of this renewal. The benchmark concentrations and required corrective actions are protective of the applicable water quality standards. Benchmarks insist the facility observe and correct any deficiencies in the on-site stormwater management plans and failure to take corrective action is a permit violation.
- ✓ Benzene. For outfalls #003, #004, #005, #006 the limits have been removed from the permit. The facility will still be required to sample for this parameter to monitor for benchmark values.
- ✓ BOD₅. Five day biochemical oxygen demand sampling at outfall #001 was changed from a 24 hour composite sampling method to a grab sample. The facility discharges less than 5000 gallons per day therefore is not subject to composite sampling as it incurs additional unnecessary costs to the facility. This change in sample type will not diminish the characterization of wastes entering waters of the state and remains protective of waters of the state.
- ✓ Chemical Oxygen Demand. The previous permit limitations were set at 60 mg/L for a daily maximum and 30 mg/L for a monthly average for outfalls #002, #004, #005, and #006. Monthly averages are not appropriate for stormwater. The permittee is only required to sample once per quarter and these outfalls are directly tied to precipitation. The *Technical Support Document for Water Quality-Based Toxics Control* (EPA/505/2-90-001) was authored with the intent of applying the directives to continuous discharges, of which precipitation is not. Using past performance of the facility at outfalls #004, #005, and #006, 23 data points were found to have a 95th percentile of 37.76 with the highest value (59) removed as it is an apparent outlier. No schedule of compliance is allowed because the facility is generally able to meet 40 mg/L at each outfall.
- ✓ Chloride. The past permit included monitoring for chloride because salt is used at the facility for deicing and the permittee believed it to be present in the discharge. Results obtained for outfalls #002, #003, #004, #005, and #006 range from 1.0 to 5.6 mg/L. Missouri water quality standards are 860 mg/L for the acute (daily maximum) and 230 mg/L for the chronic (monthly average) standard. Monitoring will be discontinued at these outfalls.
- ✓ Ethylbenzene. The permittee is only required to sample once per quarter at outfalls (#002, #004, #005 and #006) and is directly tied to precipitation. The previous permit limitations allotted a daily maximum of 262 µg/L. Because these outfalls discharge stormwater, the aquatic life protection standard (320 µg/L) directly applies and waste load allocations are not applicable. This discharge is not associated with a TMDL for this parameter.
For outfalls #003, #004, #005, #006 the limits have been removed from the permit. The facility will still be required to sample for this parameter to monitor for benchmark values.
- ✓ Flow. The facility was measuring flow from outfall #001 once per weekday. The facility will no longer be required to measure five times per week but three times per week because it is a small facility.
- ✓ Monthly averages for stormwater. The department has reviewed the *Technical Support Document for Water Quality-Based Toxics Control* (EPA/505/2-90-001). This document was authored with the intent of applying the directives to continuous discharges, of which precipitation is not. Therefore, all monthly averages for the stormwater discharges (outfalls #003 through #006) have been dropped.
- ✓ Nitrogen. The facility was required to monitor for nitrogen once every month. This monitoring requirement was decreased to once every quarter as this will still provide sufficient data to determine if the facility has reasonable potential to cause pollution to waters of the state when the department creates limits for this parameter.
- ✓ Oil & Grease. The facility measured Oil and Grease from outfall #001 every month during the last permit cycle. The waste water treatment facility is effective at removing any oil or grease from domestic sewage as the highest value reported was 5.4 mg/L. Hence the permittee will only be required to monitor for this pollutant once per quarter during this permit cycle; limits have been removed.
- ✓ Oxygen, Dissolved. Outfall #001 had 6.3 for a monthly average minimum for this parameter. The water quality standard is 5 mg/L. No justification was reported in the last fact sheet as to why limits were given in the modification. 5 mg/L is sufficiently protective of the receiving stream waters.
- ✓ Phosphorous. The facility had phosphorous limits of 0.2 mg/L for a monthly average in the last permit cycle. The facility has been generally meeting the limits but has been using excess alum causing aluminum water quality violations. Regulations for this area of the state allow for 0.5 mg/L of phosphorous in the effluent. It is the permit writer's best professional judgment to raise the phosphorous limits to achieve the aluminum limits.

- ✓ Toluene. The last permit allowed a monthly average of 1000 µg/L and a daily maximum of 2010 µg/L. The permittee is only required to sample once per quarter and outfall #002 is directly tied to precipitation. Because of the fleeting and non-reproducible nature of wet weather events, the chronic standard will be the daily maximum; the *Technical Support Document for Water Quality-Based Toxics Control* (EPA/505/2-90-001) was authored with the intent of applying the directives within the document to continuous discharges, of which precipitation is not. There are no longer monthly average limitations associated with this parameter.
For outfalls #003, #004, #005, and #006 the limits have been removed from the permit. The facility will still be required to sample for this parameter to monitor for benchmark values.
- ✓ Total Kjeldahl Nitrogen. TKN was removed from monitoring at outfall #001. This parameter is not as useful in characterizing water pollution from wastewater discharges; as total nitrogen, nitrate, and total ammonia are more appropriate for domestic wastewater discharges.
- ✓ Total Suspended Solids. The facility was required to sample for TSS at outfall #001 using a 24 hour composite sampler during the last permit cycle. However, the facility discharges less than 5000 gallons per day therefore is not subject to composite sampling as it incurs additional unnecessary costs to the facility. This change in sample type will not diminish the characterization of wastes entering waters of the state and remains protective of waters of the state.
The facility was required to monitor for TSS at outfall #002 during the last permit cycle. The data indicate 8 mg/L as the maximum concentration discharged for the last five years. Monitoring at outfall #002 for TSS is discontinued.
- ✓ WET. The permittee no longer falls under a category the department classifies as applicable to perform WET tests.
- ✓ Xylenes. For outfalls #003, #004, #005, and #006 the limits have been removed from the permit. The facility will still be required to sample for this parameter to monitor for benchmark values.

ANTIDegradation

In accordance with Missouri's Water Quality Standard [10 CSR 20-7.031(2)], the Department is to document by means of Antidegradation Review that the use of a water body's available assimilative capacity is justified. Degradation is justified by documenting the socio-economic importance of a discharging activity after determining the necessity of the discharge.

- ✓ Renewal; no degradation proposed and no further review necessary.

BIOSOLIDS & SEWAGE SLUDGE

Biosolids are solid materials resulting from domestic wastewater treatment that meet federal and state criteria for beneficial uses (i.e. fertilizer). Sewage sludge is solids, semi-solids, 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 a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works. Additional information regarding biosolids and sludge is located at the following web address:

<http://extension.missouri.edu/main/DisplayCategory.aspx?C=74>, items WQ422 through WQ449.

- ✓ Permittee is not authorized to land apply biosolids. Sludge/biosolids are removed by contract hauler, landfilled, or incinerated.

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.

- ✓ Not applicable. The permittee/facility is not currently under Water Protection Program enforcement action.

INDUSTRIAL SLUDGE

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

- ✓ Not applicable. This condition is not applicable to the permittee for this facility.

REASONABLE POTENTIAL ANALYSIS (RPA)

Federal regulation [40 CFR Part 122.44(d)(1)(i)] requires effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause or contribute to an in-stream excursion above narrative or numeric water quality standard. In accordance with [40 CFR Part 122.44(d)(1)(iii)] if the permit writer determines that 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 that pollutant.

- ✓ Applicable; a RPA was conducted on aluminum and iron. The RPA indicated that the facility has reasonable potential to cause an excursion above water quality standards in the receiving stream. Please see APPENDIX A – RPA RESULTS.

SANITARY SEWER OVERFLOWS (SSO) AND INFLOW AND INFILTRATION (I&I)

Sanitary Sewer Overflows (SSOs) are defined as untreated sewage releases and are considered bypassing under state regulation [10 CSR 20-2.010(11)] and should not be confused with the federal definition of bypass. SSOs result from a variety of causes including blockages, line breaks, and sewer defects that can either allow wastewater to backup within the collection system during dry weather conditions or allow excess stormwater and groundwater to enter and overload the collection system during wet weather conditions. SSOs can also result from lapses in sewer system operation and maintenance, inadequate sewer design and construction, power failures, and vandalism. SSOs include overflows out of manholes, cleanouts, broken pipes, and other into waters of the state and onto city streets, sidewalks, and other terrestrial locations.

Inflow and Infiltration (I&I) is defined as unwanted intrusion of stormwater or groundwater into a collection system. This can occur from points of direct connection such as sump pumps, roof drain downspouts, foundation drains, and storm drain cross-connections or through cracks, holes, joint failures, faulty line connections, damaged manholes, and other openings in the collection system itself. I&I results from a variety of causes including line breaks, improperly sealed connections, cracks caused by soil erosion/settling, penetration of vegetative roots, and other sewer defects. In addition, excess stormwater and groundwater entering the collection system from line breaks and sewer defects have the potential to negatively impact the treatment facility.

Missouri RSMo §644.026.1.(13) mandates that the Department issue permits for discharges of water contaminants into the waters of this state, and also for the operation of sewer systems. Such permit conditions shall ensure compliance with all requirements as established by sections 644.006 to 644.141. Standard Conditions Part I, referenced in the permit, contains provisions requiring proper operation and maintenance of all facilities and systems of treatment and control. Missouri RSMo §644.026.1.(15) instructs the Department to require proper maintenance and operation of treatment facilities and sewer systems and proper disposal of residual waste from all such facilities. To ensure that public health and the environment are protected, any noncompliance which may endanger public health or the environment must be reported to the Department within 24 hours of the time the permittee becomes aware of the noncompliance. Standard Conditions Part I, referenced in the permit, contains the reporting requirements for the permittee when bypasses and upsets occur. The permit also contains requirements for permittees to develop and implement a program for maintenance and repair of the collection system. The permit requires that the permittee submit an annual report to the Department for the previous calendar year that contains a list of all SSOs and building backups (locations, features of collection system where the SSO/building backup occurred, volumes, durations, receiving stream, causes, mitigation efforts, and actions to prevent reoccurrences), a summary of efforts taken by the permittee to locate and eliminate sources of excess I & I, a summary of general maintenance and repairs to the collection system, and a summary of any planned maintenance and repairs to the collection system for the upcoming calendar year.

- ✓ This facility is not required to develop or implement a program for maintenance and repair of the collection system; however, it is a violation of Missouri state environmental laws and regulations to allow untreated wastewater to discharge to waters of the state.

SCHEDULE OF COMPLIANCE (SOC)

A schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements (actions, operations, or milestone events) leading to compliance with the Missouri Clean Water Law, its implementing regulations, and/or the terms and conditions of an operating permit.

- ✓ Applicable. The time given for effluent limitations of this permit listed under Interim Effluent Limitation and Final Effluent Limitations were established in accordance with [10 CSR 20-7.031(10)]. The facility has been given a schedule of compliance to meet final effluent limits for aluminum. One year is ample time for the facility to adjust the aluminum feed to decrease aluminum pollution and meet the new phosphorous limits.

SPILL REPORTING

Per 10 CSR 24-3.010, 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.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

In accordance with 40 CFR 122.44(k) *Best Management Practices (BMPs)* 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 storm water 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*, (Document number EPA 833-B-09-002) [published by the United States Environmental Protection Agency (USEPA) in February 2009], BMPs are measures or practices used to reduce the amount of pollution entering (regarding this operating permit) waters of the state. BMPs may take the form of a process, activity, or physical structure. Additionally in accordance with the Storm Water 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.

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

303(d) LIST

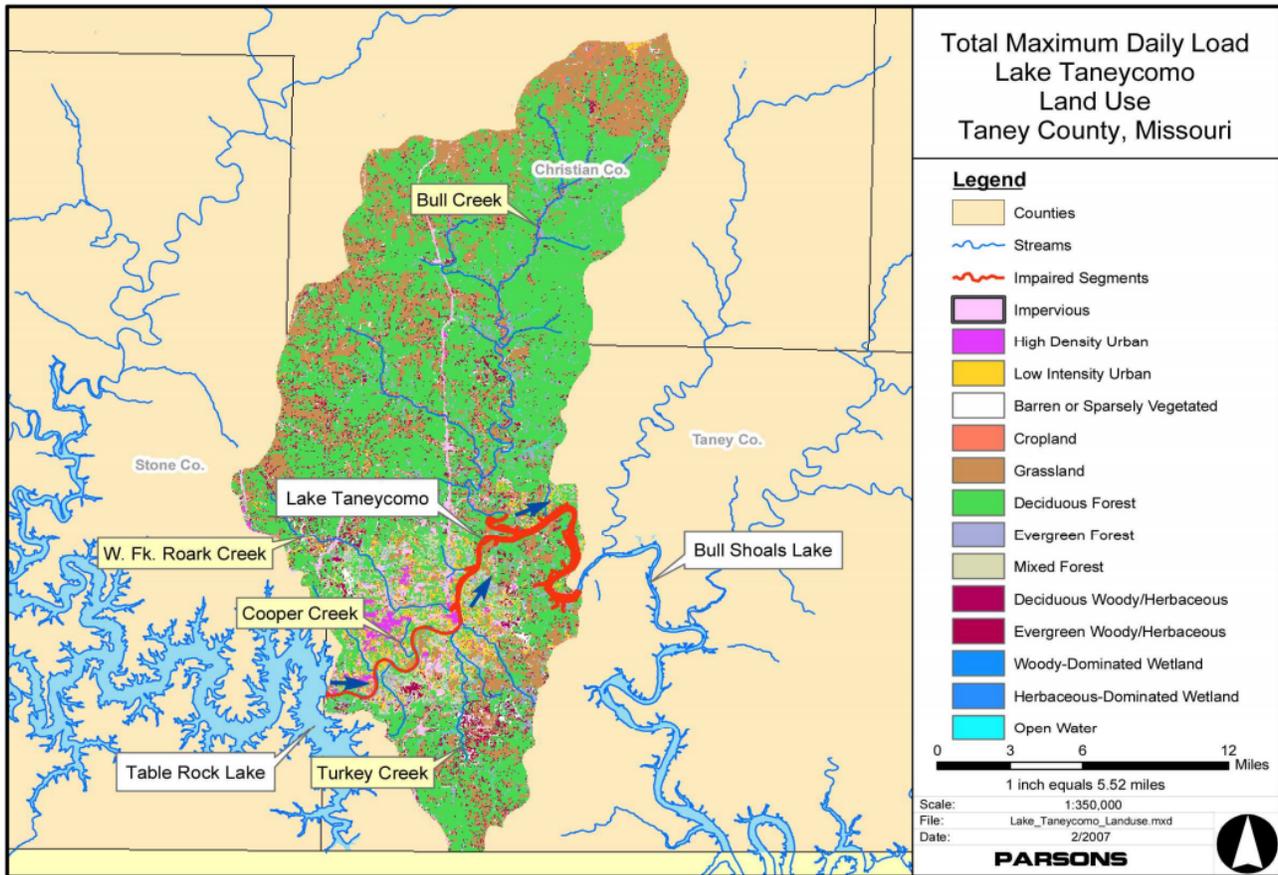
Section 303(d) of the federal Clean Water Act requires each state identify waters within its boundaries that are not meeting water quality standards even after water pollution controls are in place. Water quality standards include criteria to protect such beneficial uses of water as whole body contact recreation (such as swimming), maintaining fish and other aquatic life, and providing drinking water for people, livestock and wildlife. The 303(d) list helps state and federal agencies keep track of waters that are impaired.

- ✓ Not applicable. This facility does not discharge to an impaired segment of a 303(d) listed stream. However, the watershed is associated with a TMDL for low dissolved oxygen.

TOTAL MAXIMUM DAILY LOAD (TMDL)

A TMDL is a calculation of the maximum amount of a given pollutant that a body of water can absorb before its water quality is 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 and listed on the 303(d) list, then a watershed study is completed to be developed into a TMDL calculation.

- ✓ Applicable. This facility falls within the boundaries of a watershed which is associated with a TMDL. Lake Taneycomo has an EPA approved TMDL dated 12/30/2010 for low dissolved oxygen. The source is listed as hypo-limnetic water released from Table Rock Lake Dam which feeds Lake Taneycomo. The TMDL also included eutrophication as a possible contributor, but was also coming from Table Rock Lake. The TMDL stated in section 3.2.1 they do not believe wastewater point sources to be a contributor to the dissolved oxygen depression as long as each of the point sources adheres to their operating permit limits for BOD₅. The below map shows the affected HUC-8 watershed (Lake Taneycomo-White River; 11010003-01); this airport discharges to tributaries to Thorp Creek which discharges to Turkey Creek, and flow north into Lake Taneycomo.



VARIANCE

As 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.

✓ Not applicable. This operating permit is not drafted under premises of a petition for variance.

WASTELOAD ALLOCATIONS (WLA) FOR LIMITS

As per [10 CSR 20-2.010(78)], the amount of pollutant each discharger is allowed by the Department to release into a given stream after the Department has determined total amount of pollutant that may be discharged into that stream without endangering its water quality.

✓ Applicable. Wasteload allocations were calculated where applicable using water quality criteria or water quality model results and the dilution equation below:

$$C = \frac{(C_s \times Q_s) + (C_e \times Q_e)}{(Q_e + Q_s)} \quad \text{(EPA/505/2-90-001, Section 4.5.5)}$$

Where
 C = downstream concentration
 Cs = upstream concentration
 Qs = upstream flow
 Ce = effluent concentration
 Qe = effluent flow

Chronic wasteload allocations were determined using applicable chronic water quality criteria (CCC: criteria continuous concentration) and stream volume of flow at the edge of the mixing zone (MZ). Acute wasteload allocations were determined using applicable water quality criteria (CMC: criteria maximum concentration) and stream volume of flow at the edge of the zone of initial dilution (ZID).

Water quality based maximum daily and average monthly effluent limitations were calculated using methods and procedures outlined in USEPA’s “Technical Support Document For Water Quality-based Toxics Control” (EPA/505/2-90-001).

Number of Samples “n”: In accordance with the TSD for water quality-based permitting, effluent quality is determined by the underlying distribution of daily values, which is determined by the Long Term Average (LTA) associated with a particular Wasteload Allocation (WLA) and by the Coefficient of Variation (CV) of the effluent concentrations. Increasing or decreasing the monitoring frequency does not affect this underlying distribution or treatment performance which should be, at a minimum, targeted to comply with the values dictated by the WLA. Therefore, it is recommended that the actual planned frequency of monitoring normally be used to determine the value of “n” for calculating the AML. However, in situations where monitoring frequency is once per month or less, a higher value for “n” must be assumed for AML derivation purposes. Thus, the statistical procedure being employed using an assumed number of samples is “n = 4” at a minimum. For Total Ammonia as Nitrogen, “n = 30” is used.

WLA MODELING

There are two general types of effluent limitations, technology-based effluent limits (TBELs) and water quality based effluent limits (WQBELs). If TBELs do not provide adequate protection for the receiving waters, then WQBEL must be used.

✓ Not applicable. A WLA study was either not submitted or determined not applicable by Department staff.

WATER QUALITY STANDARDS

Per [10 CSR 20-7.031(4)], general criteria shall be applicable to all waters of the state at all times including mixing zones.

Additionally, [40 CFR 122.44(d)(1)] directs the Department to establish in each NPDES permit to include conditions to achieve water quality established under Section 303 of the Clean Water Act, including State narrative criteria for water quality.

WHOLE EFFLUENT TOXICITY (WET) TEST

A WET test is a quantifiable method of determining if a discharge from a facility may be causing toxicity to aquatic life by itself, in combination with, or through synergistic responses when mixed with receiving stream water.

✓ Not applicable. While the facility has had issues in the past, the main issues were ammonia and aluminum. The permit has monitoring and limits for ammonia and aluminum, therefore WET testing is not applicable. No other toxics are present in the discharge. The WWTF facility discharges less than 5000 gallons per day and is at the head of the stream therefore no mixing of upstream toxics can occur.

Part IV. 2013 WATER QUALITY CRITERIA FOR AMMONIA

Upcoming changes to the Water Quality Standard for ammonia may require significant upgrades to wastewater treatment facilities. On August 22, 2013, the U.S. Environmental Protection Agency (EPA) finalized new water quality criteria for ammonia, based on toxicity studies of mussels and gill breathing snails. Missouri's current ammonia criteria are based on toxicity testing of several species, but did not include data from mussels or gill breathing snails. Missouri is home to 69 of North America's mussel species, which are spread across the state. According to the Missouri Department of Conservation nearly two-thirds of the mussel species in Missouri are considered to be "of conservation concern". Nine species are listed as federally endangered, with an additional species currently proposed as endangered and another species proposed as threatened.

The adult forms of mussels that are seen in rivers, lakes, and streams are sensitive to pollutants because they are sedentary filter feeders. They vacuum up many pollutants with the food they bring in and cannot escape to new habitats, so they can accumulate toxins in their bodies and die. But very young mussels, called glochidia, are exceptionally sensitive to ammonia in water. As a result of a citizen suit, the EPA was compelled to conduct toxicity testing and develop ammonia water quality criteria that would be protective if young mussels may be present in a waterbody. These new criteria will apply to any discharge with ammonia levels that may pose a reasonable potential to violate the standards. Nearly all discharging domestic wastewater treatment facilities (cities, subdivisions, mobile home parks, etc.), as well as certain industrial and stormwater dischargers with ammonia in their effluent, will be affected by this change in the regulations.

When new water quality criteria are established by the EPA, states must adopt them into their regulations in order to keep their authorization to issue permits under the National Pollutant Discharge Elimination System (NPDES). States are required to review their water quality standards every three years, and if new criteria have been developed they must be adopted. States may be more protective than the Federal requirements, but not less protective. Missouri does not have the resources to conduct the studies necessary for developing new water quality standards, and therefore our standards mirror those developed by the EPA; however, we will utilize any available flexibility based on actual species of mussels that are native to Missouri and their sensitivity to ammonia.

Many treatment facilities in Missouri are currently scheduled to be upgraded to comply with the current water quality standards. But these new ammonia standards may require a different treatment technology than the one being considered by the permittee. It is important that permittees discuss any new and upcoming requirements with their consulting engineers to ensure that their treatment systems are capable of complying with the new requirements. The Department encourages permittees to construct treatment technologies that can attain effluent quality that supports the EPA ammonia criteria.

Ammonia toxicity varies by pH and temperature of the receiving water. Assuming a stable pH value, but taking into account winter and summer temperatures, Missouri includes two seasons of ammonia effluent limitations. Current effluent limitations in this permit are:

- Summer – 3.6 mg/L daily maximum, 1.4 mg/L monthly average.
- Winter – 7.5 mg/L daily maximum, 2.9 mg/L monthly average.

Under the new EPA criteria, where mussels of the family Unionidae are present or expected to be present, the *estimated* effluent limitations for a facility in a location such as this that discharges to a receiving stream with no mixing will be:

- Summer – 1.7 mg/L daily maximum, 0.6 mg/L monthly average.
- Winter – 5.6 mg/L daily maximum, 2.1 mg/L monthly average.

Operating permits for facilities in Missouri must be written based on current statutes and regulations. Therefore permits will be written with the existing effluent limitations until the new standards are adopted. To aid permittees in decision making, an advisory will be added to permit Fact Sheets notifying permittees of the expected effluent limitations for ammonia. When setting schedules of compliance for ammonia effluent limitations, consideration will be given to facilities that have recently constructed upgraded facilities to meet the current ammonia limitations. For more information on this topic feel free to contact the Missouri Department of Natural Resources, Water Protection Program, Water Pollution Control Branch, Operating Permits Section at (573) 751-1300.

Part V. EFFLUENT LIMITS DETERMINATIONS

Outfall #001 – Main Facility Outfall, Wastewater Treatment Plant

Effluent limitations derived and established in the below Effluent Limitations Table are based on current operations of the facility. Future permit action due to facility modification may contain new operating permit terms and conditions that supersede the terms and conditions, including effluent limitations, of this operating permit.

| PARAMETER | UNIT | BASIS FOR LIMITS | DAILY MAXIMUM | WEEKLY AVERAGE | MONTHLY AVERAGE | MODIFIED | PREVIOUS PERMIT LIMITATIONS |
|---|----------|------------------|---------------------|----------------|-----------------|----------|--|
| Aluminum (total recoverable) | µg/L | 2, 3 | 750 | | 370, 227 | yes | 750 / 370 |
| Ammonia as N (April 1 – Sept 30) (Oct 1 – March 31) | mg/L | 2, 3 | 3.6 7.5 | | 1.4 2.9 | yes | Mar-May 6.8 / 2.6 Jun-Aug 3.3 / 1.2 Sep-Nov 6.8 / 2.6 Dec-Feb 7.5 / 2.9 |
| Biochemical Oxygen Demand ₅ | mg/L | 1, 3 | 15 | | 10 | yes | 20 / 10 |
| Dissolved Oxygen ** | mg/L | 1, 3 | * | | 5.0 min | yes | 5.0/6.3 |
| Escherichia coli *** | #/100 mL | 1, 3 | 126 | | 126 | no | |
| Flow | gal./day | 1 | * | | * | no | |
| Iron (total recoverable) | µg/L | 2, 3 | 603 | | 300 | yes | 0.6 / 0.3 mg/L |
| Nitrogen, total N | mg/L | 6 | * | | * | no | |
| Oil & Grease | mg/L | 1, 6 | * | | * | yes | 15 / 10 |
| pH | SU | 1, 2 | 6.5 min, 9.0 max | | n/a | no | |
| Phosphorous, total P | mg/L | 1 | * | | 0.5 | yes | * / 0.2 |
| Total Suspended Solids | mg/L | 1, 2 | 20 | | 15 | no | |

* - Monitoring requirement only

** - For DO the Daily Maximum is a Daily Minimum and the Monthly Average is a Monthly Average Minimum.

*** - # of colonies/100mL; the Monthly Average for *E. coli* is a geometric mean.

Basis for Limitations Codes:

- | | |
|--|-----------------------------------|
| 1. State or Federal Regulation/Law | 5. Water Quality Model |
| 2. Water Quality Standard (includes RPA) | 6. Best Professional Judgment |
| 3. Water Quality Based Effluent Limits | 7. TMDL or Permit in lieu of TMDL |
| 4. Antidegradation Review/Policy | 8. WET Test Policy |

Derivation and Discussion of Limits:

Biochemical Oxygen Demand (BOD₅)

15 mg/L daily maximum and 10 mg/L monthly average effluent limitations per 10 CSR 20-7.015(4)(B)2 for losing stream settings. The previous permit set limits erroneously for a facility discharging to a gaining stream (20 mg/L for a daily maximum).

Escherichia coli (E. coli)

Discharges to losing streams shall not exceed 126 per 100 mL as a Daily Maximum and Monthly Average at any time, as per 10 CSR 20-7.031(5)(C). No more than 10% of samples shall exceed 126 #/100 mL daily maximum as per 10 CSR 20-7.015(9)(B)1.G. The monthly value reported is a geometric mean.

Flow

In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification. The facility averaged about 4326 gallons per day throughout the last permit cycle. The facility was only required to obtain flow measurements once per weekday during the last permit cycle. The facility will be required to monitor the flow at a minimum three times per week. Additionally, the digital discharge monitoring report has identical numbers for the daily max and the monthly average. These numbers should be different as an average should have been computed from the daily measurements. After review of a few of the paper discharge reports, the facility was not reporting a daily maximum for any parameter. The facility must begin to report the one highest daily flow value within each month to the department in addition to the monthly average flow rates.

Metals

Effluent limitations for total recoverable metals were developed using methods and procedures outlined in the “Technical Support Document For Water Quality-based Toxic Controls” (EPA/505/2-90-001) and “The Metals Translator: Guidance for Calculating a Total Recoverable Permit Limit from a Dissolved Criterion” (EPA 823-B-96-007). General warm-water fishery criteria apply and a water hardness of 162 mg/L would normally be used in the conversion below. However, the two metals for this permit are not hardness dependent hence there is no conversion factor.

Aluminum, Total Recoverable

This facility uses chemicals for phosphorous removal that may contain aluminum. Previous permit limits were 0.75 mg/L for daily maximum, and 0.37 mg/L for monthly average. This permit keeps the same daily maximum (although now the facility is to report in µg/L) and has lowered the monthly average because of the reasonable potential to contribute to pollution of waters of the state. See Appendix A – Reasonable Potential Analysis.

Protection of aquatic life chronic criteria = none; acute criteria = 750 µg/L.

$$\text{Acute WLA: } C_e = ((0.006705 + 0.0)750 - (0.0 * 0.0))/0.006705 \quad C_e = 750 \text{ } \mu\text{g/L}$$

$$LTA_c = 750 (0.131) = 98.25 \text{ } \mu\text{g/L}$$

[CV = 3.4, 99th Percentile]

$$LTA_a = 750 (0.0877) = 65.78 \text{ } \mu\text{g/L}$$

[CV = 3.4, 99th Percentile]

Use most protective number of LTA_c or LTA_a = 65.78

$$\text{MDL} = 65.78 (11.4) = 749.89 \text{ } \mu\text{g/L} \approx \mathbf{750 \text{ } \mu\text{g/L}}$$

[CV = 3.4, 99th Percentile]

$$\text{AML} = 65.78 (3.45) = 226.94 \text{ } \mu\text{g/L} \approx \mathbf{227 \text{ } \mu\text{g/L}}$$

[CV = 3.4, 95th Percentile, n = 4]

Iron, Total Recoverable

This facility uses chemicals for phosphorous removal that may contain iron. During the last permit cycle, values ranged from 0 mg/L to 0.9 mg/L. Sixty five of 68 values were reported as “0”. However, of the three values reported other than zero, two were above the permit limits. The previous permit set limits based on the groundwater standards for iron; this is appropriate as the groundwater standard (300 µg/L) is more conservative than the protection of aquatic life (1000 µg/L) standard.

$$\text{WLA: } C_e = ((0.006705 + 0.0)300 - (0.0 * 0.0))/0.006705 \quad C_e = 300 \text{ } \mu\text{g/L}$$

$$LTA_c = 300 (0.527) = 158.1 \text{ } \mu\text{g/L}$$

[CV = 0.6, 99th Percentile]

$$LTA_a = 300 (0.321) = 96.3 \text{ } \mu\text{g/L}$$

[CV = 0.6, 99th Percentile]

Use most protective number of LTA_c or LTA_a = 96.3

$$\text{MDL} = 96.3 (3.11) \approx \mathbf{493 \text{ } \mu\text{g/L}}$$

[CV = 0.6, 99th Percentile]

$$\text{AML} = 96.3 (1.55) \approx \mathbf{246 \text{ } \mu\text{g/L}}$$

[CV = 0.6, 95th Percentile, n = 4]

Nutrients

Because of the watershed the facility is located within, nutrients are of particular interest to keep Lake Taneycomo and Table Rock Lake as pristine features of the state. Nitrogen-containing compounds and phosphorous are of concern. For additional information about nutrient pollution in Missouri, visit <http://www.dnr.mo.gov/env/wpp/mnrsc/index.htm> to view the Nutrient Reduction Strategy.

Nitrogenous Compounds

The wastewater treatment facility may have a problem removing nitrogenous compounds (ammonia, nitrates, nitrogen, and nitrites) from the effluent. It is this permit writer’s responsibility to identify and reduce nitrogenous compounds which are found in effluent which are toxic to fish or which violate water quality standards. During the last permit modification, nitrate was removed from the sampling requirement stating “Limitations and monitoring requirements for nitrate have been removed from the permit. No water quality standard exists at this time.” Currently, there are water quality standards for nitrate. During a site visit, it was noted by the facility consultant the influent is highly concentrated because it is not diluted by any common processes (laundry, dishwashers, or showers). The treatment plant treats almost exclusively toilets and hand washing sinks.

Nitrogen (Total N)

Per 10 CSR 20-7.015(9)(D)7, nutrient monitoring shall be instituted on a quarterly basis for facilities with a design flow greater than 0.1 MGD. However, monitoring was included within the last permit cycle even though the facility discharges less than 5000 gallons per day on average. Thirty three values were obtained for total nitrogen and ranged from 1.05 to 75.3 mg/L. the average was 37.3 mg/L. Because this parameter does not have water quality limits, a numeric reasonable potential analysis can not be performed. However, because of the high variation within the values submitted on the discharge monitoring report, because they discharge to a losing stream, and also because they discharge to streams which will eventually impact Lake Taneycomo, the facility will be required to continue to monitor for this nutrient. The department is currently assessing nutrients throughout the state of Missouri and is expected to develop limits for nutrients (nitrogen and phosphorous) in the future. Monitoring was decreased from once per month to once per quarter. Quarterly data will still provide enough information to determine if reasonable potential exists to pollute waters of the state when numeric water quality limits are established.

Ammonia (Total Ammonia as Nitrogen)

Early life stages assumed present therefore total ammonia nitrogen criteria apply [10 CSR 20-7.031(4)(B)7.C. & Table B3]; default pH 7.8 SU. No mixing considerations are allowed. The facility did not supply the daily flows but an average was calculated at 4326 gallons per day which translates to 0.006705 cubic feet per second.

| Season | Temp (°C) | pH (SU) | Total Ammonia Nitrogen CCC (mg/L) | Total Ammonia Nitrogen CMC (mg/L) |
|--------|-----------|---------|-----------------------------------|-----------------------------------|
| Summer | 26 | 7.8 | 1.5 | 12.1 |
| Winter | 6 | 7.8 | 3.1 | 12.1 |

Summer: April 1 – September 30

Chronic WLA: $C_c = ((0.006705 + 0.0) * 1.5 - (0.0 * 0.01)) / 0.006705 = 1.5 \text{ mg/L}$

Acute WLA: $C_c = ((0.006705 + 0.0) * 12.1 - (0.0 * 0.01)) / 0.006705 = 12.1 \text{ mg/L}$

$LTA_c = 1.5 \text{ mg/L (0.780)} = 1.2 \text{ mg/L}$

[CV = 0.6, 99th Percentile, 30 day avg.]

$LTA_a = 12.1 \text{ mg/L (0.321)} = 3.9 \text{ mg/L}$

[CV = 0.6, 99th Percentile]

Use most protective number of LTA_c or $LTA_a = 1.2$

MDL = 1.2 mg/L (3.11) = **3.6 mg/L**

[CV = 0.6, 99th Percentile]

AML = 1.2 mg/L (1.19) = **1.4 mg/L**

[CV = 0.6, 95th Percentile, n = 30]

Winter: October 1 – March 31

Chronic WLA: $C_c = ((0.006705 + 0.0) * 3.1 - (0.0 * 0.01)) / 0.006705 = 3.1 \text{ mg/L}$

Acute WLA: $C_c = ((0.006705 + 0.0) * 12.1 - (0.0 * 0.01)) / 0.006705 = 12.1 \text{ mg/L}$

$LTA_c = 3.1 \text{ mg/L (0.780)} = 2.4 \text{ mg/L}$

[CV = 0.6, 99th Percentile, 30 day avg.]

$LTA_a = 12.1 \text{ mg/L (0.321)} = 3.9 \text{ mg/L}$

[CV = 0.6, 99th Percentile]

Use most protective number of LTA_c or $LTA_a = 2.4$

MDL = 2.4 mg/L (3.11) = **7.5 mg/L**

[CV = 0.6, 99th Percentile]

AML = 2.4 mg/L (1.19) = **2.9 mg/L**

[CV = 0.6, 95th Percentile, n=30]

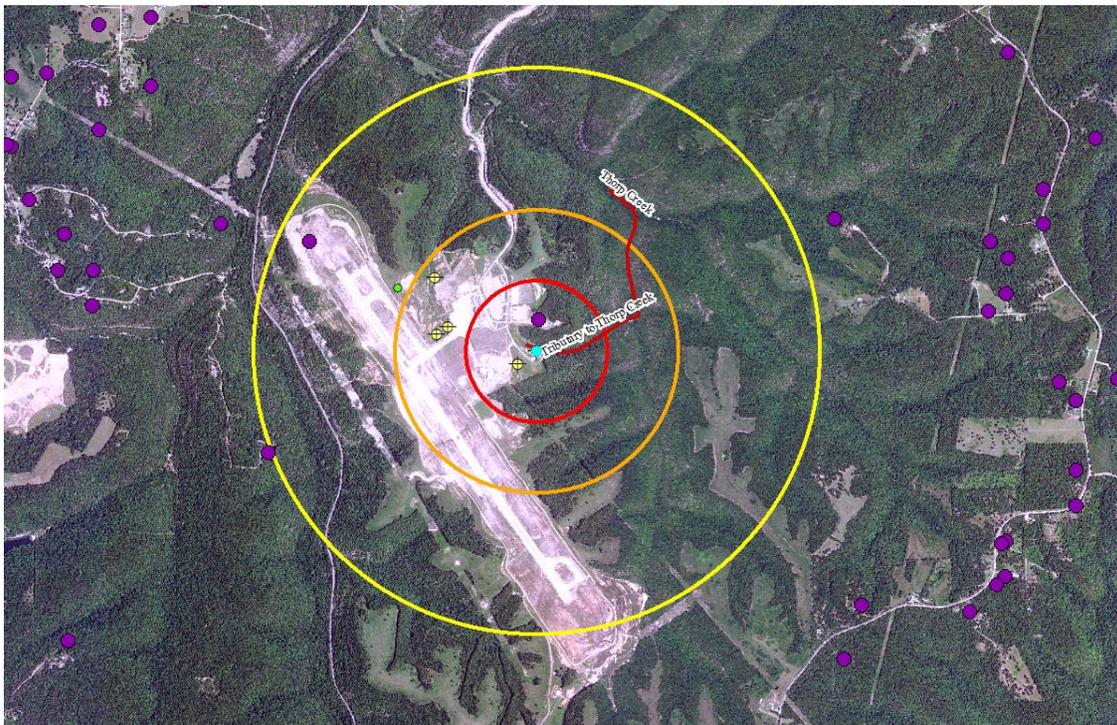
The facility had seven exceedances of permit limits for ammonia in 2013, in 2014 the facility vastly improved its performance and had no exceedances. However, due to the nature of the influent (restrooms only and a small portion from a restaurant—no intrinsic dilution from laundry or showers) a schedule of compliance is allowed for one year.

Nitrite (NO₂⁻) as N

At the beginning of the last permit cycle, the facility was required to analyze the effluent for nitrate plus nitrite until the modification in 2013. Nitrites are an intermediate, moderately toxic, breakdown product of ammonia by bacteria; the final stage of nitrification being nitrates. There are no water quality standards for nitrites hence no monitoring will be required. However, the facility may voluntarily monitor for this parameter to determine effectiveness of the beneficial bacteria to oxidize nitrogenous compounds.

Nitrate (NO_3^-) as N

The last permit modification removed limits for nitrates stating there were no water quality standards at the time. However, rules currently found in 10 CSR 20-7.015(4)(B)7. states “For situations in which nitrates in a discharge can be reasonably expected to impact specific drinking water wells, the concentration of nitrates in the discharge shall be limited to an average monthly limit of 10 mg/L as nitrogen and a maximum daily limit 20 mg/L”. On the following diagram, there are three drinking water wells (purple dots) within one mile of outfall #001. The red circle is 0.25 miles, the orange circle is 0.5 miles, and the yellow circle is one mile. While there are groundwater water quality standards in 10 CSR 20-7.031 (10 mg/L), the regulations in 10 CSR 20-7.015 have precedence at this time because they are effluent regulations pertaining specifically to wastewater treatment plants. In lieu of a study following Missouri Risk-Based Corrective Action guidance, a meeting between the department, Mr. Jesse Fosnaugh, and Mr. Rick Helms on 4/22/2015 determined there was no potential for nitrates from the wastewater treatment facility to impact the 800+ foot deep drinking water well serving the airport. Groundwater flows appear to be moving away from the well. The airport withdraws 875,000 gallons per day, chlorinates, and distributes the water throughout the airport facility. Over the past five years, the groundwater was tested on five separate occasions for nitrates-nitrites. In all instances, the groundwater showed non-detectable levels of the nutrients. The permit writer has used best professional judgment to not include further assessment at this time. Depending on performance of the wastewater treatment plant, the department reserves the right to impose groundwater-standard-based effluent limits at the next permit renewal.



Total Kjeldahl Nitrogen (TKN)

The last permit included monitoring for TKN. The permit writer used best professional judgment to eliminate this parameter because it is customarily applicable to facilities which land-apply the sludge. The applicant did not indicate they land apply sludge.

Phosphorous, Total P

The previous permit provided limits for total phosphorous based on similar facilities within the watershed. Those limits were 0.2 mg/L for maximum monthly average and established monitoring for daily maximum. The value was reassessed and determined it is still protective of the receiving waters and reasonable for the facility to meet as there was only one exceedance at 0.21 mg/L. However, the facility uses alum to remove phosphorous from the wastewater. The facility has been exceeding permit limits for aluminum. This raises the question: if the limits were higher for phosphorous, would the facility be able to attain compliance with aluminum? The airport is within the Table Rock Lake Ozark Highland Ecoregion and meets the requirements to adhere to 10 CSR 20-7.015(3)(E) where "...discharges to Lake Taneycomo and its tributaries between Table Rock Dam and Power Site Dam... shall not exceed 0.5 mg/L of phosphorous as a monthly average." The last permit based limits on nearby wastewater treatment facilities permit limits; City of Hollister and Branson Creek WWTF. While this facility is able to meet the 0.2 limit (in general), it may not be useful to have such low limits if pollution to waters of the state is occurring by other means (aluminum). This value is still protective of the receiving water's quality for phosphorous and will help the facility also meet water quality limits for aluminum. The facility will be required to monitor for this nutrient at least once every month and report monthly. The monthly average limit will be 0.5 mg/L, no limits will be leveraged for daily maximum but monitoring and reporting is necessary. Should the facility decide to sample only once per month, the monthly average limit must be met. For additional information, see http://dnr.mo.gov/env/wpp/permits/manual/docs/6_1_6_6.pdf.

Oil & Grease

Conventional pollutant, in accordance with 10 CSR 20-7.031 Table A effluent limitation for protection of aquatic life; Previous permit limits: 10 mg/L monthly average, 15 mg/L daily maximum. During the last permit cycle, the facility sampled monthly. The highest value reported was 5.4 mg/L and was the detection limit. It is the permit writer's best professional judgment the facility has no reasonable potential to violate water quality standards therefore they will be required to minimally monitor and report the value once per quarter.

Oxygen, Dissolved

Monitoring for a decrease in dissolved oxygen is necessary to determine in-stream impacts from the wastewater treatment process. Monthly minimum (chronic standard) of 5.0 mg/L. The previous permit modification added limits for this parameter which included a monthly minimum average of 6.3 mg/L. 10 CSR 20-7.031 Table A indicates a cool water fishery should receive a chronic standard of 5 mg/L. Therefore, monitoring will be introduced for the daily maximum. Should the facility decide to sample only once per month, the monthly average minimum must be met. Dissolved oxygen problems associated with the TMDL for Lake Taneycomo were determined to not be caused by wastewater treatment facilities in the watershed.

pH

6.5 to 9.0 SU. The Water Quality Standard states water contaminants shall not cause pH to be outside the range of 6.5 to 9.0 standard units. No mixing zone or dilution is allowed due to the classification of the receiving stream, therefore the water quality standard must be met at the outfall.

Temperature

In accordance with 10 CSR 20-7.031(5)(D), water contaminant sources shall not cause or contribute to stream temperature in excess of ninety degrees Fahrenheit (90 °F) or thirty-two and two-ninths degrees Celsius (32 2/9 °C). However, wastewater treatment facilities in general do not have reasonable potential to contribute to increases in stream temperature therefore temperature monitoring will not be required.

Total Suspended Solids (TSS)

20 mg/L daily maximum and 15 mg/L monthly average effluent limitations, as per [10 CSR 20-7.015(4)(B)1] for losing streams. The last permit allowed a daily maximum of 30 mg/L and 15 mg/L for monthly average which was applied in error.

Minimum Sampling and Reporting Frequency Requirements

| PARAMETER | MINIMUM SAMPLING FREQUENCY | REPORTING FREQUENCY |
|--|----------------------------|---------------------|
| Aluminum (total recoverable) | once/month | once/quarter |
| Ammonia as N | once/month | once/quarter |
| Biochemical Oxygen Demand ₅ | once/month | once/quarter |
| Dissolved Oxygen | once/month | once/quarter |
| Escherichia coli | once/month | once/quarter |
| Flow | three times weekly | once/quarter |
| Iron (total recoverable) | once/month | once/quarter |
| Nitrate (NO ₃ ⁻) as N | once/quarter | once/quarter |
| Nitrogen, total N | once/quarter | once/quarter |
| Oil & Grease | once/quarter | once/quarter |
| pH | once/month | once/quarter |
| Phosphorous, total P | once/month | once/quarter |
| Total Suspended Solids | once/month | once/quarter |

Sampling Frequency Justification

Sampling frequency was somewhat retained from the previous permit. Please see the table above for specific sampling and reporting frequencies for this permit. For flows less than or equal to 100,000 gallons per day, the Clean Water Commission has directed the Department to proceed with amending 10 CSR 20-7.015 to reduce the sampling frequency required for E. coli to a lesser frequency, still protective of water quality standards, for smaller facilities, including those with discharges of 100,000 gallons per day or less.

Reporting Frequency Justification

The facility was required to report monthly during the last permit cycle. By allowing for quarterly reporting, the department has determined the facility will reduce costs from postage. The facility is encouraged to submit their discharge monitoring reports online. This will be a requirement in the near future, possibly by the next permit renewal. The facility should visit www.dnr.mo.gov/env/edmr.htm for additional information and to begin the process.

Sampling Type Justification

As per 10 CSR 20-7.015, BOD₅, TSS, and WET test samples collected for mechanical plants may be a 24 hour composite sample. Grab samples, however, must be collected for pH, ammonia as N, E. coli, Oil & Grease, and Total Phosphorus. This is due to the holding time restriction for E. coli, the volatility of ammonia, and the fact that pH and DO cannot be preserved and must be sampled in the field. As Ammonia, Oil & Grease, and total phosphorus samples must be immediately preserved with acid, these samples are to be collected as a grab. However, because this is a small facility, grab sampling is appropriate for all parameters as composite sampling is cost prohibitive. The facility is required to collect *representative* grab samples according to 40 CFR 122.48 and 10 CSR 20-7.015(1)(A)4. For further information on sampling and testing methods see 10 CSR 20-7.015(9)(D)2

Outfall #002 – Oil/Water Separator Outfall

Effluent limitations derived and established in the below Effluent Limitations Table are based on current operations of the facility. Future permit action due to facility modification may contain new operating permit terms and conditions that supersede the terms and conditions, including effluent limitations, of this operating permit. The permittee is only required to sample once per quarter and this outfall is directly tied to precipitation. Because of the fleeting and non-reproducible nature of wet weather events, the monthly averages will be required to be the daily maximum; the *Technical Support Document for Water Quality-Based Toxics Control* (EPA/505/2-90-001) was authored with the intent of applying the directives within the document to continuous discharges, of which precipitation is not.

| PARAMETER | UNIT | BASIS FOR LIMITS | DAILY MAXIMUM | WEEKLY AVERAGE | MONTHLY AVERAGE | MODIFIED | PREVIOUS PERMIT LIMITATIONS |
|-------------------------|--------|------------------|---------------|----------------|-----------------|----------|-----------------------------|
| Benzene | µg/L | 1 | 5 | | | yes | 10 / 5 |
| Chemical Oxygen Demand | mg/L | 1, 2 | 30 | | | yes | 60 / 30 |
| Ethylbenzene | µg/L | 1 | 320 | | | yes | 526 / 262 |
| Flow | mg/L | 1 | * | | | no | |
| Gasoline Range Organics | µg/L | 6 | * | | | new | |
| Oil & Grease | mg/L | 1, 2 | 10 | | | yes | 15 / 10 |
| pH | SU | 1, 2 | 6.5-9 | | | no | |
| Precipitation | inches | 6 | * | | | new | |
| Settleable Solids | mg/L | 6 | ** | | | yes | 1.0 / 0.5 |
| Toluene | mg/L | 1 | 1000 | | | yes | 2010 / 1000 |
| Xylenes, total | µg/L | 1 | 10,000 | | | yes | 20,100 / 10,000 |

* Monitoring requirement only
** Monitoring with Benchmark

Basis for Limitations Codes:

- | | |
|--|-----------------------------------|
| 1. State or Federal Regulation/Law | 5. Water Quality Model |
| 2. Water Quality Standard (includes RPA) | 6. Best Professional Judgment |
| 3. Water Quality Based Effluent Limits | 7. TMDL or Permit in lieu of TMDL |
| 4. Antidegradation Review/Policy | 8. WET Test Policy |

Derivation and Discussion of Limits

Benzene

This parameter is required because of fueling areas onsite. The Discharge Monitoring Report (DMR) showed concentrations ranging from 0.5 to 1 µg/L. No mixing is available, thus the water quality standard (WQS) for groundwater (GW) applies at the outfall. The WQS for the protection of GW is 5 µg/L.

Chemical Oxygen Demand

The previous permit limitations were set at 60 mg/L for a daily maximum and 30 mg/L for a monthly average. Monthly averages are not appropriate for stormwater. The permittee is only required to sample once per quarter and this outfall is directly tied to precipitation. Because of the fleeting and non-reproducible nature of wet weather events, the prior monthly average will be required to be the daily maximum; the *Technical Support Document for Water Quality-Based Toxics Control* (EPA/505/2-90-001) was authored with the intent of applying the directives to continuous discharges, of which precipitation is not. No schedule of compliance is allowed because the facility is able to meet 30 mg/L.

Chloride

The past permit included monitoring for chloride because salt is used at the facility for de-icing. Results obtained for this outfall range from 1 to 1.4 mg/L. Missouri water quality standards are 860 mg/L for the acute (daily maximum) and 230 mg/L for the chronic (monthly average) standard. While the applicant believes it is present on the property, reported values have determined it is not present in sufficient amounts to pose a threat to Missouri’s waterways. Monitoring will be discontinued at this outfall.

Ethylbenzene

This parameter is required because of fueling areas onsite. The DMR showed concentration ranging from 0.5 µg/L to 1400 µg/L. No mixing is available, thus the water quality standard (WQS) for protection of aquatic life (AQL) applies at the outfall (it is more protective of the groundwater quality standard of 700 µg/L). The WQS for the protection of AQL is 320 µg/L. No schedule of compliance is allowed because the facility has been meeting the water quality standard since 2009 when the last violation occurred.

Gasoline Range Organics (GRO)

The facility fuels airplanes on-site and this parameter is needed to determine if the cleanliness of the discharge is adequate. This is a new requirement and will be monitoring only.

Oil & Grease

Conventional pollutant, in accordance with 10 CSR 20-7.031 Table A effluent limitation for protection of aquatic life; Previous permit limits: 10 mg/L monthly average, 15 mg/L daily maximum. Because the flow is dependent upon precipitation, the monthly average limits are not appropriate. The lowest value of the daily or monthly limit will be retained (10 mg/L) for daily maximum. A schedule of compliance is not available because the facility is already able to meet the limit at this outfall.

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 management exists at the site. Knowing the amount of potential stormwater runoff can provide the permittee a better understanding of specific control measure that should be employed to ensure protection of water quality. The facility will report the amount of precipitation for 24 hours on the day of sampling.

Settleable Solids

The previous permit provided limits for Settleable solids of 1 mL/L/hr for a daily maximum and 0.5 mL/L/hr for a monthly average. Discharge monitoring reports indicate 0.1 (the detection limit) was reported for all values. Because there were limits imposed on the previous permit, the requirement will be relaxed one level to monitoring only with an associated benchmark.

Temperature

Due to the nature of the discharge being stormwater only, the permittee will not be required to monitor for this pollutant during sampling from this outfall. The permit writer has used best professional judgment to determine the discharge will not cause an exceedance in temperature in the receiving stream during discharges of stormwater only.

Toluene

This parameter is required because of fueling areas onsite. The DMR showed concentration ranging from 0.5 to 1 µg/L. No mixing is available, thus the water quality standard (WQS) for groundwater (GW) applies at the outfall. The WQS for the protection of GW is 1,000 µg/L. The last permit allowed a monthly average of 1000 µg/L and a daily maximum of 2010 µg/L. No schedule of compliance is allowed because the facility is able to meet the water quality standard.

Total Suspended Solids (TSS)

An analysis of the data provided a maximum value of 8 mg/L indicating this parameter is not a constituent of concern for this outfall. Monitoring will be discontinued for this outfall.

Xylene

This parameter is required because of fueling areas onsite. The DMR showed concentration ranging from 0.6 to 4.3 µg/L. No mixing is available, thus the water quality standard (WQS) for groundwater (GW) applies at the outfall. The WQS for the protection of GW is 10,000 µg/L. The last permit allowed a monthly average of 10,000 µg/L and a daily maximum of 20,100 µg/L. The permittee is only required to sample once per quarter and this outfall is directly tied to precipitation. No schedule of compliance is allowed because the facility is able to meet the water quality standard.

Minimum Sampling and Reporting Frequency Requirements

All parameters shall be sampled and reported once per quarter. Should a qualifying precipitation event not occur, report no discharge.

Sampling Frequency Justification

Quarterly sampling frequency was determined to be representative of the discharges from this outfall at this facility and is appropriate for stormwater. This requirement was carried over from the previous permit.

Sampling Type Justification

Grab samples are appropriate for stormwater discharges. For further information on sampling and testing methods see 10 CSR 20-7.015(9)(D)2.

Outfalls #003, #004, #005, & #006 – Stormwater Runoff

Effluent limitations derived and established in the below Effluent Limitations Table are based on current operations of the facility. Future permit action due to facility modification may contain new operating permit terms and conditions that supersede the terms and conditions, including effluent limitations, of this operating permit.

Due to the nature of the discharges from these outfalls being stormwater, only a maximum daily limit (MDL) or monitoring requirement will be implemented for many of the parameters listed below. Stormwater events are acute occurrences that result in the greatest concentrations of pollutants being discharged in the first part of the runoff. This first flush can best be represented by a grab sample within the first hours of runoff. Additionally, stormwater events are highly variable. Recording an average monthly limit (AML) is not representative of the nature of these discharges. Many of these parameters that require just a MDL monitoring only requirement will now have a benchmark value associated with that monitoring only requirement. These benchmark values will be listed under the individual discussion and derivation of each parameter containing such a value.

The permittee is only required to sample once per quarter and these outfalls are directly tied to precipitation. Because of the fleeting and non-reproducible nature of wet weather events, the chronic standard will be required to be the daily maximum limit or benchmark; the *Technical Support Document for Water Quality-Based Toxics Control* (EPA/505/2-90-001) was authored with the intent of applying the directives to continuous discharges, of which precipitation is not.

Benchmark concentrations are **not** effluent limitations; a benchmark exceedance, therefore, is not a permit violation. Benchmark monitoring data is used to determine the overall effectiveness of control measures and to assist the permittee in knowing when additional corrective action(s) may be necessary to comply with the technology based effluent limitations (TBEL). Failure to take corrective action is a violation of the permit. Benchmark exceedance alone is not a permit violation.

The benchmarks listed in the derivation discussion below have been determined to be feasible, affordable and protective of water quality. These benchmark values are consistent with other stormwater permits including the EPA MSGP. The facility will be required to monitor for all these parameters and if the benchmarks are exceeded at all in the following permit cycle, then the permit writer will use best professional judgment to determine if effluent limitations will be necessary to protect water quality.

| PARAMETER | UNIT | BASIS FOR LIMITS | DAILY MAXIMUM | BENCHMARK | MODIFIED | PREVIOUS PERMIT LIMITATIONS |
|------------------------|---------|------------------|---------------|-----------|----------|-----------------------------|
| Benzene | µg/L | 3 | ** | - | yes | 10 / 5 |
| Chemical Oxygen Demand | mg/L | 2, 3 | 40 | - | yes | 60 / 30 |
| Ethylbenzene | µg/L | 3 | ** | - | yes | 526 / 262 |
| Flow | GPD | 1 | * | - | no | |
| Oil & Grease | mg/L | 2 | 10 | - | yes | 15 / 10 |
| pH | SU | 1 | 6.5-9 | - | no | |
| Precipitation | inches | 6 | * | - | new | |
| Settleable Solids | mL/L/hr | 2 | ** | 0.5 | yes | 1.0 / 0.5 |
| Toluene | µg/L | 3 | ** | - | yes | 2010 / 1000 |
| Total Suspended Solids | mg/L | 2, 3 | ** | 50 | yes | * |
| Xylenes, total | µg/L | 3 | ** | - | yes | 20,100 / 10,000 |

- * Monitoring requirement only
- ** Monitoring with associated benchmark

Basis for Limitations Codes:

- | | |
|--|-----------------------------------|
| 1. State or Federal Regulation/Law | 5. Water Quality Model |
| 2. Water Quality Standard (includes RPA) | 6. Best Professional Judgment |
| 3. Water Quality Based Effluent Limits | 7. TMDL or Permit in lieu of TMDL |
| 4. Antidegradation Review/Policy | 8. WET Test Policy |

Outfalls #003, #004, #005, & #006 -- Derivation and Discussion of Limits

Benzene

This parameter is required because of fueling areas onsite. The Discharge Monitoring Report (DMR) showed concentrations ranging from 0.5 to 1 µg/L. No mixing is available, thus the water quality standard applies at the outfall. The WQS for the protection of groundwater is 5 µg/L and will be applied as a benchmark.

Chemical Oxygen Demand (COD)

Monitoring is included using the permit writer's best professional judgment. There is no 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 that may indicate materials/chemicals coming into contact with stormwater that cause an increase in oxygen demand. Increases in COD may indicate a need for maintenance or improvement of BMPs. The limit value will be set at 40 mg/L. The limit was calculated by using 22 data points of COD from outfalls #004, #005, and #006. An apparent outlier of 59 mg/L was removed to obtain a 95th percentile of 37.76 therefore a limit of 40 mg/L was established using best professional judgment. An analysis of all of the data indicated this limit is achievable. The permit writer used best professional judgment to make COD a limit instead of a benchmark because of the dissolved oxygen issues within the watershed.

Ethylbenzene

This parameter is required because of fueling areas onsite. The DMR showed concentration ranging from 0.5 µg/L to 1000 µg/L. No mixing is available, thus the water quality standard (WQS) for protection of aquatic life (AQL) applies at the outfall as the benchmark. The WQS for the protection of AQL is 320 µg/L.

Flow

The measurement of the flow which is being discharged through these outfalls is necessary to determine the effectiveness of the BMPs and SWPPP for the site.

Oil & Grease

Conventional pollutant, in accordance with 10 CSR 20-7.031 Table A effluent limitation for protection of aquatic life; Previous permit limits: 10 mg/L monthly average, 15 mg/L daily maximum. Because the flow is dependent upon precipitation, the monthly average limits are not appropriate. The lowest value of the daily or monthly limit will be retained (10 mg/L) for daily maximum. A schedule of compliance is not available because the facility is already able to meet the limit at this outfall.

Precipitation

The facility is required to obtain precipitation measurements from the day of sampling. The facility will need to include a precipitation measurement for each outfall sampled. The department sees the need for duplicative monitoring of this parameter because facilities are not required to sample the same day at each outfall.

Settleable Solids

The previous permit provided limits for Settleable Solids of 1 mL/L/hr for a daily maximum and 0.5 mL/L/hr for a monthly average. Discharge monitoring reports indicate 0.1 to 0.3 mg/L were reported. Because there were limits imposed on the previous permit, the permit writer used best professional judgment to translate those limits to a benchmark. The benchmark will be 1.0 mL/L/hr which is achievable at all four outfalls.

Temperature

Due to the nature of the discharge being stormwater only, the permittee will not be required to monitor for this pollutant. The permit writer has used best professional judgment to determine the discharge will not cause an exceedance in temperature in the receiving stream during discharges of stormwater only.

Toluene

This parameter is required because of fueling activities onsite. The DMR showed concentration ranging from 0.5 to 100 µg/L. No mixing is available, thus the water quality standard (WQS) for groundwater (GW) applies at the outfall as the benchmark. The WQS for the protection of GW is 1,000 µg/L.

Total Suspended Solids (TSS)

TSS data from outfalls #004, #005, and #006 were calculated to determine the 95th percentile was 51.7. When the outlier of 116 mg/L was removed, the 95th percentile became 41.015 demonstrating the 50 mg/L benchmark is achievable. A TSS benchmark of 50 mg/L was established using best professional judgment.

Xylene

This parameter is required because of fueling areas onsite. The DMR showed concentration ranging from 1 to 200 µg/L. No mixing is available, thus the water quality standard applies at the outfall as the benchmark.

Minimum Sampling and Reporting Frequency Requirements

All parameters shall be sampled and reported once per quarter. Should a qualifying precipitation event not occur, report no discharge.

Sampling Frequency Justification

Sampling frequency was determined to be representative of the discharges from this facility. Quarterly sampling is appropriate for stormwater and was carried over from the previous permit.

Sampling Type Justification

Grab samples are appropriate for stormwater discharges. For further information on sampling and testing methods see 10 CSR 20-7.015(9)(D)2.

Outfall #007 – Holding Tank for De-Icing Pad

This feature is to be operated as a no discharge structure. Any discharge associated with this outfall is a violation. The facility must report any discharge to the regional office (or after hours to the department's spill line) no later than 72 hours after discharge.

Part VI. COMPLIANCE WITH SWPPP REQUIREMENTS TO ACHIEVE BENCHMARK VALUES

The purpose of a SWPPP is to comply with all applicable stormwater regulations by creating an adaptive management plan to control and mitigate pollution of 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 discussed in Part V above. This section is not intended to be all encompassing or restrict the use of any physical BMP or operational and maintenance procedure that will assist in pollution control. Additional steps or revisions to the SWPPP may be required to meet the requirements of the permit. Additional information can be found in EPA's *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (Document number EPA 833-B-09-002) [published by the United States Environmental Protection Agency (USEPA) in February 2009].

In order to effectively control the pollutants being discharged in stormwater runoff, potential stormwater pollution sources must be identified. Areas which should be included in the SWPPP are identified in 40 CFR 122.26(b)(14). The pollutants of concern that have already been identified in Part V above can be used to assist in identifying potential sources. Once these 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, employ the control measures that have been determined to be adequate to achieve the benchmark values discussed above. Conduct monitoring and inspections of the BMPs to ensure they are working properly. Re-evaluate any BMP that is not achieving compliance with permitting requirements. For example, if sample results from either 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 quarter 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.

If failures continue to occur and the permittee feels there are no practicable or cost-effective BMPs that 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 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. Provide financial data of the company and documentation of cost associated with BMPs for review. 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 should also include the SWPPP, which should contain adequate documentation of BMPs employed, failed BMPs, corrective actions, and all other required information. The request shall be submitted in the form of an operating permit modification application. Appropriate application forms can be found on the Department's website: <http://dnr.mo.gov/forms/index.html>.

Part VII. COST ANALYSIS FOR COMPLIANCE

Pursuant to Section 644.145, RSMo, when issuing permits under this chapter that incorporate a new requirement for discharges from publicly owned combined or separate sanitary or storm sewer systems or publicly owned treatment works, or when enforcing provisions of this chapter or the Federal Water Pollution Control Act, 33 U.S.C. 1251 et seq., pertaining to any portion of a publicly owned combined or separate sanitary or storm sewer system or [publicly owned] treatment works, the Department of Natural Resources shall make a “finding of affordability” on the costs to be incurred and the impact of any rate changes on ratepayers upon which to base such permits and decisions, to the extent allowable under this chapter and the Federal Water Pollution Control Act. This process is completed through a cost analysis for compliance. Permits that do not include new requirements may be deemed affordable.

✓ Not applicable; the airport is a Limited Liability Corporation (LLC).

Part VIII. 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 that all permits within a watershed will move through the Watershed Based Management (WBM) cycle together will all expire in the same fiscal year. 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 three years old, that 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. *To attain synchronization, the permit will expire at the end of the fourth quarter of 2019.*

PUBLIC NOTICE

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

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

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

The Public Notice period for this operating permit was from 5/22/2015 to 6/22/2015. No responses were received.

DATE OF FACT SHEET: JUNE 2015

COMPLETED BY

PAM HACKLER, ENVIRONMENTAL SCIENTIST
MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
OPERATING PERMITS SECTION - INDUSTRIAL UNIT
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APPENDIX A – RPA RESULTS

| Parameter | CMC* | RWC Acute* | CCC* | RWC Chronic* | n** | Range max, min | CV*** | CI | RP Yes/No |
|-----------------------------|------|------------|------|--------------|-----|----------------|-------|-------|-----------|
| Aluminum, total recoverable | 750 | 55.47 | n/a | n/a | 68 | 15300, 0 | 3.391 | 3.625 | yes |
| Iron, total recoverable | n/a | 5059 | 300 | 5059 | 3 | 150, 900 | 0.6 | 5.621 | yes |

N/A – Not Applicable

* — Units are (µg/L) unless otherwise noted.

** — If the number of samples is 10 or greater, then the CV value must be used in the WQBEL for the applicable constituent.

*** Coefficient of Variation: calculated by dividing the standard deviation of the sample set by the mean of the same sample set.

RWC — Receiving Water Concentration. Concentration of a toxicant or the parameter's toxicity in the receiving water after mixing (if applicable).

n — Is the number of samples.

CI — Confidence interval; 99% Confidence Level and 99% Probability Basis

RP — Reasonable potential; an effluent is projected or calculated to cause an excursion above a water quality standard based on a number of factors including, as a minimum, the four factors listed in 40 CFR 122.44(d)(1)(ii)

Reasonable Potential Analysis is conducted as per (TSD, EPA/505/2-90-001, Section 3.3.2).

A more detailed version including calculations of this RPA is available upon request.



STANDARD CONDITIONS FOR NPDES PERMITS
ISSUED BY
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION
REVISED
AUGUST 1, 2014

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(a)(1);
 - 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;
 - iv. 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.
2. **Non-compliance Reporting.**
 - 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.



STANDARD CONDITIONS FOR NPDES PERMITS
ISSUED BY
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION
REVISED
AUGUST 1, 2014

- 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.
- 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).
 - c. 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.
3. **Upset Requirements.**
 - a. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph 3. b. of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
 - b. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - i. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - ii. The permitted facility was at the time being properly operated; and
 - iii. The permittee submitted notice of the upset as required in Section B – Reporting Requirements, paragraph 2. b. ii. (24-hour notice).
 - iv. The permittee complied with any remedial measures required under Section D – Administrative Requirements, paragraph 4.
 - c. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

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.

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



STANDARD CONDITIONS FOR NPDES PERMITS
ISSUED BY
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION
REVISED
AUGUST 1, 2014

- 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 \$50,000 per day of violation, or by imprisonment of not more than two (2) 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)(iii) 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 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 back-up 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
- iv. Any reason set forth in the Law or Regulations.
- b. 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.



STANDARD CONDITIONS FOR NPDES PERMITS
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MISSOURI CLEAN WATER COMMISSION
REVISED
AUGUST 1, 2014

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.

STANDARD CONDITIONS FOR NPDES PERMITS
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March 1, 2015

**PART III – SLUDGE AND BIOSOLIDS FROM DOMESTIC AND INDUSTRIAL WASTEWATER
TREATMENT FACILITIES**

SECTION A – GENERAL REQUIREMENTS

1. This permit pertains to sludge requirements under the Missouri Clean Water Law and regulation for domestic wastewater and industrial process wastewater. This permit also incorporates applicable federal sludge disposal requirements under 40 CFR 503 for domestic wastewater. The Environmental Protection Agency (EPA) has principal authority for permitting and enforcement of the federal sludge regulations under 40 CFR 503 for domestic wastewater. EPA has reviewed and accepted these standard sludge conditions. EPA may choose to issue a separate sludge addendum to this permit or a separate federal sludge permit at their discretion to further address the federal requirements.
2. These PART III Standard Conditions apply only to sludge and biosolids generated at domestic wastewater treatment facilities, including public owned treatment works (POTW), privately owned facilities and sludge or biosolids generated at industrial facilities.
3. Sludge and Biosolids Use and Disposal Practices:
 - a. The permittee is authorized to operate the sludge and biosolids treatment, storage, use, and disposal facilities listed in the facility description of this permit.
 - b. The permittee shall not exceed the design sludge volume listed in the facility description and shall not use sludge disposal methods that are not listed in the facility description, without prior approval of the permitting authority.
 - c. The permittee is authorized to operate the storage, treatment or generating sites listed in the Facility Description section of this permit.
4. Sludge Received from other Facilities:
 - a. Permittees may accept domestic wastewater sludge from other facilities including septic tank pumpings from residential sources as long as the design sludge volume is not exceeded and the treatment facility performance is not impaired.
 - b. The permittee shall obtain a signed statement from the sludge generator or hauler that certifies the type and source of the sludge
5. These permit requirements do not supersede nor remove liability for compliance with county and other local ordinances.
6. These permit requirements do not supersede nor remove liability for compliance with other environmental regulations such as odor emissions under the Missouri Air Pollution Control Law and regulations.
7. This permit may (after due process) be modified, or alternatively revoked and reissued, to comply with any applicable sludge disposal standard or limitation issued or approved under Section 405(d) of the Clean Water Act under Chapter 644 RSMo.
8. In addition to STANDARD CONDITIONS, the Department may include sludge limitations in the special conditions portion or other sections of a site specific permit.
9. Alternate Limits in the Site Specific Permit.

Where deemed appropriate, the Department may require an individual site specific permit in order to authorize alternate limitations:

 - a. A site specific permit must be obtained for each operating location, including application sites.
 - b. To request a site specific permit, an individual permit application, permit fee, and supporting documents shall be submitted for each operating location. This shall include a detailed sludge/biosolids management plan or engineering report.
10. Exceptions to these Standard Conditions may be authorized on a case-by-case basis by the Department, as follows:
 - a. The Department will prepare a permit modification and follow permit notice provisions as applicable under 10 CSR 20-6.020, 40 CFR 124.10, and 40 CFR 501.15(a)(2)(ix)(E). This includes notification of the owner of the property located adjacent to each land application site, where appropriate.
 - b. Exceptions cannot be granted where prohibited by the federal sludge regulations under 40 CFR 503.

SECTION B – DEFINITIONS

1. Best Management Practices include agronomic loading rates, soil conservation practices and other site restrictions.
2. Biosolids means organic fertilizer or soil amendment produced by the treatment of domestic wastewater sludge.
3. Biosolids land application facility is a facility where biosolids are spread onto the land at agronomic rates for production of food or fiber. The facility includes any structures necessary to store the biosolids until soil, weather, and crop conditions are favorable for land application.
4. Class A biosolids means a material that has met the Class A pathogen reduction requirements or equivalent treatment by a Process to Further Reduce Pathogens (PFRP) in accordance with 40 CFR 503.
5. Class B biosolids means a material that has met the Class B pathogen reduction requirements or equivalent treatment by a Process to Significantly Reduce Pathogens (PFRP) in accordance with 40 CFR 503.
6. Domestic wastewater means wastewater originating from the sanitary conveniences of residences, commercial buildings, factories and institutions; or co-mingled sanitary and industrial wastewater processed by a (POTW) or a privately owned facility.
7. Industrial wastewater means any wastewater, also known as process water, not defined as domestic wastewater. Per 40 CFR Part 122, process water means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.
8. Mechanical treatment plants are wastewater treatment facilities that use mechanical devices to treat wastewater, including septic tanks, sand filters, extended aeration, activated sludge, contact stabilization, trickling filters, rotating biological discs, and other similar facilities. It does not include wastewater treatment lagoons and constructed wetlands for wastewater treatment.
9. Operating location as defined in 10 CSR 20-2.010 is all contiguous lands owned, operated or controlled by one (1) person or by two (2) or more persons jointly or as tenants in common.
10. Plant Available Nitrogen (PAN) is the nitrogen that will be available to plants during the growing seasons after biosolids application.
11. Public contact site is land with a high potential for contact by the public. This includes, but is not limited to, public parks, ball fields, cemeteries, plant nurseries, turf farms, and golf courses.
12. Sludge is the solid, semisolid, or liquid residue removed during the treatment of wastewater. Sludge includes septage removed from septic tanks or equivalent facilities. Sludge does not include carbon coal byproducts (CCBs)
13. Sludge lagoon is part of a mechanical wastewater treatment facility. A sludge lagoon is an earthen basin that receives sludge that has been removed from a wastewater treatment facility. It does not include a wastewater treatment lagoon or sludge treatment units that are not a part of a mechanical wastewater treatment facility.
14. Septage is the material pumped from residential septic tanks and similar treatment works (with a design population of less than 150 people). The standard for biosolids from septage is different from other sludges.

SECTION C – MECHANICAL WASTEWATER TREATMENT FACILITIES

1. Sludge shall be routinely removed from wastewater treatment facilities and handled according to the permit facility description and sludge conditions of this permit.
2. The permittee shall operate the facility so that there is no sludge discharged to waters of the state.
3. Mechanical treatment plants shall have separate sludge storage compartments in accordance with 10 CSR 20, Chapter 8. Failure to remove sludge from these storage compartments on the required design schedule is a violation of this permit.

SECTION D – SLUDGE DISPOSED AT OTHER TREATMENT FACILITY OR CONTRACT HAULER

1. This section applies to permittees that haul sludge to another treatment facility for disposal or use contract haulers to remove and dispose of sludge.
2. Permittees that use contract haulers are responsible for compliance with all the terms of this permit including final disposal, unless the hauler has a separate permit for sludge or biosolids disposal issued by the Department; or the hauler transports the sludge to another permitted treatment facility.
3. Haulers who land apply septage must obtain a state permit.
4. Testing of sludge, other than total solids content, is not required if sludge is hauled to a municipal wastewater treatment facility or other permitted wastewater treatment facility, unless it is required by the accepting facility.

SECTION E – INCINERATION OF SLUDGE

1. Sludge incineration facilities shall comply with the requirements of 40 CFR 503 Subpart E; air pollution control regulations under 10 CSR 10; and solid waste management regulations under 10 CSR 80.
2. Permittee may be authorized under the facility description of this permit to store incineration ash in lagoons or ash ponds. This permit does not authorize the disposal of incineration ash. Incineration ash shall be disposed in accordance with 10 CSR 80; or if the ash is determined to be hazardous with 10 CSR 25.
3. In addition to normal sludge monitoring, incineration facilities shall report the following as part of the annual report, quantity of sludge incinerated, quantity of ash generated, quantity of ash stored, and ash used or disposal method, quantity, and location. Permittee shall also provide the name of the disposal facility and the applicable permit number.

SECTION F – SURFACE DISPOSAL SITES AND SLUDGE LAGOONS

1. Surface disposal sites of domestic facilities shall comply with the requirements in 40 CFR 503 Subpart C; air pollution control regulations under 10 CSR 10; and solid waste management regulations under 10 CSR 80.
2. Sludge storage lagoons are temporary facilities and are not required to obtain a permit as a solid waste management facility under 10 CSR 80. In order to maintain sludge storage lagoons as storage facilities, accumulated sludge must be removed routinely, but not less than once every two years unless an alternate schedule is approved in the permit. The amount of sludge removed will be dependent on sludge generation and accumulation in the facility. Enough sludge must be removed to maintain adequate storage capacity in the facility.
 - a. In order to avoid damage to the lagoon seal during cleaning, the permittee may leave a layer of sludge on the bottom of the lagoon, upon prior approval of the Department; or
 - b. Permittee shall close the lagoon in accordance with Section H.

SECTION G – LAND APPLICATION

1. The permittee shall not land apply sludge or biosolids unless land application is authorized in the facility description or the special conditions of the issued NPDES permit.
2. Land application sites within a 20 miles radius of the wastewater treatment facility are authorized under this permit when biosolids are applied for beneficial use in accordance with these standard conditions unless otherwise specified in a site specific permit. If the permittee's land application site is greater than a 20 mile radius of the wastewater treatment facility, approval must be granted from the Department.
3. Land application shall not adversely affect a threatened or endangered species or its designated critical habitat.
4. Biosolids shall not be applied unless authorized in this permit or exempted under 10 CSR 20, Chapter 6.
 - a. This permit does not authorize the land application of domestic sludge except for when sludge meets the definition of biosolids.
 - b. This permit authorizes "Class A or B" biosolids derived from domestic wastewater and/or process water sludge to be land applied onto grass land, crop land, timber or other similar agricultural or silviculture lands at rates suitable for beneficial use as organic fertilizer and soil conditioner.
5. Public Contact Sites:

Permittees who wish to apply Class A biosolids to public contact sites must obtain approval from the Department after two years of proper operation with acceptable testing documentation that shows the biosolids meet Class A criteria. A shorter length of testing will be allowed with prior approval from the Department. Authorization for land applications must be provided in the special conditions section of this permit or in a separate site specific permit.

 - a. After Class B biosolids have been land applied, public access must be restricted for 12 months.
 - b. Class B biosolids are only land applied to root crops, home gardens or vegetable crops whose edible parts will not be for human consumption.
6. Agricultural and Silvicultural Sites:

Septage – Based on Water Quality guide 422 (WQ422) published by the University of Missouri

 - a. Haulers that land apply septage must obtain a state permit
 - b. Do not apply more than 30,000 gallons of septage per acre per year.
 - c. Septage tanks are designed to retain sludge for one to three years which will allow for a larger reduction in pathogens and vectors, as compared to other mechanical type treatment facilities.
 - d. To meet Class B sludge requirements, maintain septage at 12 pH for at least thirty (30) minutes before land application. 50 pounds of hydrated lime shall be added to each 1,000 gallons of septage in order to meet pathogen and vector stabilization for septage biosolids applied to crops, pastures or timberland.
 - e. Lime is to be added to the pump truck and not directly to the septic tanks, as lime would harm the beneficial bacteria of the septic tank.

Biosolids - Based on Water Quality guide 423, 424, and 425 (WQ423, WQ424, WQ425) published by the University of Missouri;

- a. Biosolids shall be monitored to determine the quality for regulated pollutants
- b. The number of samples taken is directly related to the amount of sludge produced by the facility (See Section I of these Standard Conditions). Report as dry weight unless otherwise specified in the site specific permit. Samples should be taken only during land application periods. When necessary, it is permissible to mix biosolids with lower concentrations of biosolids as well as other suitable Department approved material to reach the maximum concentration of pollutants allowed.
- c. Table 1 gives the maximum concentration allowable to protect water quality standards

TABLE 1

| Biosolids ceiling concentration ¹ | |
|--|------------------------------------|
| Pollutant | Milligrams per kilogram dry weight |
| Arsenic | 75 |
| Cadmium | 85 |
| Copper | 4,300 |
| Lead | 840 |
| Mercury | 57 |
| Molybdenum | 75 |
| Nickel | 420 |
| Selenium | 100 |
| Zinc | 7,500 |

¹ Land application is not allowed if the sludge concentration exceeds the maximum limits for any of these pollutants

- d. The low metal concentration biosolids has reduced requirements because of its higher quality and can safely be applied for 100 years or longer at typical agronomic loading rates. (See Table 2)

TABLE 2

| Biosolids Low Metal Concentration ¹ | |
|--|------------------------------------|
| Pollutant | Milligrams per kilogram dry weight |
| Arsenic | 41 |
| Cadmium | 39 |
| Copper | 1,500 |
| Lead | 300 |
| Mercury | 17 |
| Nickel | 420 |
| Selenium | 36 |
| Zinc | 2,800 |

¹ You may apply low metal biosolids without tracking cumulative metal limits, provided the cumulative application of biosolids does not exceed 500 dry tons per acre.

- e. Each pollutant in Table 3 has an annual and a total cumulative loading limit, based on the allowable pounds per acre for various soil categories.

TABLE 3

| Pollutant | CEC 15+ | | CEC 5 to 15 | | CEC 0 to 5 | |
|-----------|---------|--------------------|-------------|--------------------|------------|--------------------|
| | Annual | Total ¹ | Annual | Total ¹ | Annual | Total ¹ |
| Arsenic | 1.8 | 36.0 | 1.8 | 36.0 | 1.8 | 36.0 |
| Cadmium | 1.7 | 35.0 | 0.9 | 9.0 | 0.4 | 4.5 |
| Copper | 66.0 | 1,335.0 | 25.0 | 250.0 | 12.0 | 125.0 |
| Lead | 13.0 | 267.0 | 13.0 | 267.0 | 13.0 | 133.0 |
| Mercury | 0.7 | 15.0 | 0.7 | 15.0 | 0.7 | 15.0 |
| Nickel | 19.0 | 347.0 | 19.0 | 250.0 | 12.0 | 125.0 |
| Selenium | 4.5 | 89.0 | 4.5 | 44.0 | 1.6 | 16.0 |
| Zinc | 124.0 | 2,492.0 | 50.0 | 500.0 | 25.0 | 250.0 |

¹ Total cumulative loading limits for soils with equal or greater than 6.0 pH (salt based test) or 6.5 pH (water based test)

TABLE 4 - Guidelines for land application of other trace substances ¹

| Cumulative Loading | |
|--------------------|-------------------------------|
| Pollutant | Pounds per acre |
| Aluminum | 4,000 ² |
| Beryllium | 100 |
| Cobalt | 50 |
| Fluoride | 800 |
| Manganese | 500 |
| Silver | 200 |
| Tin | 1,000 |
| Dioxin | (10 ppt in soil) ³ |
| Other | ⁴ |

¹ Design of land treatment systems for Industrial Waste, 1979. Michael Ray Overcash, North Carolina State University and Land Treatment of Municipal Wastewater, EPA 1981.)

² This applies for a soil with a pH between 6.0 and 7.0 (salt based test) or a pH between 6.5 to 7.5 (water based test). Case-by-case review is required for higher pH soils.

³ Total Dioxin Toxicity Equivalents (TEQ) in soils, based on a risk assessment under 40 CFR 744, May 1998.

⁴ Case by case review. Concentrations in sludge should not exceed the 95th percentile of the National Sewage Sludge Survey, EPA, January 2009.

Best Management Practices – Based on Water Quality guide 426 (WQ426) published by the University of Missouri

- a. Use best management practices when applying biosolids.
- b. Biosolids cannot discharge from the land application site
- c. Biosolid application is subject to the Missouri Department of Agriculture State Milk Board concerning grazing restrictions of lactating dairy cattle.
- d. Biosolid application must be in accordance with section 4 of the Endangered Species Act.
- e. Do not apply more than the agronomic rate of nitrogen needed.
- f. The applicator must document the Plant Available Nitrogen (PAN) loadings, available nitrogen in the soil, and crop removal when either of the following occurs: 1) When biosolids are greater than 50,000 mg/kg TN; or 2) When biosolids are land applied at an application rate greater than two dry tons per acre per year.
 - i. PAN can be determined as follows and is in accordance with WQ426
(Nitrate + nitrite nitrogen) + (organic nitrogen x 0.2) + (ammonia nitrogen x volatilization factor¹).
¹Volatilization factor is 0.7 for surface application and 1 for subsurface application.
- g. Buffer zones are as follows:
 - i. 300 feet of a water supply well, sinkhole, lake, pond, water supply reservoir or water supply intake in a stream;
 - ii. 300 feet of a losing stream, no discharge stream, stream stretches designated for whole body contact recreation, wild and scenic rivers, Ozark National Scenic Riverways or outstanding state resource waters as listed in the Water Quality Standards, 10 CSR 20-7.031;
 - iii. 150 feet if dwellings;
 - iv. 100 feet of wetlands or permanent flowing streams;
 - v. 50 feet of a property line or other waters of the state, including intermittent flowing streams.
- h. Slope limitation for application sites are as follows;
 - i. A slope 0 to 6 percent has no rate limitation
 - ii. Applied to a slope 7 to 12 percent, the applicator may apply biosolids when soil conservation practices are used to meet the minimum erosion levels
 - iii. Slopes > 12 percent, apply biosolids only when grass is vegetated and maintained with at least 80 percent ground cover at a rate of two dry tons per acre per year or less.
- i. No biosolids may be land applied in an area that it is reasonably certain that pollutants will be transported into waters of the state.
- j. Do not apply biosolids to sites with soil that is snow covered, frozen or saturated with liquid without prior approval by the Department.
- k. Biosolids / sludge applicators must keep detailed records up to five years.

SECTION H – CLOSURE REQUIREMENTS

1. This section applies to all wastewater facilities (mechanical, industrial, and lagoons) and sludge or biosolids storage and treatment facilities and incineration ash ponds. It does not apply to land application sites.
2. Permittees of a domestic wastewater facility who plan to cease operation must obtain Department approval of a closure plan which addresses proper removal and disposal of all residues, including sludge, biosolids. Mechanical plants, sludge lagoons, ash ponds and other storage structures must obtain approval of a closure plan from the Department. Permittee must maintain this permit until the facility is closed in accordance with the approved closure plan per 10 CSR 20 – 6. 010 and 10 CSR 20 – 6.015.
3. Residuals that are left in place during closure of a lagoon or earthen structure or ash pond shall not exceed the agricultural loading rates as follows:
 - a. Residuals shall meet the monitoring and land application limits for agricultural rates as referenced in Section H of these standard conditions.
 - b. If a wastewater treatment lagoon has been in operation for 15 years or more without sludge removal, the sludge in the lagoon qualifies as a Class B biosolids with respect to pathogens due to anaerobic digestion, and testing for fecal coliform is not required. For other lagoons, testing for fecal coliform is required to show compliance with Class B biosolids limitations. In order to reach Class B biosolids requirements, fecal coliform must be less than 2,000,000 colony forming units or 2,000,000 most probable number. All fecal samples must be presented as geometric mean per gram.
 - c. The allowable nitrogen loading that may be left in the lagoon shall be based on the plant available nitrogen (PAN) loading. For a grass cover crop, the allowable PAN is 300 pounds/acre.
 - i. PAN can be determined as follows:
$$(\text{Nitrate} + \text{nitrite nitrogen}) + (\text{organic nitrogen} \times 0.2) + (\text{ammonia nitrogen} \times \text{volatilization factor}^1).$$

¹ Volatilization factor is 0.7 for surface application and 1 for subsurface application.
4. When closing a domestic wastewater treatment lagoon with a design treatment capacity equal or less than 150 persons, the residuals are considered “septage” under the similar treatment works definition. See Section B of these standard conditions. Under the septage category, residuals may be left in place as follows:
 - a. Testing for metals or fecal coliform is not required
 - b. If the wastewater treatment lagoon has been in use for less than 15 years, mix lime with the sludge at a rate of 50 pounds of hydrated lime per 1000 gallons (134 cubic feet) of sludge.
 - c. The amount of sludge that may be left in the lagoon shall be based on the plant available nitrogen (PAN) loading. 100 dry tons/acre of sludge may be left in the basin without testing for nitrogen. If 100 dry tons/acre or more will be left in the lagoon, test for nitrogen and determine the PAN using the calculation above. Allowable PAN loading is 300 pounds/acre.
5. Residuals left within the domestic lagoon shall be mixed with soil on at least a 1 to 1 ratio, the lagoon berm shall be demolished, and the site shall be graded and contain $\geq 70\%$ vegetative density over 100% of the site so as to avoid ponding of storm water and provide adequate surface water drainage without creating erosion.
6. Lagoons and/or earthen structure and/or ash pond closure activities shall obtain a storm water permit for land disturbance activities that equal or exceed one acre in accordance with 10 CSR 20-6.200
7. When closing a mechanical wastewater and/or industrial process wastewater plant; all sludge must be cleaned out and disposed of in accordance with the Department approved closure plan before the permit for the facility can be terminated.
 - a. Land must be stabilized which includes any grading, alternate use or fate upon approval by the Department, remediation, or other work that exposes sediment to stormwater per 10 CSR 20-6.200. The site shall be graded and contain $\geq 70\%$ vegetative density over 100% of the site, so as to avoid ponding of storm water and provide adequate surface water drainage without creating erosion.
 - b. Per 10 CSR 20-6.015(4)(B)6, Hazardous Waste shall not be land applied or disposed during industrial and mechanical plant closures unless in accordance with Missouri Hazardous Waste Management Law and Regulations under 10 CSR 25.
 - c. After demolition of the mechanical plant / industrial plant, the site must only contain clean fill defined in RSMo 260.200 (5) as uncontaminated soil, rock, sand, gravel, concrete, asphaltic concrete, cinderblocks, brick, minimal amounts of wood and metal, and inert solids as approved by rule or policy of the Department for fill or other beneficial use. Other solid wastes must be removed.
8. If sludge from the domestic lagoon or mechanical treatment plant exceeds agricultural rates under Section G and/or H, a landfill permit or solid waste disposal permit must be obtained if the permittee chooses to seek authorization for on-site sludge disposal under the Missouri Solid Waste Management Law and regulations per 10 CSR 80, and the permittee must comply with the surface disposal requirements under 40 CFR 503, Subpart C.

SECTION I – MONITORING FREQUENCY

1. At a minimum, sludge or biosolids shall be tested for volume and percent total solids on a frequency that will accurately represent sludge quantities produced and disposed. Please see the table below.

TABLE 5

| Design Sludge Production (dry tons per year) | Monitoring Frequency (See Notes 1, 2 and 3) | | | |
|--|---|---------------------------|---------------------------|---|
| | Metals, Pathogens and Vectors | Nitrogen TKN ¹ | Nitrogen PAN ² | Priority Pollutants and TCLP ³ |
| 0 to 100 | 1 per year | 1 per year | 1 per month | 1 per year |
| 101 to 200 | biannual | biannual | 1 per month | 1 per year |
| 201 to 1,000 | quarterly | quarterly | 1 per month | 1 per year |
| 1,001 to 10,000 | 1 per month | 1 per month | 1 per week | -- ⁴ |
| 10,001 + | 1 per week | 1 per week | 1 per day | -- ⁴ |

¹ Test total Kjeldahl nitrogen, if biosolids application is 2 dry tons per acre per year or less.
² Calculate plant available nitrogen (PAN) when either of the following occurs: 1) when biosolids are greater than 50,000 mg/kg TN; or 2) when biosolids are land applied at an application rate greater than two dry tons per acre per year.
³ Priority pollutants (40 CFR 122.21, Appendix D, Tables II and III) and toxicity characteristic leaching procedure (40 CFR 261.24) is required only for permit holders that must have a pre-treatment program.
⁴ One sample for each 1,000 dry tons of sludge.

Note 1: Total solids: A grab sample of sludge shall be tested one per day during land application periods for percent total solids. This data shall be used to calculate the dry tons of sludge applied per acre.
 Note 2: Total Phosphorus: Total phosphorus and total potassium shall be tested at the same monitoring frequency as metals.
 Note 3: Table 5 is not applicable for incineration

2. If you own a wastewater treatment lagoon or sludge lagoon that is cleaned out once a year or less, you may choose to sample only when the sludge is removed or the lagoon is closed. Test one composite sample for each 100 dry tons of sludge or biosolids removed from the lagoon during the year within the lagoon at closing. Composite sample must represent various areas at one-foot depth.
3. Additional testing may be required in the special conditions or other sections of the permit. Permittees receiving industrial wastewater may be required to conduct additional testing upon request from the Department.
4. At this time, the Department recommends monitoring requirements shall be performed in accordance with, “POTW Sludge Sampling and Analysis Guidance Document,” United States Environmental Protection Agency, August 1989, and the subsequent revisions.

SECTION J – RECORD KEEPING AND REPORTING REQUIREMENTS

1. The permittee shall maintain records on file at the facility for at least five years for the items listed in these standard conditions and any additional items in the Special Conditions section of this permit. This shall include dates when the sludge facility is checked for proper operation, records of maintenance and repairs and other relevant information.
2. Reporting period
 - a. By January 28th of each year, an annual report shall be submitted for the previous calendar year period for all mechanical wastewater treatment facilities, sludge lagoons, and sludge or biosolids disposal facilities.
 - b. Permittees with wastewater treatment lagoons shall submit the above annual report only when sludge or biosolids are removed from the lagoon during the report period or when the lagoon is closed.
3. Report Forms. The annual report shall be submitted on report forms provided by the Department or equivalent forms approved by the Department.
4. Reports shall be submitted as follows:

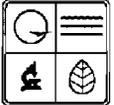
Major facilities (those serving 10,000 persons or 1 million gallons per day) shall report to both the Department and EPA. Other facilities need to report only to the Department. Reports shall be submitted to the addresses listed as follows:

DNR regional office listed in your permit
 (see cover letter of permit)
 ATTN: Sludge Coordinator

EPA Region VII
 Water Compliance Branch (WACM)
 Sludge Coordinator
 11201 Renner Blvd.
 Lenexa, KS 66219

5. Annual report contents. The annual report shall include the following:
- a. Sludge and biosolids testing performed. Include a copy or summary of all test results, even if not required by the permit.
 - b. Sludge or biosolids quantity shall be reported as dry tons for quantity generated by the wastewater treatment facility, the quantity stored on site at the end of the year, and the quantity used or disposed.
 - c. Gallons and % solids data used to calculate the dry ton amounts.
 - d. Description of any unusual operating conditions.
 - e. Final disposal method, dates, and location, and person responsible for hauling and disposal.
 - i. This must include the name, address for the hauler and sludge facility. If hauled to a municipal wastewater treatment facility, sanitary landfill, or other approved treatment facility, give the name of that facility.
 - ii. Include a description of the type of hauling equipment used and the capacity in tons, gallons, or cubic feet.
 - f. Contract Hauler Activities:
If contract hauler, provide a copy of a signed contract from the contractor. Permittee shall require the contractor to supply information required under this permit for which the contractor is responsible. The permittee shall submit a signed statement from the contractor that he has complied with the standards contained in this permit, unless the contract hauler has a separate sludge or biosolids use permit.
 - g. Land Application Sites:
 - i. Report the location of each application site, the annual and cumulative dry tons/acre for each site, and the landowners name and address. The location for each spreading site shall be given as a legal description for nearest ¼, ¼, Section, Township, Range, and county, or UTM coordinates. The facility shall report PAN when either of the following occurs: 1) When biosolids are greater than 50,000 mg/kg TN; or 2) when biosolids are land applied at an application rate greater than two dry tons per acre per year.
 - ii. If the “Low Metals” criteria are exceeded, report the annual and cumulative pollutant loading rates in pounds per acre for each applicable pollutant, and report the percent of cumulative pollutant loading which has been reached at each site.
 - iii. Report the method used for compliance with pathogen and vector attraction requirements.
 - iv. Report soil test results for pH, CEC, and phosphorus. If none was tested during the year, report the last date when tested and results.

AP17424



MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM FORM B: APPLICATION FOR AN OPERATING PERMIT FOR DOMESTIC OR MUNICIPAL WASTEWATER (≤100,000 gallons per day) WATER PROTECTION PROGRAM

JAN 10 2014

FOR AGENCY USE ONLY CHECK NUMBER DATE RECEIVED 1/10/14 FEE SUBMITTED

PLEASE READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM

1. THIS APPLICATION IS FOR:

An operating permit for a new (including antidegradation review) or unpermitted facility. Construction Permit # An operating permit renewal: Permit #MO- 135127 Expiration Date 4/1/2014 An operating permit modification: Permit #MO- Reason: 1.1 Is the appropriate fee included with the application (see instructions for appropriate fee)? 1.2 Is a facility description included with this application (see 7.1)?

2. FACILITY

NAME Branson Airport, LLC TELEPHONE NUMBER WITH AREA CODE (417) 334-8136 ADDRESS (PHYSICAL) 4000 Branson Airport Blvd. CITY Hollister STATE MO ZIP CODE 65672 OUTFALL NUMBER For multiple outfalls, this is number 1-6 of 6 Estimated (actual) flow: gpd, Design Average Flow: gpd, Design Peak Hourly Flow: gph 2.1 Legal description: SW 1/4, SW 1/4, NE 1/4, Sec. 10, T 21, R 21 County Taney 2.2 UTM Coordinates Easting (X): Northing (Y): For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83) 2.3 Name of receiving stream:

3. OWNER

NAME Branson Airport, LLC E-MAIL ADDRESS jfosnaugh@flybranson.com TELEPHONE NUMBER WITH AREA CODE (417) 334-8136 ADDRESS 4000 Branson Airport Blvd. CITY Hollister STATE MO ZIP CODE 65672 3.1 Request review of draft permit prior to public notice? YES NO

4. CONTINUING AUTHORITY: Permanent organization that will serve as the continuing authority for the operation, maintenance and modernization of the facility.

NAME Branson Airport, LLC E-MAIL ADDRESS jfosnaugh@flybranson.com TELEPHONE NUMBER WITH AREA CODE (417) 334-8136 ADDRESS 4000 Branson Airport Blvd. CITY Hollister STATE MO ZIP CODE 65672

5. OPERATOR

NAME White River Valley Environmental Services CERTIFICATE NUMBER 2409 E-MAIL ADDRESS rhelms@whiteriver.org TELEPHONE NUMBER WITH AREA CODE (417) 294-0590

6. FACILITY CONTACT

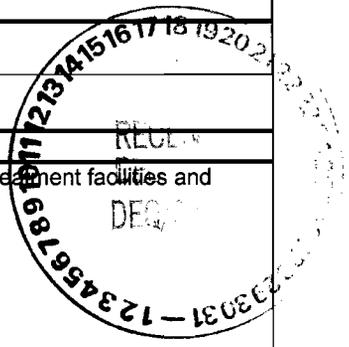
NAME Jesse Fosnaugh TITLE Deputy Director of Operations E-MAIL ADDRESS jfosnaugh@flybranson.com TELEPHONE NUMBER WITH AREA CODE (417) 334-8136

7. DESCRIPTION OF FACILITY

7.1 Describe the facility (attach additional sheet if required) and attach a flow chart showing the influents, treatment facilities and outfalls. 7.2 Attach an aerial photograph or USGS topographic map showing the location of the facility and outfall. 7.3 Design flow for this outfall: 10650 Total design flow for the facility: 1065 Actual flow for this outfall: 3500 7.4 Number of people presently connected or population equivalent (P.E.): 60 Design P.E.: 106 7.5 Does the facility accept or process leachate from landfills? Yes No

MO 780-1512 (06/13)

213.wpcp. Branson Airport. mo 6135127. x. 2013. 12. 18. fly14. DPAPP. x. rovd SW Taney



8. ADDITIONAL FACILITY INFORMATION

8.1 Facility SIC code: 581; Discharge SIC code: 952.

8.2 Milestone dates:

Date of completion of construction of facility: mar 2009

Dates of any construction modifications to the facility (along with description of modification): _____

8.3 Connections to the facility:

Number of units presently connected: Homes 0 Trailers 0 Apartments 0

Other (including industrial) 0 (If industrial, see instructions 8.1)

Number of commercial establishments: 1

Daily number of employees working (total estimate): 60 Daily number of customers/guests (total estimate): 1500

8.4 Length of pipe in the sewer collection system? 800 feet or _____ miles (either unit is appropriate.)

8.5 Does any bypassing occur in the collection system or at the treatment facility? Yes No (If yes, explain.)

8.6 Does significant infiltration occur in the collection system? Yes No (If yes, explain and attach proposed repair.)

9. DISCHARGE INFORMATION

9.1 Will the discharge be continuous throughout the year? Yes No

9.2 Discharge will occur during the following months: _____

9.3 How many days of the week will the discharge occur? _____

9.4 Is wastewater land-applied? Yes No (If yes, attach Form I.)

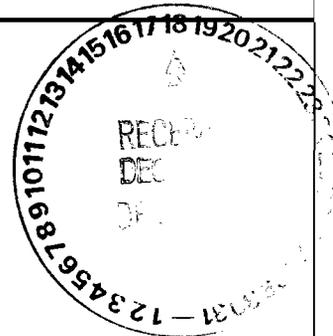
9.5 Will chlorine be added to the effluent? Yes No

If chlorine is added, what is the resulting residual? _____ $\mu\text{g/l}$ (micrograms per liter)

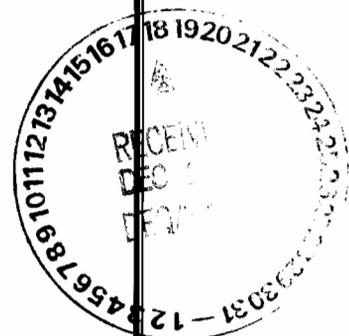
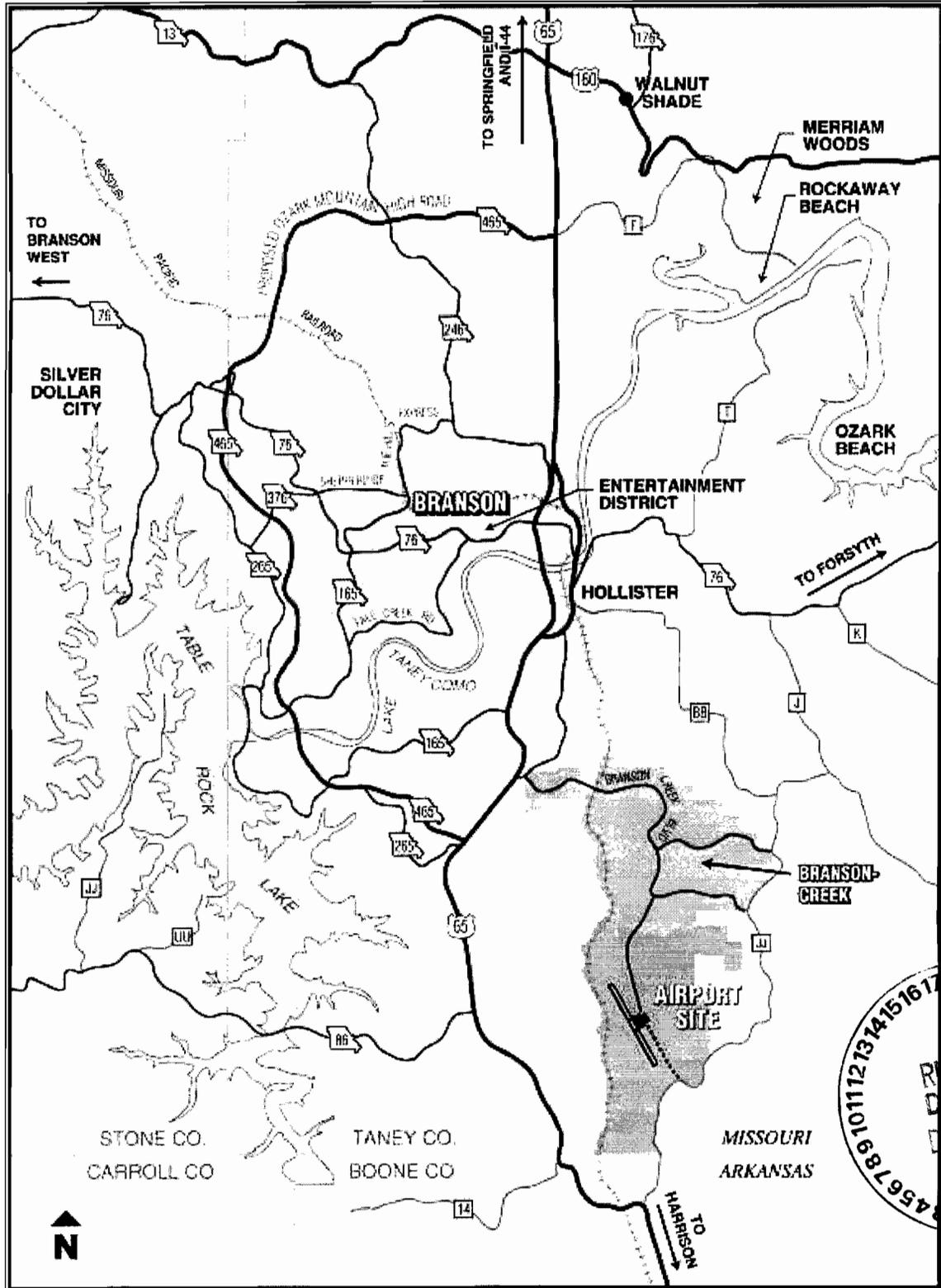
9.6 Does this facility discharge to a losing stream or sinkhole? Yes No

9.7 Has a waste load allocation study been completed for this facility? Yes No

10. List all permit violations, including effluent limit exceedances, in the last five years. Attach a separate sheet if necessary. If none, write none.

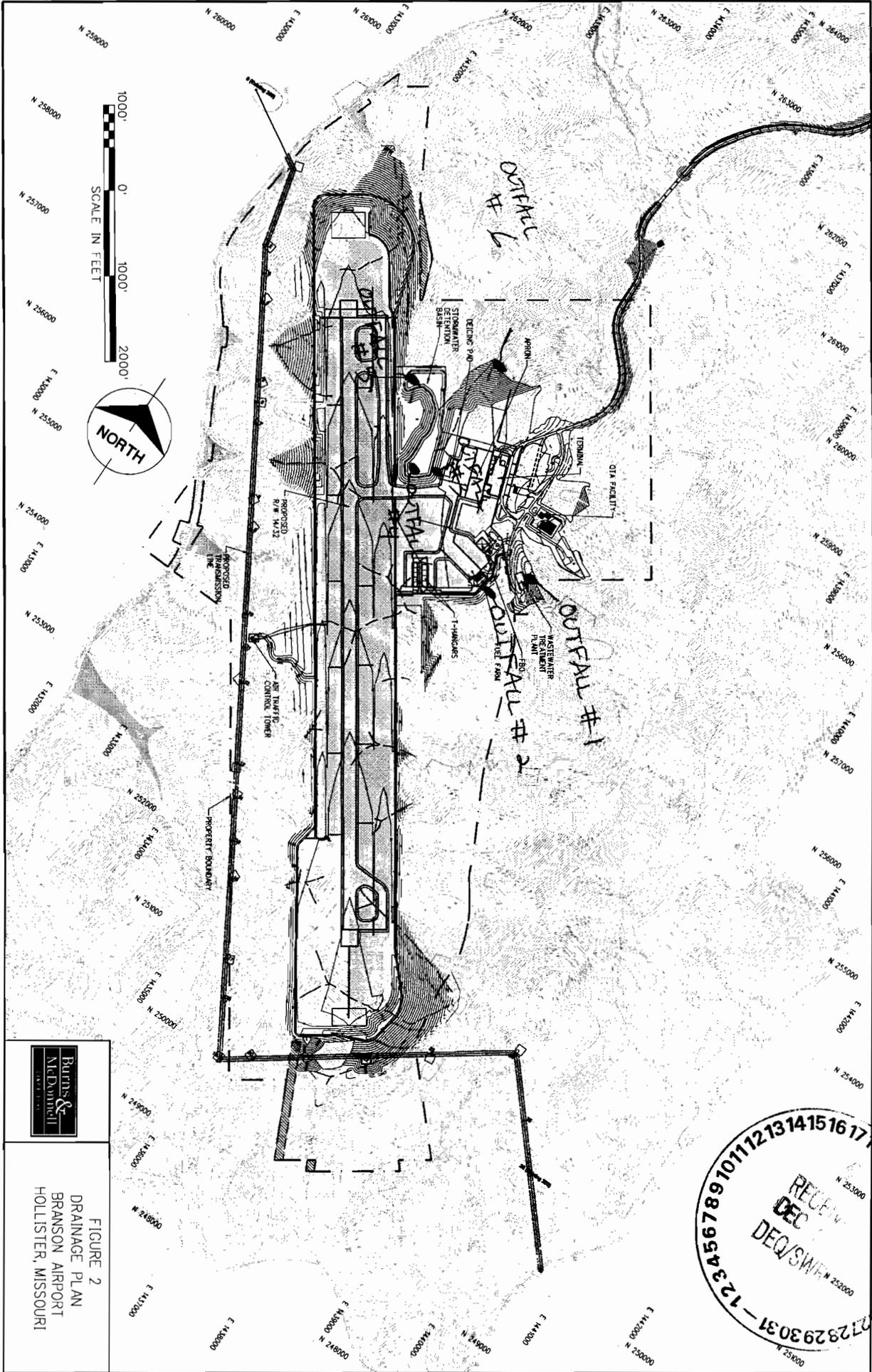


ATTACHMENT 100 - 1
SITE LOCATION



FAA APPROVED

DATE:



BRANSON AIRPORT
OUTFALL LOCATIONS



FIGURE 2
DRAINAGE PLAN
BRANSON AIRPORT
HOLLISTER, MISSOURI

FIGURE1.DGN / 1-30-2009 13:43 / MLB

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SEP 3 2014



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH
FORM C - APPLICATION FOR DISCHARGE PERMIT -
MANUFACTURING, COMMERCIAL, MINING, WATER PROTECTION PROGRAM
SILVICULTURE OPERATIONS, PROCESS AND STORMWATER

| FOR AGENCY USE ONLY | |
|-------------------------|------------------------|
| CHECK NO. | |
| DATE RECEIVED 9-3-14 | FEE SUBMITTED — JS. |

NOTE: DO NOT ATTEMPT TO COMPLETE THIS FORM BEFORE READING THE ACCOMPANYING INSTRUCTIONS

1.00 NAME OF FACILITY
Branson Airport WWT

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER
MO-0135127

1.20 THIS IS A NEW FACILITY AND WAS CONSTRUCTED UNDER MISSOURI CONSTRUCTION PERMIT NUMBER (COMPLETE ONLY IF THIS FACILITY DOES NOT HAVE AN OPERATING PERMIT).

2.00 LIST THE STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODES APPLICABLE TO YOUR FACILITY (FOUR DIGIT CODE)

A. FIRST 4 B. SECOND 5
C. THIRD 8 D. FOURTH 1

2.10 FOR EACH OUTFALL GIVE THE LEGAL DESCRIPTION.

OUTFALL NUMBER (LIST) _____ 1/4 _____ 1/4 SEC _____ T _____ R _____ COUNTY _____

See Attachment A

2.20 FOR EACH OUTFALL LIST THE NAME OF THE RECEIVING WATER

| OUTFALL NUMBER (LIST) | RECEIVING WATER |
|-----------------------|-----------------|
| See Attachment A | |

2.30 BRIEFLY DESCRIBE THE NATURE OF YOUR BUSINESS

Airport

2.40 CONTINUED

C. EXCEPT FOR STORM RUNOFF, LEAKS OR SPILLS, ARE ANY OF THE DISCHARGES DESCRIBED IN ITEMS A OR B INTERMITTENT OR SEASONAL?

YES (COMPLETE THE FOLLOWING TABLE) NO (GO TO SECTION 2.50)

| 1. OUTFALL NUMBER (list) | 2. OPERATION(S) CONTRIBUTING FLOW (list) | 3. FREQUENCY | | 4. FLOW | | | | C. DURATION (in days) |
|-----------------------------|--|---------------------------------------|---|-----------------------|------------------|--------------------------------------|--------------------|--------------------------|
| | | A. DAYS PER WEEK (specify average) | B. MONTHS PER YEAR (specify average) | A. FLOW RATE (in mgd) | | B. TOTAL VOLUME (specify with units) | | |
| | | | | 1. LONG TERM AVERAGE | 2. MAXIMUM DAILY | 4. LONG TERM DAILY | 3. MAXIMUM AVERAGE | |
| | | | | | | | | |

2.50 MAXIMUM PRODUCTION

A. DOES AN EFFLUENT GUIDELINE LIMITATION PROMULGATED BY EPA UNDER SECTION 304 OF THE CLEAN WATER ACT APPLY TO YOUR FACILITY?

YES (COMPLETE B.) NO (GO TO SECTION 2.60)

B. ARE THE LIMITATIONS IN THE APPLICABLE EFFLUENT GUIDELINES EXPRESSED IN TERMS OF PRODUCTION (OF OTHER MEASURE OF OPERATION)?

YES (COMPLETE c.) NO (GO TO SECTION 2.60)

C. IF YOU ANSWERED "YES" TO B. LIST THE QUANTITY THAT REPRESENTS 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.

| 1. MAXIMUM QUANTITY | | | 2. AFFECTED OUTFALLS (list outfall numbers) |
|---------------------|---------------------|--|--|
| A. QUANTITY PER DAY | B. UNITS OF MEASURE | C. OPERATION, PRODUCT, MATERIAL, ETC. (specify) | |
| | | | |

2.60 IMPROVEMENTS

A. ARE YOU NOW 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 THAT 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 3.00)

| 1. IDENTIFICATION OF CONDITION AGREEMENT, ETC. | 2. AFFECTED OUTFALLS | | 3. BRIEF DESCRIPTION OF PROJECT | 4. FINAL COMPLIANCE DATE | |
|--|----------------------|--|---------------------------------|--------------------------|--------------|
| | | | | A. REQUIRED | B. PROJECTED |
| | | | | | |

B. OPTIONAL: YOU MAY ATTACH ADDITIONAL SHEETS DESCRIBING ANY ADDITIONAL WATER POLLUTION CONTROL PROGRAMS (OR OTHER ENVIRONMENTAL PROJECTS WHICH MAY AFFECT YOUR DISCHARGES) YOU NOW HAVE UNDER WAY OR WHICH YOU PLAN. INDICATE WHETHER EACH PROGRAM IS NOW UNDER WAY OR PLANNED, AND INDICATE YOUR ACTUAL OR PLANNED SCHEDULES FOR CONSTRUCTION.

MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED.

3.10 BIOLOGICAL TOXICITY TESTING DATA

DO YOU HAVE ANY KNOWLEDGE OR REASON TO BELIEVE THAT ANY BIOLOGICAL TEST FOR ACUTE OR CHRONIC TOXICITY HAS BEEN MADE ON ANY OF YOUR DISCHARGES OR ON RECEIVING WATER IN RELATION TO YOUR DISCHARGE WITHIN THE LAST THREE YEARS?

YES (IDENTIFY THE TEST(S) AND DESCRIBE THEIR PURPOSES BELOW.) NO (GO TO 3.20)

3.20 CONTRACT ANALYSIS INFORMATION

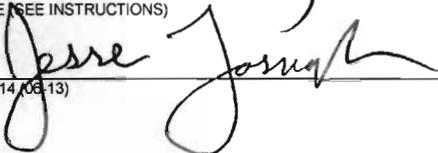
WERE ANY OF THE ANALYSES REPORTED PERFORMED BY A CONTRACT LABORATORY OR CONSULTING FIRM?

YES (LIST THE NAME, ADDRESS AND TELEPHONE NUMBER OF AND POLLUTANTS ANALYZED BY EACH SUCH LABORATORY OR FIRM BELOW.) NO (GO TO 3.30)

| A. NAME | B. ADDRESS | C. TELEPHONE (area code and number) | D. POLLUTANTS ANALYZED (list) |
|--|--|-------------------------------------|--|
| Consulting Analytical Services International Inc | 2804 E. Battlefield Rd Springfield, MO. 65804 | 417-882-1017 | oil + grease chloride Ethylene glycol Propylene glycol Toluene Ethylbenzene Total Xylenes Benzene |

3.30 CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED IN THIS APPLICATION AND ALL ATTACHMENTS AND THAT, BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THAT THE INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

| | |
|---|---|
| NAME AND OFFICIAL TITLE (TYPE OR PRINT) Jesse Fosnaigh - Deputy Director | TELEPHONE NUMBER WITH AREA CODE 417-334-8136 |
| SIGNATURE (SEE INSTRUCTIONS)  | DATE SIGNED 8-29-14 |

RECEIVED

SEP 3 2014

WATER PROTECTION PROGRAM

Branson Airport

Form C – Attachment A

Outfall #002

Legal Description - NE $\frac{1}{4}$, SE $\frac{1}{4}$, NW $\frac{1}{4}$, SEC 10, T 21N, R 21W, Taney County

Receiving Water- Unnamed Tributary to Thorp Creek (U) (Losing)

Outfall #003

Legal Description - SE $\frac{1}{4}$, NW $\frac{1}{4}$, NW $\frac{1}{4}$, SEC 10, T 21N, R 21W, Taney County

Receiving Water- Unnamed Tributary to Turkey Creek (U) (Losing)

Outfall #004

Legal Description - SE $\frac{1}{4}$, NW $\frac{1}{4}$, NW $\frac{1}{4}$, SEC 10, T 21N, R 21W, Taney County

Receiving Water – Unnamed Tributary to Turkey Creek (U) (Losing) Legal

Outfall #005

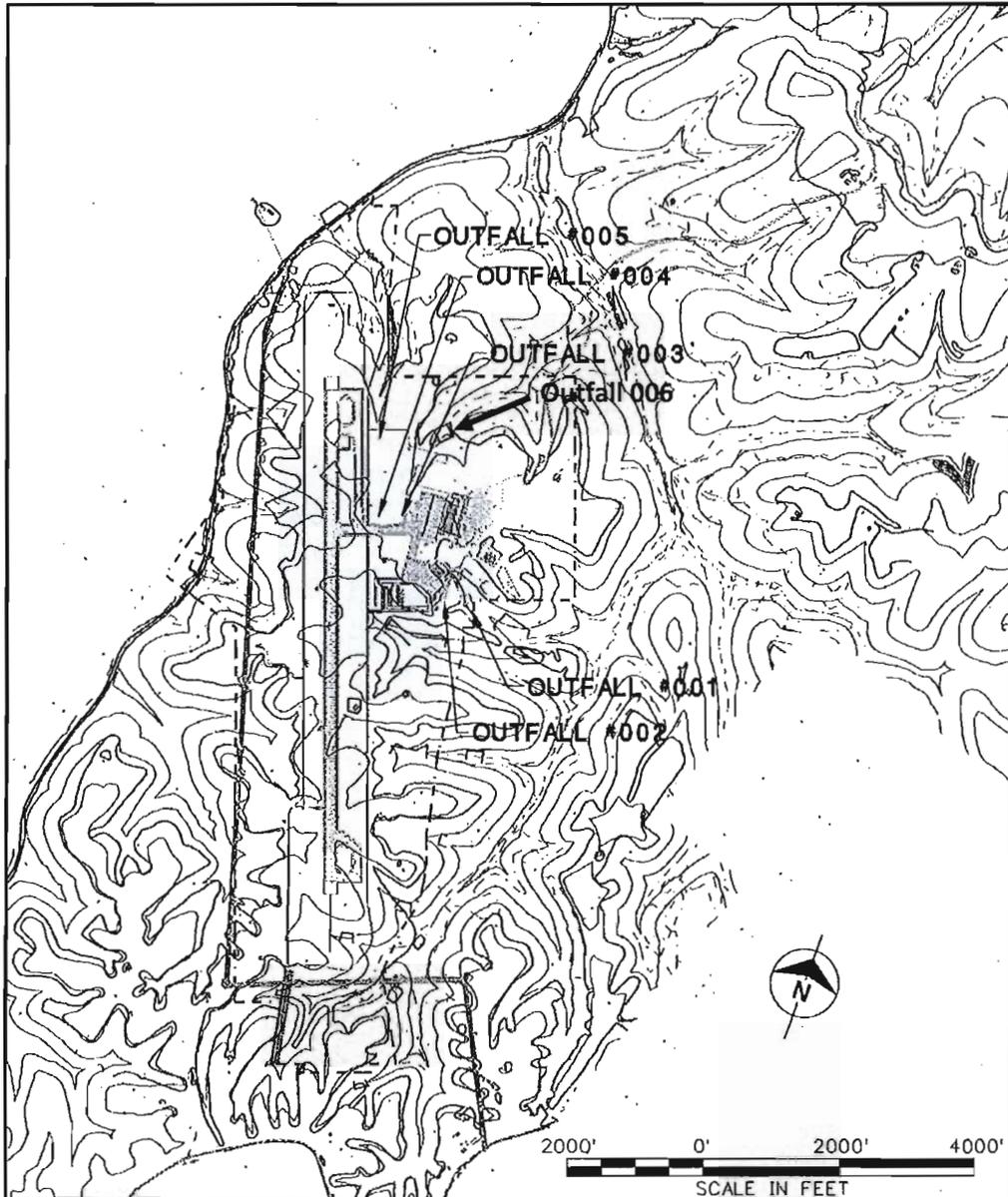
Legal Description - NE $\frac{1}{4}$, SE $\frac{1}{4}$, NW $\frac{1}{4}$, SEC 10, T 21N, R 21W, Taney County

Receiving Water – Unnamed Tributary to Turkey Creek (U) (Losing)

Outfall #006

Legal Description - NW $\frac{1}{4}$, NW $\frac{1}{4}$, NE $\frac{1}{4}$, SEC 10, T 21N, R 21W, Taney County

Receiving Water – Unnamed Tributary to Turkey Creek (U) (Losing)



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date JUNE 12, 2008
 designed S. KLINGELE

BRANSON AIRPORT
 OUTFALL LOCATIONS

project _____
 contract _____
 SK - 101 R0

PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet
(Use the same format) instead of completing these pages.
SEE INSTRUCTIONS

FORM C
TABLE 1 FOR 3.00 ITEM A AND B

OUTFALL NO.
002

INTAKE AND EFFLUENT CHARACTERISTICS

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

| 1. POLLUTANT | 2. EFFLUENT | | | | 3. UNITS (specify if blank) | | | | 4. INTAKE (optional) | | B. NO. OF ANALYSES | |
|------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|----------------------|--------------------------|--------------------|----------|
| | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | |
| | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | | (2) MASS |
| A. Biochemical Oxygen Demand (BOD) | | | | | | | | | | | | |
| B. Chemical Oxygen Demand (COD) | 7.6 | mg/L | | | | | | | | | | |
| C. Total organic Carbon (TOC) | 4 | | | | | | | | | | | |
| D. Total Suspended Solids (TSS) | 4.5 | mg/L | | | | | | | | | | |
| E. Ammonia (as N) | 0.3 | mg/L | | | | | | | | | | |
| F. Flow | VALUE | | VALUE | | VALUE | | | | | VALUE | | |
| G. Temperature (winter) | VALUE | | VALUE | | VALUE | | | | | VALUE | | |
| H. Temperature (summer) | VALUE | | VALUE | | VALUE | | | | | VALUE | | |
| I. pH | MINIMUM | MAXIMUM | MINIMUM | MAXIMUM | | | | | | | | |
| | | 7.35 | | | | | | | | | | |

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 any 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 that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | 4. UNITS | | | | 5. INTAKE (optional) | | B. NO. OF ANALYSES | |
|--|---------------------|--------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|----------------------|--------------------------|--------------------|----------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | | (2) MASS |
| A. Bromide (24959-67-9) | | X | | | | | | | | | | | | |
| B. Chlorine, Total Residual | | X | | | | | | | | | | | | |
| C. Color | | X | | | | | | | | | | | | |
| D. Fecal Coliform | | X | | | | | | | | | | | | |
| E. Fluoride (16984-48-8) | | X | | | | | | | | | | | | |
| F. Nitrate - Nitrate (as N) | | X | | | | | | | | | | | | |

CONVENTIONAL AND NONCONVENTIONAL POLLUTANTS

| 1. POLLUTANT AND CAS NUMBER <i>(if available)</i> | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE <i>(optional)</i> | | |
|---|---------------------|--------------------|------------------------|----------|--|----------|---|----------|--------------------|---------|-----------------------------|----------|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE <i>(if available)</i> | | C. LONG TERM AVRG. VALUE <i>(if available)</i> | | A. CONCEN- TRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | (1) CONCENTRATION | (2) MASS | |
| G. Nitrogen, Total Organic <i>(as N)</i> | | X | | | | | | | | | | | |
| H. Oil and Grease | X | | | | | | | | | | | | |
| I. Phosphorus <i>(as P)</i> , Total <i>(7723-14-0)</i> | | X | | | | | | | | | | | |
| J. Sulfate <i>(as SO₄⁻²)</i> <i>(14808-79-8)</i> | | X | | | | | | | | | | | |
| K. Sulfide <i>(as S)</i> | | X | | | | | | | | | | | |
| L. Sulfite <i>(as SO₃⁻²)</i> <i>(14265-45-3)</i> | | X | | | | | | | | | | | |
| M. Surfactants | | X | | | | | | | | | | | |
| N. Aluminum, Total <i>(7429-90-5)</i> | | X | | | | | | | | | | | |
| O. Barium, Total <i>(7440-39-3)</i> | | X | | | | | | | | | | | |
| P. Boron, Total <i>(7440-42-8)</i> | | X | | | | | | | | | | | |
| Q. Cobalt, Total <i>(7440-48-4)</i> | | X | | | | | | | | | | | |
| R. Iron, Total <i>(7439-89-6)</i> | | X | | | | | | | | | | | |
| S. Magnesium, Total <i>(7439-95-4)</i> | | X | | | | | | | | | | | |
| T. Molybdenum, Total <i>(7439-98-7)</i> | | X | | | | | | | | | | | |
| U. Manganese, Total <i>(7439-96-5)</i> | | X | | | | | | | | | | | |
| V. Tin, Total <i>(7440-31-5)</i> | | X | | | | | | | | | | | |
| W. Titanium, Total <i>(7440-32-6)</i> | | X | | | | | | | | | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "x" | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | B. NO. OF ANALYSES |
|---|---------------------|--------------------|------------------------|----------|---|----------|--|----------|------------------|---------|--|----------|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE (1) CONCENTRATION | (2) MASS | |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | |
| METALS, AND TOTAL PHENOLS | | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-9) | | X | | | | | | | | | | | |
| 2M. Arsenic, Total (7440-38-2) | | X | | | | | | | | | | | |
| 3M. Beryllium, Total (7440-41-7) | | X | | | | | | | | | | | |
| 4M. Cadmium, Total (7440-43-9) | | X | | | | | | | | | | | |
| 5M. Chromium III (16065-83-1) | | X | | | | | | | | | | | |
| 6M. Chromium VI (18540-29-9) | | X | | | | | | | | | | | |
| 7M. Copper, Total (7440-50-8) | | X | | | | | | | | | | | |
| 8M. Lead, Total (7439-92-1) | | X | | | | | | | | | | | |
| 9M. Mercury, Total (7439-97-6) | | X | | | | | | | | | | | |
| 10M. Nickel, Total (7440-02-0) | | X | | | | | | | | | | | |
| 11M. Selenium, Total (7782-49-2) | | X | | | | | | | | | | | |
| 12M. Silver, Total (7440-22-4) | | X | | | | | | | | | | | |
| 13M. Thallium, Total (7440-28-0) | | X | | | | | | | | | | | |
| 14M. Zinc, Total (7440-66-6) | | X | | | | | | | | | | | |
| 15M. Cyanide, Amenable to Chlorination | | X | | | | | | | | | | | |
| 16M. Phenols, Total | | X | | | | | | | | | | | |
| RADIOACTIVITY | | | | | | | | | | | | | |
| (1) Alpha Total | | X | | | | | | | | | | | |
| (2) Beta Total | | X | | | | | | | | | | | |
| (3) Radium Total | | X | | | | | | | | | | | |
| (4) Radium 226 Total | | X | | | | | | | | | | | |

PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet
(Use the same format) instead of completing these pages.
SEE INSTRUCTIONS

FORM C
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS

OUTFALL NO. **003**

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

| 1. POLLUTANT | 2. EFFLUENT | | | | 3. UNITS (specify if blank) | | | | 4. INTAKE (optional) | | B. NO. OF ANALYSES |
|------------------------------------|------------------------|-------------|--|----------|-----------------------------|--------------------|---------|--------------------------|----------------------|--------------------|--------------------|
| | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | D. NO. OF ANALYSES | A. CONCEN- TRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES | |
| | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | | |
| A. Biochemical Oxygen Demand (BOD) | | | | | | | | | | | |
| B. Chemical Oxygen Demand (COD) | | 7.6 mg/L | | | | | | | | | |
| C. Total organic Carbon (TOC) | | | | | | | | | | | |
| D. Total Suspended Solids (TSS) | | 23.0 mg/L | | | | | | | | | |
| E. Ammonia (as N) | | 0.16 mg/L | | | | | | | | | |
| F. Flow | | 1,001.5 MGD | | | | | | | | | |
| G. Temperature (winter) | | | | | | | | | | | |
| H. Temperature (summer) | | | | | | | | | | | |
| I. pH | | | | | | | | | | | |

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 that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | 4. UNITS | | | | 5. INTAKE (optional) | |
|--|---------------------|--------------------|------------------------|--|---|--------------------|--------------------|----------|--------------------------|--------------------|----------------------|--|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | B. MAXIMUM 30 DAY VALUE (if available) | C. LONG TERM AVRG. VALUE (if available) | D. NO. OF ANALYSES | A. CONCEN- TRATION | B. MASS | A. LONG TERM AVRG. VALUE | B. NO. OF ANALYSES | | |
| | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | |

CONVENTIONAL AND NONCONVENTIONAL POLLUTANTS

| | | | | | | | | | | | |
|-----------------------------|--|---|--|--|--|--|--|--|--|--|--|
| A. Bromide (24959-67-9) | | X | | | | | | | | | |
| B. Chlorine, Total Residual | | X | | | | | | | | | |
| C. Color | | X | | | | | | | | | |
| D. Fecal Coliform | | X | | | | | | | | | |
| E. Fluoride (16984-48-8) | | X | | | | | | | | | |
| F. Nitrate - Nitrate (as N) | | X | | | | | | | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | B. NO. OF ANALYSES |
|---|---------------------|--------------------|------------------------|----------|--|----------|---|----------|------------------|---------|----------------------|----------|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | A. CONCENTRATION | B. MASS | (1) CONCENTRATION | (2) MASS | |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | |
| G. Nitrogen, Total Organic (as N) | | X | | | | | | | | | | | |
| H. Oil and Grease | | X | | | | | | | | | | | |
| I. Phosphorus (as P), Total (7723-14-0) | | X | | | | | | | | | | | |
| J. Sulfate (as SO ₄) (14808-79-8) | | X | | | | | | | | | | | |
| K. Sulfide (as S) | | X | | | | | | | | | | | |
| L. Sulfite (as SO ₃) (14265-45-3) | | X | | | | | | | | | | | |
| M. Surfactants | | X | | | | | | | | | | | |
| N. Aluminum, Total (7429-90-5) | | X | | | | | | | | | | | |
| O. Barium, Total (7440-39-3) | | X | | | | | | | | | | | |
| P. Boron, Total (7440-42-8) | | X | | | | | | | | | | | |
| Q. Cobalt, Total (7440-48-4) | | X | | | | | | | | | | | |
| R. Iron, Total (7439-89-6) | | X | | | | | | | | | | | |
| S. Magnesium, Total (7439-95-4) | | X | | | | | | | | | | | |
| T. Molybdenum, Total (7439-98-7) | | X | | | | | | | | | | | |
| U. Manganese, Total (7439-96-5) | | X | | | | | | | | | | | |
| V. Tin, Total (7440-31-5) | | X | | | | | | | | | | | |
| W. Titanium, Total (7440-32-6) | | X | | | | | | | | | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|----------------------------------|--------------------|--|----------|--|----------|---|----------|--------------------|------------------|----------------------|--|----------|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE (1) CONCENTRATION | (2) MASS | B. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION | (2) MASS | C. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION | (2) MASS | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE (1) CONCENTRATION | (2) MASS | B. NO. OF ANALYSES |
| | METALS, AND TOTAL PHENOLS | | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-9) | | X | | | | | | | | | | | | |
| 2M. Arsenic, Total (7440-38-2) | | X | | | | | | | | | | | | |
| 3M. Beryllium, Total (7440-41-7) | | X | | | | | | | | | | | | |
| 4M. Cadmium, Total (7440-43-9) | | X | | | | | | | | | | | | |
| 5M. Chromium III (16065-83-1) | | X | | | | | | | | | | | | |
| 6M. Chromium VI (18540-29-9) | | X | | | | | | | | | | | | |
| 7M. Copper, Total (7440-50-8) | | X | | | | | | | | | | | | |
| 8M. Lead, Total (7439-92-1) | | X | | | | | | | | | | | | |
| 9M. Mercury, Total (7439-97-6) | | X | | | | | | | | | | | | |
| 10M. Nickel, Total (7440-02-0) | | X | | | | | | | | | | | | |
| 11M. Selenium, Total (7782-49-2) | | X | | | | | | | | | | | | |
| 12M. Silver, Total (7440-22-4) | | X | | | | | | | | | | | | |
| 13M. Thallium, Total (7440-28-0) | | X | | | | | | | | | | | | |
| 14M. Zinc, Total (7440-66-6) | | X | | | | | | | | | | | | |
| 15M. Cyanide, Amenable to Chlorination | | X | | | | | | | | | | | | |
| 16M. Phenols, Total | | X | | | | | | | | | | | | |
| RADIOACTIVITY | | | | | | | | | | | | | | |
| (1) Alpha Total | | X | | | | | | | | | | | | |
| (2) Beta Total | | X | | | | | | | | | | | | |
| (3) Radium Total | | X | | | | | | | | | | | | |
| (4) Radium 226 Total | | X | | | | | | | | | | | | |

PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet
(Use the same format) instead of completing these pages.
SEE INSTRUCTIONS

FORM C
TABLE 1 FOR 3.00 ITEM A AND B

OUTFALL NO.
004

INTAKE AND EFFLUENT CHARACTERISTICS

| 1. POLLUTANT | 2. EFFLUENT | | | | 3. UNITS (specify if blank) | | | | 4. INTAKE (optional) | | | |
|------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|----------------------|--------------------------|----------|--------------------|
| | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| A. Biochemical Oxygen Demand (BOD) | | | | | | | | | | | | |
| B. Chemical Oxygen Demand (COD) | | | | | | | | | | | | |
| C. Total organic Carbon (TOC) | | | | | | | | | | | | |
| D. Total Suspended Solids (TSS) | | | | | | | | | | | | |
| E. Ammonia (as N) | | | | | | | | | | | | |
| F. Flow | VALUE | | VALUE | | VALUE | | | | | VALUE | | |
| G. Temperature (winter) | VALUE | | VALUE | | VALUE | | | | | VALUE | | |
| H. Temperature (summer) | VALUE | | VALUE | | VALUE | | | | | VALUE | | |
| I. pH | MINIMUM | MAXIMUM | MINIMUM | MAXIMUM | | | | | | | | |

No testing done at this time

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

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 that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | 4. UNITS | | | | 5. INTAKE (optional) | | | |
|--|-------------------------|--------------------|--|----------|---|----------|--|----------|--------------------|------------------|----------------------|--|----------|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE (1) CONCENTRATION | (2) MASS | B. MAXIMUM 30 DAY VALUE (1) CONCENTRATION | (2) MASS | C. LONG TERM AVRG. VALUE (1) CONCENTRATION | (2) MASS | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE (1) CONCENTRATION | (2) MASS | B. NO. OF ANALYSES |
| | A. Bromide (24959-67-9) | | X | | | | | | | | | | | |
| B. Chlorine, Total Residual | | X | | | | | | | | | | | | |
| C. Color | | X | | | | | | | | | | | | |
| D. Fecal Coliform | | X | | | | | | | | | | | | |
| E. Fluoride (16984-48-8) | | X | | | | | | | | | | | | |
| F. Nitrate - Nitrate (as N) | | X | | | | | | | | | | | | |

CONVENTIONAL AND NONCONVENTIONAL POLLUTANTS

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | |
|---|---------------------|--------------------|------------------------|----------|---|----------|--|----------|--------------------|---------|---|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | A. CONCEN- TRATION | B. MASS | A. LONG TERM AVRG. VALUE (1) CONCENTRATION | B. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | |
| G. Nitrogen, Total Organic (as N) | | X | | | | | | | | | | |
| H. Oil and Grease | | X | | | | | | | | | | |
| I. Phosphorus (as P), Total (7723-14-0) | | X | | | | | | | | | | |
| J. Sulfate (as SO ₄) (14808-79-8) | | X | | | | | | | | | | |
| K. Sulfide (as S) | | X | | | | | | | | | | |
| L. Sulfite (as SO ₃) (14265-45-3) | | X | | | | | | | | | | |
| M. Surfactants | | X | | | | | | | | | | |
| N. Aluminum, Total (7429-90-5) | | X | | | | | | | | | | |
| O. Barium, Total (7440-39-3) | | X | | | | | | | | | | |
| P. Boron, Total (7440-42-8) | | X | | | | | | | | | | |
| Q. Cobalt, Total (7440-48-4) | | X | | | | | | | | | | |
| R. Iron, Total (7439-89-6) | | X | | | | | | | | | | |
| S. Magnesium, Total (7439-95-4) | | X | | | | | | | | | | |
| T. Molybdenum, Total (7439-98-7) | | X | | | | | | | | | | |
| U. Manganese, Total (7439-96-5) | | X | | | | | | | | | | |
| V. Tin, Total (7440-31-5) | | X | | | | | | | | | | |
| W. Titanium, Total (7440-32-6) | | X | | | | | | | | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | | B. NO. OF ANALYSES | |
|--|---------------------|--------------------|---------------------------------------|----------|--|----------|--------------------|------------------|----------------------|--------------------------|--------------------|----------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE (if available) | | B. MAXIMUM 30 DAY VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | | (2) MASS |
| METALS, AND TOTAL PHENOLS | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-9) | | X | | | | | | | | | | |
| 2M. Arsenic, Total (7440-38-2) | | X | | | | | | | | | | |
| 3M. Beryllium, Total (7440-41-7) | | X | | | | | | | | | | |
| 4M. Cadmium, Total (7440-43-9) | | X | | | | | | | | | | |
| 5M. Chromium III (16065-83-1) | | X | | | | | | | | | | |
| 6M. Chromium VI (18540-29-9) | | X | | | | | | | | | | |
| 7M. Copper, Total (7440-50-8) | | X | | | | | | | | | | |
| 8M. Lead, Total (7439-92-1) | | X | | | | | | | | | | |
| 9M. Mercury, Total (7439-97-6) | | X | | | | | | | | | | |
| 10M. Nickel, Total (7440-02-0) | | X | | | | | | | | | | |
| 11M. Selenium, Total (7782-49-2) | | X | | | | | | | | | | |
| 12M. Silver, Total (7440-22-4) | | X | | | | | | | | | | |
| 13M. Thallium, Total (7440-28-0) | | X | | | | | | | | | | |
| 14M. Zinc, Total (7440-66-6) | | X | | | | | | | | | | |
| 15M. Cyanide, Amenable to Chlorination | | X | | | | | | | | | | |
| 16M. Phenols, Total | | X | | | | | | | | | | |
| RADIOACTIVITY | | | | | | | | | | | | |
| (1) Alpha Total | | X | | | | | | | | | | |
| (2) Beta Total | | X | | | | | | | | | | |
| (3) Radium Total | | X | | | | | | | | | | |
| (4) Radium 226 Total | | X | | | | | | | | | | |

PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet
(Use the same format) instead of completing these pages.
SEE INSTRUCTIONS

FORM C
TABLE 1 FOR 3.00 ITEM A AND B

| | | |
|-------------------------------------|--|---------------------------|
| INTAKE AND EFFLUENT CHARACTERISTICS | | OUTFALL NO. 005 |
|-------------------------------------|--|---------------------------|

| 1. POLLUTANT | 2. EFFLUENT | | | | 3. UNITS (specify if blank) | | | | 4. INTAKE (optional) | | | |
|------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|----------------------|--------------------------|----------|--------------------|
| | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| A. Biochemical Oxygen Demand (BOD) | | | | | | | | | | | | |
| B. Chemical Oxygen Demand (COD) | | | | | | | | | | | | |
| C. Total organic Carbon (TOC) | | | | | | | | | | | | |
| D. Total Suspended Solids (TSS) | | | | | | | | | | | | |
| E. Ammonia (as N) | | | | | | | | | | | | |
| F. Flow | VALUE | | | | VALUE | | | | | VALUE | | |
| G. Temperature (winter) | VALUE | | | | VALUE | | | | | VALUE | | |
| H. Temperature (summer) | VALUE | | | | VALUE | | | | | VALUE | | |
| I. pH | MINIMUM | MAXIMUM | MINIMUM | MAXIMUM | | | | | | STANDARD UNITS | | |

No testing done at this time

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 any 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 that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | 4. UNITS | | | | 5. INTAKE (optional) | | | |
|--|---------------------|--------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|----------------------|--------------------------|--|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | | |
| A. Bromide (24959-67-9) | X | | | | | | | | | | | | | |
| B. Chlorine, Total Residual | X | | | | | | | | | | | | | |
| C. Color | X | | | | | | | | | | | | | |
| D. Fecal Coliform | X | | | | | | | | | | | | | |
| E. Fluoride (16984-48-8) | X | | | | | | | | | | | | | |
| F. Nitrate - Nitrate (as N) | X | | | | | | | | | | | | | |

CONVENTIONAL AND NONCONVENTIONAL POLLUTANTS

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | 3. EFFLUENT | 4. UNITS | 5. INTAKE (optional) |
|--|-------------|-------------|----------|----------------------|
| A. Bromide (24959-67-9) | X | | | |
| B. Chlorine, Total Residual | X | | | |
| C. Color | X | | | |
| D. Fecal Coliform | X | | | |
| E. Fluoride (16984-48-8) | X | | | |
| F. Nitrate - Nitrate (as N) | X | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | B. NO. OF ANALYSES |
|---|---------------------|--------------------|------------------------|----------|---|----------|--|----------|------------------|---------|--------------------------|--|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | |
| G. Nitrogen, Total Organic (as N) | | X | | | | | | | | | | | |
| H. Oil and Grease | | X | | | | | | | | | | | |
| I. Phosphorus (as P), Total (7723-14-0) | | X | | | | | | | | | | | |
| J. Sulfate (as SO ₄) (14808-79-8) | | X | | | | | | | | | | | |
| K. Sulfide (as S) | | X | | | | | | | | | | | |
| L. Sulfite (as SO ₃) (14265-45-3) | | X | | | | | | | | | | | |
| M. Surfactants | | X | | | | | | | | | | | |
| N. Aluminum, Total (7429-90-5) | | X | | | | | | | | | | | |
| O. Barium, Total (7440-39-3) | | X | | | | | | | | | | | |
| P. Boron, Total (7440-42-8) | | X | | | | | | | | | | | |
| Q. Cobalt, Total (7440-48-4) | | X | | | | | | | | | | | |
| R. Iron, Total (7439-89-6) | | X | | | | | | | | | | | |
| S. Magnesium, Total (7439-95-4) | | X | | | | | | | | | | | |
| T. Molybdenum, Total (7439-98-7) | | X | | | | | | | | | | | |
| U. Manganese, Total (7439-96-5) | | X | | | | | | | | | | | |
| V. Tin, Total (7440-31-5) | | X | | | | | | | | | | | |
| W. Titanium, Total (7440-32-6) | | X | | | | | | | | | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | 4. UNITS | | | | 5. INTAKE (optional) | | |
|---|---------------------|--------------------|------------------------|----------|-------------------------|----------|--------------------------|----------|--------------------|------------------|----------------------|--------------------------|----------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE | | C. LONG TERM AVRG. VALUE | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS |
| METALS, AND TOTAL PHENOLS | | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-9) | | X | | | | | | | | | | | |
| 2M. Arsenic, Total (7440-38-2) | | X | | | | | | | | | | | |
| 3M. Beryllium, Total (7440-41-7) | | X | | | | | | | | | | | |
| 4M. Cadmium, Total (7440-43-9) | | X | | | | | | | | | | | |
| 5M. Chromium III (16065-83-1) | | X | | | | | | | | | | | |
| 6M. Chromium VI (18540-29-9) | | X | | | | | | | | | | | |
| 7M. Copper, Total (7440-50-8) | | X | | | | | | | | | | | |
| 8M. Lead, Total (7439-92-1) | | X | | | | | | | | | | | |
| 9M. Mercury, Total (7439-97-6) | | X | | | | | | | | | | | |
| 10M. Nickel, Total (7440-02-0) | | X | | | | | | | | | | | |
| 11M. Selenium, Total (7782-49-2) | | X | | | | | | | | | | | |
| 12M. Silver, Total (7440-22-4) | | X | | | | | | | | | | | |
| 13M. Thallium, Total (7440-28-0) | | X | | | | | | | | | | | |
| 14M. Zinc, Total (7440-66-6) | | X | | | | | | | | | | | |
| 15M. Cyanide, Amenable to Chlorination | | X | | | | | | | | | | | |
| 16M. Phenols, Total | | X | | | | | | | | | | | |
| RADIOACTIVITY | | | | | | | | | | | | | |
| (1) Alpha Total | | X | | | | | | | | | | | |
| (2) Beta Total | | X | | | | | | | | | | | |
| (3) Radium Total | | X | | | | | | | | | | | |
| (4) Radium 226 Total | | X | | | | | | | | | | | |

PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet
(Use the same format) instead of completing these pages.
SEE INSTRUCTIONS

FORM C
TABLE 1 FOR 3.00 ITEM A AND B

OUTFALL NO.
006

INTAKE AND EFFLUENT CHARACTERISTICS

| 1. POLLUTANT | 2. EFFLUENT | | | | 3. UNITS (specify if blank) | | | | 4. INTAKE (optional) | | B. NO. OF ANALYSES | |
|------------------------------------|------------------------|----------|--|----------|---|----------|--------------------|--------------------|----------------------|--------------------------|--------------------|----------|
| | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCEN- TRATION | B. MASS | A. LONG TERM AVRG. VALUE | | |
| | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | | (2) MASS |
| A. Biochemical Oxygen Demand (BOD) | | | | | | | | | | | | |
| B. Chemical Oxygen Demand (COD) | | | | | | | | | | | | |
| C. Total organic Carbon (TOC) | | | | | | | | | | | | |
| D. Total Suspended Solids (TSS) | | | | | | | | | | | | |
| E. Ammonia (as N) | | | | | | | | | | | | |
| F. Flow | VALUE | | | | | | | | | VALUE | | |
| G. Temperature (winter) | VALUE | | | | | | | | | VALUE | | |
| H. Temperature (summer) | VALUE | | | | | | | | | VALUE | | |
| I. pH | MINIMUM | MAXIMUM | MINIMUM | MAXIMUM | | | | | | STANDARD UNITS | | |

no testings done at this time

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 that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | 4. UNITS | | | | 5. INTAKE (optional) | | |
|--|-------------------------|--------------------|--|----------|---|----------|---|----------|--------------------|--------------------|----------------------|--|----------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE (1) CONCENTRATION | (2) MASS | B. MAXIMUM 30 DAY VALUE (1) CONCENTRATION | (2) MASS | C. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION | (2) MASS | D. NO. OF ANALYSES | A. CONCEN- TRATION | B. MASS | A. LONG TERM AVRG. VALUE (1) CONCENTRATION | (2) MASS |
| | A. Bromide (24959-67-9) | | X | | | | | | | | | | |
| B. Chlorine, Total Residual | | X | | | | | | | | | | | |
| C. Color | | X | | | | | | | | | | | |
| D. Fecal Coliform | | X | | | | | | | | | | | |
| E. Fluoride (16984-48-8) | | X | | | | | | | | | | | |
| F. Nitrate - Nitrate (as N) | | X | | | | | | | | | | | |

| CONVENTIONAL AND NONCONVENTIONAL POLLUTANTS | | | | | | | | | | | | | |
|---|--|---|--|--|--|--|--|--|--|--|--|--|--|
| A. Bromide (24959-67-9) | | X | | | | | | | | | | | |
| B. Chlorine, Total Residual | | X | | | | | | | | | | | |
| C. Color | | X | | | | | | | | | | | |
| D. Fecal Coliform | | X | | | | | | | | | | | |
| E. Fluoride (16984-48-8) | | X | | | | | | | | | | | |
| F. Nitrate - Nitrate (as N) | | X | | | | | | | | | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | | 5. INTAKE (optional) | | |
|---|---------------------|--------------------|---------------------------------------|----------|--|----------|---|----------|--------------------|------------------|---------|--------------------------|--|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE (if available) | | B. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | B. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | | |
| G. Nitrogen, Total Organic (as N) | | X | | | | | | | | | | | | |
| H. Oil and Grease | | X | | | | | | | | | | | | |
| I. Phosphorus (as P), Total (7723-14-0) | | X | | | | | | | | | | | | |
| J. Sulfate (as SO ₄) (14808-79-8) | | X | | | | | | | | | | | | |
| K. Sulfide (as S) | | X | | | | | | | | | | | | |
| L. Sulfite (as SO ₃) (14265-45-3) | | X | | | | | | | | | | | | |
| M. Surfactants | | X | | | | | | | | | | | | |
| N. Aluminum, Total (7429-90-5) | | X | | | | | | | | | | | | |
| O. Barium, Total (7440-39-3) | | X | | | | | | | | | | | | |
| P. Boron, Total (7440-42-8) | | X | | | | | | | | | | | | |
| Q. Cobalt, Total (7440-48-4) | | X | | | | | | | | | | | | |
| R. Iron, Total (7439-89-6) | | X | | | | | | | | | | | | |
| S. Magnesium, Total (7439-95-4) | | X | | | | | | | | | | | | |
| T. Molybdenum, Total (7439-98-7) | | X | | | | | | | | | | | | |
| U. Manganese, Total (7439-96-5) | | X | | | | | | | | | | | | |
| V. Tin, Total (7440-31-5) | | X | | | | | | | | | | | | |
| W. Titanium, Total (7440-32-6) | | X | | | | | | | | | | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK "X" | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | B. NO. OF ANALYSES |
|---|---------------------|--------------------|------------------------|----------|-------------------------|----------|--------------------------|-------------------|------------------|---------|--------------------------|-------------------|--------------------|
| | A. BELIEVED PRESENT | B. BELIEVED ABSENT | A. MAXIMUM DAILY VALUE | | B. MAXIMUM 30 DAY VALUE | | C. LONG TERM AVRG. VALUE | | A. CONCENTRATION | B. MASS | A. LONG TERM AVRG. VALUE | | |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (if available) | (1) CONCENTRATION | | | (2) MASS | (1) CONCENTRATION |  | (2) MASS |
| METALS, AND TOTAL PHENOLS | | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-9) | | X | | | | | | | | | | | |
| 2M. Arsenic, Total (7440-38-2) | | X | | | | | | | | | | | |
| 3M. Beryllium, Total (7440-41-7) | | X | | | | | | | | | | | |
| 4M. Cadmium, Total (7440-43-9) | | X | | | | | | | | | | | |
| 5M. Chromium III (16065-83-1) | | X | | | | | | | | | | | |
| 6M. Chromium VI (18540-29-9) | | X | | | | | | | | | | | |
| 7M. Copper, Total (7440-50-8) | | X | | | | | | | | | | | |
| 8M. Lead, Total (7439-92-1) | | X | | | | | | | | | | | |
| 9M. Mercury, Total (7439-97-6) | | X | | | | | | | | | | | |
| 10M. Nickel, Total (7440-02-0) | | X | | | | | | | | | | | |
| 11M. Selenium, Total (7782-49-2) | | X | | | | | | | | | | | |
| 12M. Silver, Total (7440-22-4) | | X | | | | | | | | | | | |
| 13M. Thallium, Total (7440-28-0) | | X | | | | | | | | | | | |
| 14M. Zinc, Total (7440-66-6) | | X | | | | | | | | | | | |
| 15M. Cyanide, Amenable to Chlorination | | X | | | | | | | | | | | |
| 16M. Phenols, Total | | X | | | | | | | | | | | |
| RADIOACTIVITY | | | | | | | | | | | | | |
| (1) Alpha Total | | X | | | | | | | | | | | |
| (2) Beta Total | | X | | | | | | | | | | | |
| (3) Radium Total | | X | | | | | | | | | | | |
| (4) Radium 226 Total | | X | | | | | | | | | | | |

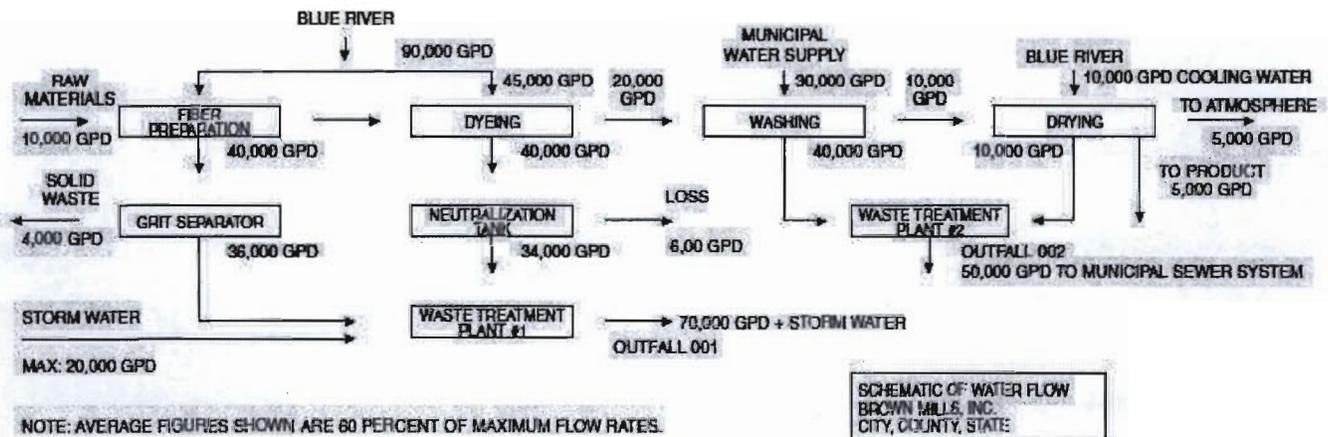
**INSTRUCTIONS FOR FILLING OUT APPLICATION FOR DISCHARGE
PERMIT FORM C – MANUFACTURING, COMMERCIAL,
MINING AND SILVICULTURE OPERATIONS.**

All blanks must be filled in when the application is submitted to the appropriate regional office (see map). The form must be signed as indicated.

This application is to be completed only for wastewater facilities with a discharge. Include any facility with possibility of discharge, even if normally there is no discharge. If this form is not adequate for you to describe your existing operation, then sufficient information should be attached so that an evaluation of the discharge can be made.

- 1.00 Name of Facility – By what title or name is this facility known locally?
- 1.10 and 1.20 Self-explanatory.
- 2.00 List in descending order of significance the four digit Standard Industrial Classification (SIC) codes that best describe your facility in terms of the principal products or services you produce or provide. Also, specify each classification in words.

SIC code numbers are descriptions that may be found in the "Standard Industrial Classification Manual" prepared by the Executive Office of the President, Office of Management and Budget, that is available from the Government Printing Office, Washington, D.C. Use the current edition of the manual. If you have any questions concerning the appropriate SIC code for your facility, contact the Missouri Department of Natural Resources Regional office in your area (see map).
- 2.10 Point of discharge should be given in terms of the legal description of the waste treatment plant, location or sufficient information so that it may be located.
- 2.20 Receiving Water – the name of the stream to which the discharge is directed and any subsequent tributary until a continuous flowing stream is reached.
- 2.30 Self-explanatory.
- 2.40 A. The line drawing should show generally the route taken by water in your facility from intake to discharge. Show all operations contributing wastewater, including process and production areas, sanitary flows, cooling water and storm water runoff. You may group similar operations into a single unit labeled to correspond to the more detailed listing. The water balance should show average and maximum flows. Show all significant losses of water to products, atmosphere, discharge and public sewer systems. You should use actual measurements whenever available; otherwise, use your best estimate. An example of any acceptable line drawing appears below.



B. List all sources of wastewater to each outfall. Operations may be described in general terms (for example, "dye-making reactor" or a distillation tower"). You may estimate the flow contributed by each source if no data is available, and for storm water, you may use any reasonable measure of duration, volume or frequency. For each treatment unit, indicate its size, flow rate and retention time, and describe the ultimate disposal of any solid or liquid wastes not discharged. Treatment units should be listed in order and you should select the proper code from Table A to fill in column 3B for each treatment unit. Insert "XX" into column 3B if no code corresponds to a treatment unit you list.

TABLE A – CODES FOR TREATMENT UNITS

PHYSICAL TREATMENT PROCESSES

| | | | |
|-----|-------------------------------------|-----|---|
| 1-A | Ammonia Stripping | 1-M | Grit Removal |
| 1-B | Dialysis | 1-N | Microstraining |
| 1-C | Diatomaceous Earth Filtration | 1-O | Mixing |
| 1-D | Distillation | 1-P | Moving Bed Filters |
| 1-E | Electrodialysis | 1-Q | Multimedia Filtration |
| 1-F | Evaporation | 1-R | Rapid Sand Filtration |
| 1-G | Flocculation | 1-S | Reverse Osmosis (Hyperfiltration) |
| 1-H | Flotation | 1-T | Screening |
| 1-I | Foam Fractionation | 1-U | Sedimentation (Settling) |
| 1-J | Freezing | 1-V | Slow Sand Filtration |
| 1-K | Gas-Phase Separation | 1-W | Solvent Extraction |
| 1-L | Grinding (Comminutors) | 1-X | Sorption |

CHEMICAL TREATMENT PROCESSES

| | | | |
|-----|-------------------------------|-----|---------------------------------|
| 2-A | Carbon Absorption | 2-G | Disinfection (Ozone) |
| 2-B | Chemical Oxidation | 2-H | Disinfection (Other) |
| 2-C | Chemical Precipitation | 2-I | Electrochemical Treatment |
| 2-D | Coagulation | 2-J | Ion Exchange |
| 2-E | Dechlorination | 2-K | Neutralization |
| 2-F | Disinfection (Chlorine) | 2-L | Reduction |

BIOLOGICAL TREATMENT PROCESSES

| | | | |
|-----|-------------------------------------|-----|---|
| 3-A | Activated Sludge | 3-E | Pre-Aeration |
| 3-B | Aerated Lagoons | 3-F | Spray Irrigation/Land Application |
| 3-C | Anaerobic Treatment | 3-G | Stabilization Ponds |
| 3-D | Nitrification-Denitrification | 3-H | Trickling Filtration |

OTHER PROCESSES

| | | | |
|-----|---------------------------------------|-----|---|
| 4-A | Discharge to Surface Water | 4-C | Reuse/Recycle of Treated Effluent |
| 4-B | Ocean Discharge Through Outfall | 4-D | Underground Injection |

SLUDGE TREATMENT AND DISPOSAL PROCESSES

| | | | |
|-----|-----------------------------|-----|---------------------------|
| 5-A | Aerobic Digestion | 5-M | Heat Drying |
| 5-B | Anaerobic Digestion | 5-N | Heat Treatment |
| 5-C | Belt Filtration | 5-O | Incineration |
| 5-D | Centrifugation | 5-P | Land Application |
| 5-E | Chemical Conditioning | 5-Q | Landfill |
| 5-F | Chlorine Treatment | 5-R | Pressure Filtration |
| 5-G | Composting | 5-S | Pyrolysis |
| 5-H | Drying Beds | 5-T | Sludge Lagoons |
| 5-I | Elutriation | 5-U | Vacuum Filtration |
| 5-J | Flotation Thickening | 5-V | Vibration |
| 5-K | Freezing | 5-W | Web Oxidation |
| 5-L | Gravity Thickening | | |

2.40 C. A discharge is intermittent unless it occurs without interruption during the operating hours of the facility, except for infrequent shutdowns for maintenance, process changes or other similar activities. A discharge is seasonal if it occurs only during certain parts of the year. Fill in every applicable column in this item for each source of intermittent or seasonal discharges. Base your answers on actual data whenever available; otherwise, provide your best estimate. Report the highest daily value for flow rate and total volume in the "Maximum Daily" columns. Report the average of all daily values measures during days when discharge occurred within the last year in the "Long Term Average" columns.

2.50 A. All effluent guidelines promulgated by EPA appear in the Federal Register and are published annually in 40 CFR Subchapter N. A guideline applies to you if you have any operations contributing process wastewater in any subcategory covered by BPT, BCT, or BAT guidelines. If you are unsure whether you are covered by a promulgated effluent guideline, check with your Missouri Department of Natural Resources' Regional Office. You must check yes if an applicable effluent guideline has been promulgated, even if the guideline limitations are being contested in court. If you believe that a promulgated effluent guideline has been remanded for reconsideration by a court and does not apply to your operations, you may check no.

B. An effluent guideline is expressed in terms of production (or other measure of operation) if the limitations are expressed as mass of pollutant per operational parameter; for example, "pounds of BOD per cubic foot of logs from which bark is removed," or "pounds of TSS per megawatt hour of electrical energy consumed by smelting furnace." An example of a guideline not expressed in terms of a measure of operation is one which limits the concentration of pollutants.

C. This item must be completed only if you checked yes to item B. The production information requested here is necessary to apply effluent guidelines to your facility and you may not claim it as confidential. However, you do not have to indicate how the reported information was calculated.

Report quantities in the units of measurement used in the applicable effluent guideline. The figures provided must be a measure of actual operation over a one month period, such as the production for the highest month during the last twelve months, or the monthly average production for the highest year of the last five years, or other reasonable measure of actual operation, but may not be based on design capacity or on predictions of future increases in operation.

2.60 A. If you check yes to this question, complete all parts of the chart, or attach a copy of any previous submission you have made containing the same information.

B. You are not required to submit a description of future pollution control projects if you do not wish to or if none is planned.

3.00 These items require you to collect and report data on the pollutants discharged from each of your outfalls. Each part of this item addresses a different set of pollutants and must be completed in accordance with the specific instructions for that part. The following general instructions apply to the entire item.

GENERAL INSTRUCTIONS. Part A requires you to report at least one analysis for each pollutant. Part B requires you to mark "X" in either the "Believe Present" column or the "Believe Absent" column (column 2A or 2B, Part B) based on your best estimate, and test for those which you believe to be present. Part C requires you to list any of a group of pollutants which you believe to be present, with a brief explanation of why you believe it to be present. (See specific instructions on the form and below Parts A through C).

Base your determination that a pollutant is present in or absent from your discharge on your knowledge of your raw materials, maintenance chemicals, intermediate and final products and byproducts, and any previous analyses known to you of your effluent or of any similar effluent. (For example, if you manufacture pesticides, you should expect those pesticides to be present in contaminated storm water runoff.) If you would expect a pollutant to be present solely as a result of its presence in your intake water, you must mark "Believe Present" but you are not required to analyze for that pollutant. Instead, mark an "X" in the "Intake" column.

REPORTING. All levels must be reported as a concentration and as total mass. You may report some or all of the required data by attaching separate sheets of paper. (Use the following abbreviations in the columns headed "Units" (column 3, Part A, and column 4, Part B).

CONCENTRATION

| | | |
|------|-------|----------------------|
| ppm | ..... | parts per million |
| mg/L | ..... | milligrams per liter |
| ppb | ..... | parts per billion |
| ug/L | ..... | micrograms per liter |

MASS

| | | |
|-----|-------|----------------------|
| lbs | ..... | pounds |
| ton | ..... | tons (English tons) |
| mg | ..... | Milligrams |
| g | ..... | grams |
| kg | ..... | kilograms |
| T | ..... | tonnes (metric tons) |

If you measure only one daily value, complete only the "Maximum Daily Values" columns and insert "1" into the "number of analyses" columns (columns 2A and 2B, Part A, and columns 3A and 3D, Part B). The Missouri Department of Natural Resources may require you to conduct additional analyses to further characterize your discharges.

For composite samples, the daily value is the total mass or average concentration found in a complete sample taken over the operating hours of the facility during a 24 hour period; for grab samples, the daily value is the arithmetic or flow-weighted total mass or average concentration found in a series of at least four grab samples taken over the operating hours of the facility during a 24 hour period.

If you measure more than one daily value for a pollutant, determine the average of all values within the last year and report the concentration and mass under the "Long Term Average Values" columns (column 2C, Part A, and column 3C, Part B), and the total number of daily values under the "Number of Analyses" columns (column 2D, Part A, and column 3D, Part B). Also, determine the average of all daily values taken during each calendar month, and report the highest average of all daily values taken during each calendar month, and report the highest average under the "Maximum 30 Day Values" columns (column 2B, Part A, and column 3B, Part B).

SAMPLING. The collection of the samples for the reported analyses should be supervised by a person experienced in performing sampling of industrial wastewater. You may contact your Missouri Department of Natural Resources' Regional Office for detailed guidance on sampling techniques and for answers to specific questions. Any specific requirements contained in the applicable analytical methods should be followed for sample containers, sample preservation, holding times, the collection of duplicate samples, etc. The time when you sample should be representative of your normal operation, to the extent feasible, with all processes which contribute wastewater in normal operation and with your treatment system operating properly with no system upsets. Samples should be collected from the center of the flow channel, where turbulence is at a maximum, at a site specified in your present permit or at any site adequate for the collection of a representative sample.

Grab and composite samples are defined as follows:

GRAB SAMPLE. An individual sample of at least 100 milliliters collected at a randomly selected time over a period not exceeding 15 minutes.

COMPOSITE SAMPLE. A combination of at least eight sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24 hour period. For volatile pollutants, aliquots must be combined in the laboratory immediately before analysis. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically.

ANALYSIS. You must use test methods promulgated in 40 CFR Part 136; however, if none has been promulgated for a particular pollutant, you may use any suitable method for measuring the level of the pollutant in your discharge provided that you submit a description of the method or a reference to a published method. Your description should include the sample holding times, preservation techniques and the quality control measures which you used.

If you have two or more substantially identical outfalls, you may request permission from the Missouri Department of Natural Resources to sample and analyze only one outfall and submit the results of the analysis for other substantially identical outfalls. If your request is granted by the Missouri Department of Natural Resources, on a separate sheet attached to the application form, identify which outfall you did test and describe why the outfalls which you did not test are substantially identical to the outfall which you did test.

REPORTING OF INTAKE DATA. You are not required to report data under the "Intake" columns unless you wish to demonstrate your eligibility for a "net" effluent limitation for one or more pollutants, that is, an effluent limitation adjusted by subtracting the average level of the pollutant(s) present in your intake water. National Pollutant Discharge Elimination System (NPDES) regulations allow net limitations only in certain circumstances. To demonstrate your eligibility, under the Intake columns report the average of the results of analyses on your intake water (if your water is treated before use, test the water after it is treated), and attach a separate sheet containing the following for each pollutant:

1. A statement that the intake water is drawn from the body of water into which the discharge is made. (Otherwise, you are not eligible for net limitations.)
 2. A statement of the extent to which the level of the pollutant is reduced by treatment of your wastewater. (Your limitations will be adjusted only to the extent that the pollutant is not removed.)
 3. When applicable, a demonstration of the extent to which the pollutants in the intake vary physically, chemically, or biologically from the pollutants contained in your discharge. For example, when the pollutant represents a class of compounds. Your limitations will be adjusted only to the extent that the intake pollutants do not vary from the discharged pollutants.
- 3.00 Part A must be completed by all applicants for all outfalls, including outfalls containing only noncontact cooling water or storm runoff. However, at your request, the Missouri Department of Natural Resources may waive the requirements to test for one or more of these pollutants, upon a determination that testing for the pollutant(s) is not appropriate for your effluent.

Use composite samples for all pollutants in this part, except use grab samples for pH and temperature. See discussion in instructions above for definitions of the columns in Part A. The "Long Term Average Values" column (column 2C) and "Maximum 30 Day Values" column (column 2B) are not compulsory but should be filled out if data is available.

- 3.00 Part B must be completed by all applicants for all outfalls, including outfalls containing only noncontact cooling water or storm runoff.

Use composite samples for all pollutants you analyze for in this part, except use grab samples for residual chlorine, oil and grease and fecal coliform. The Long Term Average Values column (column 3C) and Maximum 30 Day Values column (column 3B) are not compulsory but should be filled out if data is available.

- 3.00 List any pollutants in Table B that you believe to be present and explain why you believe them to be present in part C. No analysis is required, but you have analytical, you must report it.

TABLE B – TOXIC POLLUTANTS AND HAZARDOUS SUBSTANCES REQUIRED TO BE IDENTIFIED BY APPLICANTS IF EXPECTED TO BE PRESENT

| TOXIC POLLUTANT | HAZARDOUS SUBSTANCES | HAZARDOUS SUBSTANCES |
|-----------------------------|----------------------|----------------------|
| Asbestos | Dichlorvos | Nalad |
| | Diethylamine | Napthenic acid |
| HAZARDOUS SUBSTANCES | Dimethylamine | Nitrotoluene |
| | Dintrobenzene | Parathion |
| Acetaldehyde | Diquat | Phenolsulfonate |
| Allyl alcohol | Disulfoton | Phosgene |
| Allyl chloride | Diuron | Propargite |
| Amyl acetate | Epichlorohydrin | Propylene oxide |
| Aniline | Ethion | Pyrethrins |
| Benzonitrile | Ethylene diamine | Quinoline |
| Benzyl chloride | Ethylene dibromide | Resorcinol |
| Butyl acetate | Formaldehyde | Strontium |
| Butylamine | Furfural | Strychnine |
| Captan | Guthion | Sytrene |

TABLE B – (continued)

| HAZARDOUS SUBSTANCES | HAZARDOUS SUBSTANCES | HAZARDOUS SUBSTANCES |
|---|-----------------------------|---|
| Carbaryl | Isoprene | 2, 4, 5-T (2,4,5-Trichloro- phenoxyacetic acid) |
| Carbofuran | Isopropanolamine | TDE (Tetrachlorodiphenyl ethane) |
| Carbon disulfide | Kelthane | 2, 4, 5-TP (2-(2,4,5-Trichloro- phenoxy) propanoic acid) |
| Chlorpyrifos | Kepone | Trichlorofon |
| Coumaphos | Malathion | Triethanolamine |
| Cresol | Mercaptodimethur | Triethylamine |
| Crotonaldehyde | Methoxychlor | Uranium |
| 2,4-D (2,4-Dichloro- Phenoxyacetic acid) | Methyl mercaptan | Vanadium |
| Diazinon | Methyl parathion | Vinyl acetate |
| Dicamba | Mevinphos | Xylene |
| Dichlobenil | Mexacarbate | Xylenol |
| 2,2-Dichloropropionic acid | Monethyl amine | Zirconium |

3.10 Self-explanatory. Additional information may be requested by the Missouri Department of Natural Resources.

3.20 Self-explanatory.

3.30 The Clean Water Act provides for severe penalties for submitting false information on this application form.

Section 309(c)(2) of the Clean Water Act provides that "Any person who knowingly makes any false statement, representation, or certification in any application . . . shall upon conviction, be punished by a fine of no more \$10,000 or by imprisonment for not more than six months, or both.

All applications must be signed as follows and the signature must be original.

- A. For a corporation, by an officer having responsibility for the overall operation of the regulated facility or activity or for environmental matters.
- B. For a partnership or sole proprietorship, by a general partner or the proprietor.
- C. For a municipal, state, federal or other public facility, by either a principal executive officer or by an individual having overall responsibility for environmental matters at the facility.