

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-0111082

Owner: 3M Company
Address: 3M Center, Building 0224-05-W-03, St. Paul, MN 55144

Continuing Authority: Same as above
Address: Same as above

Facility Name: 3M Commercial Graphics
Facility Address: 2120 East Austin Blvd., Nevada, MO 64772

Legal Description: See page 2
UTM Coordinates: See page 2

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

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

FACILITY DESCRIPTION

The use or operation of this facility does not require the supervision of a **Certified Operator**.

3M Commercial Graphics produces decorative and specialty films for architectural, sign, fleet, commercial and automotive applications, including colored vinyl films, silicone release liners, double coated tapes, vinyl and urethane protective films, specialty medical products, post-it bulletin boards, and printing and embossing cylinders. Manufacturing equipment on site includes surface coating lines controlled by regenerative thermal oxidizers, film extruders, various coating mixing equipment, solvent storage tanks and boilers.

See page 2 for outfall descriptions.

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

May 1, 2016
Effective Date

Sara Parker Pauley, Director, Department of Natural Resources

April 30, 2021
Expiration Date

John Madras, Director, Water Protection Program

FACILITY DESCRIPTION (continued):

Outfall #001 - Landfill, SIC #4953, #3081 & #2672

Stormwater runoff from landfill.

Design flow is 0.64 million gallons per day (MGD).

Actual flow is dependent upon precipitation.

Legal Description: SE¼, NE¼, Sec. 10, T35N, R31W, Vernon County
UTM Coordinates: X= 382805, Y= 4187712
Receiving Stream: Tributary to Birch Branch
First Classified Stream and ID: 8-20-13 MUDD V1.0 (C) (3960) (locally known as Birch Branch)
USGS Basin & Sub-watershed No.: 10290104-0406

Outfall #002 - Landfill, SIC #4953, #3081 & #2672

Stormwater runoff from landfill.

Design flow is 0.39 million gallons per day (MGD).

Actual flow is dependent upon precipitation.

Legal Description: SW¼, NE¼, Sec. 10, T35N, R31W, Vernon County
UTM Coordinates: X= 382341, Y= 4188076
Receiving Stream: Tributary to Willow Branch
First Classified Stream and ID: 8-20-13 MUDD V1.0 (C) (3960) (locally known as Willow Branch)
USGS Basin & Sub-watershed No.: 10290104-0406

Outfall #003 - Industrial, SIC #3081 & #2672

Stormwater runoff from industrial site.

Design flow is 0.51 million gallons per day (MGD).

Actual flow is dependent upon precipitation.

Legal Description: NW¼, NE¼, Sec. 10, T35N, R31W, Vernon County
UTM Coordinates: X= 382711, Y= 4188484
Receiving Stream: Tributary to Willow Branch
First Classified Stream and ID: 8-20-13 MUDD V1.0 (C) (3960) (locally known as Willow Branch)
USGS Basin & Sub-watershed No.: 10290104-0406

Outfall #004 - Industrial, SIC #3081 & #2672

Stormwater runoff from industrial site.

Design flow is 0.61 million gallons per day (MGD).

Actual flow is dependent upon precipitation.

Legal Description: NE¼, NE¼, Sec. 10, T35N, R31W, Vernon County
UTM Coordinates: X= 383085, Y= 4188472
Receiving Stream: Tributary to Willow Branch
First Classified Stream and ID: 8-20-13 MUDD V1.0 (C) (3960) (locally known as Willow Branch)
USGS Basin & Sub-watershed No.: 10290104-0406

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

ALL OUTFALLS	TABLE A. 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 May 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 PARAMETER(S) (Note 1, Page 4)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
PHYSICAL						
Flow	MGD	*			once/quarter****	24 hr. estimate
Precipitation	Inches	*			once/quarter****	measured
CONVENTIONAL						
Chemical Oxygen Demand	mg/L	**			once/quarter****	grab
Chloride + Sulfate	mg/L	**			once/quarter****	grab
pH – Units	SU	***			once/quarter****	grab
Settleable Solids	mL/L/hr	**			once/quarter****	grab
Total Suspended Solids	mg/L	**			once/quarter****	grab
PETROLEUM RELATED PRODUCTS						
Oil & Grease	mg/L	**			once/quarter****	grab
METALS – Outfalls #001 and #002 only						
Selenium, Total Recoverable	µg/L	*			once/quarter****	grab
Thallium, Total Recoverable	µg/L	*			once/quarter****	grab
NUTRIENTS						
Ammonia as N (April 1 – Sept 30) (Oct 1 – March 31)	mg/L	*			once/quarter****	grab
MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE JULY 28, 2016. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

- * Monitoring requirement only.
- ** Monitoring requirement only associated with a benchmark value. See special condition #11.
- *** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units. Facility will report minimum and maximum values.
- **** See table below for quarterly sampling.

Minimum Sampling and Reporting 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 28 th
Third	July, August, September	Sample at least once during any month of the quarter	October 28 th
Fourth	October, November, December	Sample at least once during any month of the quarter	January 28 th

Note 1 - 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. If a discharge 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.

B. STANDARD CONDITIONS

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

C. SPECIAL CONDITIONS

1. 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.
2. All outfalls must be clearly marked in the field.
3. 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.
4. 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":
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) 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;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) 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.
5. Report as no-discharge when a discharge does not occur during the report period.

C. SPECIAL CONDITIONS (CONTINUED)

6. 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.

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

8. 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.

9. 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 structural BMPs at the facility should be designed to meet effluent limitations and benchmark values during rainfall event up to the 10 year, 24 hour rain event. The operational BMPs at the facility shall be able to meet effluent limitations and benchmark values during any 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.

10. 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 #001, #002, #003, and #004	
Parameter	Benchmark
Chemical Oxygen Demand	100 mg/L
Chloride + Sulfate	1,000 mg/L
Settleable Solids	1.5 mL/L/hr
Total Suspended Solids	100 mg/L
Oil & Grease	15 mg/L

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)

11. 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 stormwater from these substances.
 - (b) Provide collection facilities and arrange for proper disposal of waste products including but not limited to petroleum waste products, and solvents.
 - (c) Store all paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) so that these materials are not exposed to stormwater or provide other prescribed BMPs such as plastic lids and/or portable spill pans to prevent the commingling of stormwater with container contents. Commingled water may not be discharged under this permit. Provide spill prevention control, and/or management sufficient to prevent any spills of these pollutants from entering waters of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater.
 - (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 permit conditions.
 - (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.
12. 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.
13. Before releasing water that has 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 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.
14. 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.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
FACT SHEET
FOR THE PURPOSE OF RENEWAL
OF
MO-0111082
3M COMMERCIAL GRAPHICS

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

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: Industrial, Landfill Facility SIC Code(s): 3081, 2672, 4953

FACILITY DESCRIPTION:

3M Commercial Graphics produces decorative and specialty films for architectural, sign, fleet, commercial and automotive applications, including colored vinyl films, silicone release liners, double coated tapes, vinyl and urethane protective films, specialty medical products, post-it bulletin boards, and printing and embossing cylinders. Manufacturing equipment on site includes surface coating lines controlled by regenerative thermal oxidizers, film extruders, various coating mixing equipment, solvent storage tanks and boilers.

Stormwater in contact with the industrial waste landfill and industrial site discharges through four outfalls prior to leaving the property. Trench dewatering no longer occurs at this facility.

Application Date: 09/16/2013
 Expiration Date: 03/18/2014
 Last Inspection: 07/11/2013 In Compliance

Have any changes occurred at this facility or in the receiving water body that effects effluent limit derivation?

- Yes; Both Willow Branch and Birch Branch are now classified as EPA has approved the Department's new stream classifications. These newly classified segment are identified as 8-20-13 MUDD V1.0 (C) (3960) in the permit due to coding in the Department's database. Once the database is updated with unique stream names, the permit can be revised to reflect that classified stream name.

OUTFALL(S) TABLE:

OUTFALL	DESIGN FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE
001	0.99	Best Management Practices (BMPs)	Industrial Stormwater
002	0.60	BMPs	Industrial Stormwater
003	0.79	BMPs	Industrial Stormwater
004	0.94	BMPs	Industrial Stormwater

FACILITY PERFORMANCE HISTORY & COMMENTS:

The most recent site inspection to determine compliance with the permit was conducted on July 11, 2013. The facility was found to be in compliance during the time of the inspection but it was noted that the discharged monitoring reports (DMRs) reviewed showed violations of effluent limits.

In addition, the Department’s database shows several violations. These violations and resulting actions are listed below.

- 09/15/2014 – exceedance in total suspended solids (TSS) – Notice of Violation (NOV)
- 12/17/2013 – exceedance in TSS – Letter of Warning (LOW)
- 08/29/2013 – exceedance in TSS and did not meet pH – NOV
- 12/22/2011 – exceedance in TSS – LOW
- 09/26/2011 – exceedance in TSS – LOW
- 11/29/2010 – exceedance in TSS – LOW

Part II. RECEIVING STREAM INFORMATION

RECEIVING WATER BODY’S WATER QUALITY:

None of the stream segments in the permit are listed on the Missouri 303(d) List of impaired waters nor have associated Total Maximum Daily Loads (TMDLs). There are no stream surveys in the Department’s database for these segments. See use designations below.

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 (7) 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 section.

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

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)].

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.

RECEIVING STREAM(S) TABLE:

OUTFALL	WATERBODY NAME	CLASS	WBID	DESIGNATED USES	DISTANCE TO CLASSIFIED SEGMENT	12-DIGIT HUC
#001	Tributary to Birch Branch	N/A	N/A	GEN	0.65	10290104-0406
#001	8-20-13 MUDD V1.0 (locally known as Birch Branch)	C	3960	AQL, HHP, IRR, LWV, SCR, WBC-B	N/A	
#002	Tributary to Willow Branch	N/A	N/A	GEN	0.40	
#003	Tributary to Willow Branch (different tributary than #002)	N/A	N/A	GEN	0.35	
#004					0.40	
#002, #003, #004	8-20-13 MUDD V1.0 (locally known as Willow Branch)	C	3960	AQL, HHP, IRR, LWV, SCR, WBC-B	N/A	

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 Criteria; GRW = Groundwater; HUC= Hydrologic Unit Code; IND= Industrial; IRR=Irrigation; LWV=Livestock & Wildlife Watering; N/A= Not Applicable; P= Permanent; SCR= Secondary Contact Recreation; W= Wetland; WBC= Whole Body Contact Recreation; WBID= Water Body Identification Number

MIXING CONSIDERATIONS:

- 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 recommended 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.

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.
 - ✓ Information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance.
 - ✓ The permit writer used best professional judgement to remove the parameter labeled “chemical stored outside currently or in the past five years”. This information should be recorded in the Stormwater Pollution Prevention Plant (SWPPP) developed for the site. All best management practices for control and management of storing chemicals and other materials should be accounted for in the SWPPP requirements. For this reason, the parameter was removed from the effluent limitations table, with the expectation that this information be managed in the SWPPP.
 - ✓ The following parameters were removed because the receiving stream and first classified streams do not have use designations listed in the regulations that require protection against these pollutants. Sulfate, barium and manganese do not have water quality standards that apply.
 - ✓ The permit writer used best professional judgement to make a reasonable potential determination that the facility does not have reasonable potential to exceed water quality standards for the following parameters. All metals except selenium and thallium were removed. The DMR data from the previous permit cycle was reviewed and showed consistent performance well below the acute water quality standards or showed that it can be reasonably determined that the values of those constituents will be below the chronic water quality standards once the stream returns to normal seven day average low flow.
 - ✓ The permit writer used best professional judgement to remove iron from the permit. The permittee submitted an engineering report titled “Iron Source in Stormwater Outfalls Investigation Report” in 2012. This report determined that iron found in discharge sample analyses is coming from naturally occurring sources, including the soils on and around the site and in the receiving stream, upstream of the outfalls. The department granted a modification request to remove the limits for iron in 2012. The permit writer has used best professional judgement to completely remove the parameter from the permit. Since the department has already agreed that the industrial activity at the site is not a source of the iron in the discharge, there is no need to continue monitoring for this parameter.
 - ✓ The permit writer used best professional judgement to remove total toxic organics from the permit. The previous permit indicated that the parameter was added to address the agricultural fields on the property. The permittee indicated that those agricultural fields are leased to private farmers and do not contain any industrial activity. In accordance with 10 CSR 20-6.200(1)(B)6., agricultural stormwater discharges and irrigation return flows are exempt from permitting.
 - ✓ The permit writer used best professional judgement to remove benzene, ethylbenzene and xylene from the permit. The performance data shows that the facility is well below any water quality standards for these parameters and does not have reasonable potential to cause impairment to the receiving streams with these parameters. Toluene was not included in the previous permit. Additionally, the permittee will still be required to test for oil and grease at all the outfalls. Oil and grease will capture petroleum products and indicate release of these substances into the environment. Having all these parameters as indicators of petroleum products in the discharge is redundant and unnecessary.
 - ✓ Due to the nature of the discharge being stormwater and the performance of the facility over the past permit cycle, the permit writer has used best professional judgment to remove effluent limitations for the following parameters and require monitoring only or monitoring with a benchmark value. Chemical oxygen demand will now have a benchmark value of 100 mg/L; chloride plus sulfate now has a benchmark value of 1,000 mg/L; settleable solids now has a benchmark value of 1.5 mL/L/hr; total suspended solids now has a benchmark value of 100 mg/L; and oil and grease now has a benchmark value of 10 mg/L.

- ✓ 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 all of the parameters in the permit. 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.

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.

- ✓ This permit is for stormwater only hence antidegradation does not apply.

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.

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

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 give 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.

- ✓ Not applicable; a RPA was not conducted for this facility. RPA's cannot be conducted on stormwater discharge data. However, the permit writer used best professional judgement to make reasonable potential determinations for the discharges to exceed either the acute water quality standards during the event or chronic water quality standards once the receiving stream returns to normal low flow.

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.

- ✓ Not Applicable. This permit does not contain a SOC.

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.

STORMWATER 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 stormwater discharges; (3) Numeric effluent limitations are infeasible; or (4) the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA. In accordance with the EPA's *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (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 Stormwater Management, a SWPPP is a series of steps and activities to (1) identify sources of pollution or contamination, and (2) select and carry out actions which prevent or control the pollution of stormwater discharges.

- ✓ 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 that each state identify waters that are not meeting water quality standards and for which adequate water pollution controls have not been required. Water quality standards protect such beneficial uses of water as whole body contact (such as swimming), maintaining fish and other aquatic life, and providing drinking water for people, livestock and wildlife. The 303(d) list helps state and federal agencies keep track of waters that are impaired but not addressed by normal water pollution control programs.

- ✓ Not applicable. This facility does not discharge to an impaired segment of a 303(d) listed stream.

TOTAL MAXIMUM DAILY LOAD (TMDL):

A TMDL is a calculation of the maximum amount of a given pollutant 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 as listed on the 303(d) list, then a watershed management plan will be developed that shall include the TMDL calculation.

- ✓ Not Applicable. This facility is not associated with a TMDL.

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.

- ✓ Not applicable. Wasteload allocations were not calculated.

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; at this time, the permittee is not required to conduct WET test for this facility.

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 temperature and by pH of the 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 – monitoring only.
Winter – monitoring only.

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 the mixing consideration listed in Part II of the Fact Sheet 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.

Actual effluent limits will depend in part on the actual performance of the facility.

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 DETERMINATION

ALL OUTFALLS – STORMWATER RUNOFF FROM LANDFILL AND INDUSTRIAL SITE

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.

Additionally, the permit writer will only be considering acute criteria in determining effluent limitation, benchmark values, monitoring only or removal of parameters from the permit. Acute criteria are more representative of the effect stormwater runoff has on the receiving stream and associated designated uses. The nature of stormwater events is much less likely to cause a four day exposure time, thus not being representative of a chronic impact on the stream. For these reason, the permit writer will compare only acute criteria to past performance data for the stormwater runoff from this site.

BENCHMARKS

Benchmark concentrations are **not** effluent limitations; 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. 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.

EFFLUENT LIMITATIONS TABLE:

PARAMETERS (ALL OUTFALLS UNLESS INDICATED OTHERWISE)	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	MONTHLY AVERAGE MAXIMUM	PREVIOUS PERMIT LIMITATIONS	MINIMUM SAMPLING FREQUENCY	MINIMUM REPORTING FREQUENCY	SAMPLE TYPE
PHYSICAL								
FLOW	MGD	1	*	***	*/*	ONCE/QUARTER	ONCE/QUARTER	ESTIMATE
PRECIPITATION	INCHES	6	*	***	*/*	ONCE/QUARTER	ONCE/QUARTER	MEASURED
CONVENTIONAL								
COD	MG/L	6	**	***	100/90	ONCE/QUARTER	ONCE/QUARTER	GRAB
CHEMICALS STORED OUTSIDE	MG/L	6	***	***	*/*	N/A – BEING REMOVED		
CHLORIDE + SULFATE	MG/L	6	**	***	1000/*	ONCE/QUARTER	ONCE/QUARTER	GRAB
FLUORIDE – OUTFALLS #001 AND #002	MG/L	6	***	***	*/*	N/A – BEING REMOVED		
HARDNESS, TOTAL	MG/L	6	***	***	*/*	N/A – BEING REMOVED		
pH	SU	6	6.0-9.0	***	6.0-9.0	ONCE/QUARTER	ONCE/QUARTER	GRAB
SETTLABLE SOLIDS	MG/L	6	**	***	1.5/1.0	ONCE/QUARTER	ONCE/QUARTER	GRAB
SULFATE	MG/L	6	***	***	*/*	N/A – BEING REMOVED		
TSS	MG/L	6	**	***	100/50	ONCE/QUARTER	ONCE/QUARTER	GRAB
TOTAL TOXIC ORGANICS	MG/L	6	***	***	*/*	N/A – BEING REMOVED		
PETROLEUM RELATED								
BENZENE	MG/L	6	***	***	*/*	N/A – BEING REMOVED		
ETHYLBENZENE	MG/L	6	***	***	*/*	N/A – BEING REMOVED		
OIL & GREASE	MG/L	6	**	***	15/10	ONCE/QUARTER	ONCE/QUARTER	GRAB
TOTAL XYLENE	MG/L	6	***	***	*/*	N/A – BEING REMOVED		

EFFLUENT LIMITATIONS TABLE (CONTINUED):

PARAMETERS (ALL OUTFALLS UNLESS INDICATED OTHERWISE)	UNIT	Basis for Limits	DAILY MAXIMUM	Monthly Average Maximum	PREVIOUS PERMIT LIMITATIONS	MINIMUM SAMPLING FREQUENCY	MINIMUM REPORTING FREQUENCY	SAMPLE TYPE
METALS – OUTFALLS #001 AND #002								
ANTIMONY, TOTAL RECOVERABLE	µg/L	6	***	***	*/*	N/A – BEING REMOVED		
ARSENIC, TOTAL RECOVERABLE	µg/L	6	***	***	*/*	N/A – BEING REMOVED		
BARIUM, TOTAL RECOVERABLE	µg/L	6	***	***	*/*	N/A – BEING REMOVED		
BERYLLIUM, TOTAL RECOVERABLE	µg/L	6	***	***	*/*	N/A – BEING REMOVED		
BORON, TOTAL RECOVERABLE	µg/L	6	***	***	*/*	N/A – BEING REMOVED		
CADMIUM, TOTAL RECOVERABLE	µg/L	6	***	***	*/*	N/A – BEING REMOVED		
CHROMIUM (III), TOTAL RECOVERABLE	µg/L	6	***	***	*/*	N/A – BEING REMOVED		
CHROMIUM (VI), DISSOLVED	µg/L	6	***	***	*/*	N/A – BEING REMOVED		
COBALT, TOTAL RECOVERABLE	µg/L	6	***	***	*/*	N/A – BEING REMOVED		
COPPER, TOTAL RECOVERABLE	µg/L	6	***	***	*/*	N/A – BEING REMOVED		
IRON, TOTAL RECOVERABLE	µg/L	6	***	***	*/*	N/A – BEING REMOVED		
LEAD, TOTAL RECOVERABLE	µg/L	6	***	***	*/*	N/A – BEING REMOVED		
MANGANESE, TOTAL RECOVERABLE	µg/L	6	***	***	*/*	N/A – BEING REMOVED		
MERCURY, TOTAL RECOVERABLE	µg/L	6	***	***	*/*	N/A – BEING REMOVED		
NICKEL, TOTAL RECOVERABLE	µg/L	6	***	***	*/*	N/A – BEING REMOVED		
SELENIUM, TOTAL RECOVERABLE	µg/L	6	*	***	*/*	ONCE/QUARTER	ONCE/QUARTER	GRAB
SILVER, TOTAL RECOVERABLE	µg/L	6	***	***	*/*	N/A – BEING REMOVED		
THALLIUM, TOTAL RECOVERABLE	µg/L	6	*	***	*/*	ONCE/QUARTER	ONCE/QUARTER	GRAB
ZINC, TOTAL RECOVERABLE	µg/L	6	***	***	*/*	N/A – BEING REMOVED		
NUTRIENTS								
AMMONIA AS N (APRIL 1 – SEPT 30)	MG/L	6	*	***	*/*	ONCE/QUARTER	ONCE/QUARTER	GRAB
AMMONIA AS N (OCT 1 – MARCH 31)	MG/L	6	*	***	*/*	ONCE/QUARTER	ONCE/QUARTER	GRAB

* - Monitoring requirement only
 ** - Monitoring with associated benchmark
 ***- Parameter or requirements removed from permit.

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:

PHYSICAL:

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.

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.

CONVENTIONAL:

Chemical Oxygen Demand (COD)

Effluent limitations removed and replaced with monitoring only and associated benchmark. There is no water quality standard for COD; however, increased oxygen demand may impact instream water quality. COD is also a valuable indicator parameter that will help identify increases in pollutants being discharged from the property during stormwater events. Increases in COD may indicate a need for maintenance or improvement of BMPs. The DMR reports show the performance of the facility to be approximately half of the daily maximum limit of 100 mg/L from the previous permit. For this reason, the permit writer has used best professional judgement to remove limits from the permit. There is no reasonable potential to exceed that limit. This value will be used as a benchmark value for continuing to ensure effectiveness of best management practices. The benchmark value will be set at 100 mg/L.

DMR History over previous permit cycle:

#001: 10-51 mg/L; #002: 10-59 mg/L; #003: 10-57.6 mg/L; #004: 10-52.3 mg/L

Chemicals Stored Outside Currently or in Past Five Years

Parameter removed from permit. The permit writer has used best professional judgement to remove this parameter from the permit. The previous permit did not contain any justification for this parameter. Inspecting and controlling the amount and location of chemicals being stored should be a component of the Stormwater Pollution Prevention Plan (SWPPP). Containers should be properly sealed to prevent leaks and should be stored in area that prevent exposure to stormwater or weather that will cause corrosion and spills of stored chemicals. Therefore, the permit writer has removed this as an effluent parameter with the expectation that proper management of SWPPP controls will prevent contaminated stormwater from leaving the site.

Chloride plus Sulfate

Effluent limitations removed and replaced with monitoring only and associated benchmark. The performance over the previous permit cycle shows values well below the limit of 1,000 mg/L, which is the same criteria that would be applied to this permit per the May 31, 2012 approved regulations 10 CSR 20-7.031(4)(L)1. (The current regulations for this parameter were not approved by EPA). The facility does not have reasonable potential to exceed water quality standards. Therefore, it is the permit writer's best professional judgment to remove effluent limitations and replace with monitoring only. Additionally, a benchmark value of 1,000 mg/L will be implemented in this permit.

DMR History over previous permit cycle:

#001: 10.2-232.2 mg/L; #002: 20.9-245 mg/L; #003: 8.5-35.3 mg/L; #004: 2.6-45.8 mg/L

Fluoride

Parameter removed from permit. The permittee reported six values below detection limits of 0.1 mg/L, 0.2 mg/L and 1.0 mg/L for outfall #001, with one value of 0.11 mg/L. For outfall #002, five values were reported below detection limits of 0.1, 0.2 mg/L, and 1.0 mg/L, with real values of 0.28 mg/L and 0.12 mg/L. The permittee also reported 0.0 mg/L for outfall #001 and 0.0 mg/L for outfall #002 on the permit application. The permittee reported that they believe this parameter is not present at outfall #003 and #004, and were not required to test for this parameter at those outfalls in the previous permit. Therefore, the permit writer will not require this parameter at outfalls #003 and #004. Due to the reports below detection limit and the few real values well below the water quality standard of 4 mg/L for protection of wildlife and livestock watering, the permit writer has used best professional judgment to remove this parameter from the permit. Based on performance history, the facility does not have reasonable potential to exceed the water quality standard for this parameter.

DMR History over previous permit cycle:

#001: one value < 1.0 mg/L, two values < 0.2 mg/L, three values < 0.1 mg/L, one value of 0.11 mg/L;
#002: one value < 1.0 mg/L, two values < 0.2 mg/L, two values < 0.1 mg/L, one value of 0.12 mg/L, one value of 0.28 mg/L;
#003: not required; #004: not required

Hardness, Total

Parameter removed from permit. The parameter was included in order to develop effluent limitations with consideration to site-specific hardness for those parameters that are hardness dependent. The permittee has requested that this parameter be removed from the permit. The permit writer has removed this parameter, understanding that any future effluent limitations that may be calculated will be conservative by not considering site-specific hardness. Thus, those limits will be protective of water quality standards.

pH

6.0-9.0 SU. Technology based effluent limitations of 6.0-9.0 SU [10 CSR 20-7.015] are protective of the water quality standard [10 CSR 20-7.031(5)(E)], which states water contaminants shall not cause pH to be outside the range of 6.5-9.0 SU. The buffering capacity during increased flows during and after a storm event will allow the pH to adjust within the range of 6.5-9.0 SU once the receiving stream returns to normal low flow. For this reason, the permit writer has used best professional judgment to implement the technology based range for pH in this permit.

Settleable Solids

Effluent limitations removed and replaced with monitoring only and associated benchmark. There is no water quality standard for settleable solids; however, sediment discharges can negatively impact aquatic life habitat. Settleable solids are also a valuable indicator parameter that may indicate uncontrolled materials leaving the site. The facility performance was well under the effluent limitations for all outfalls, showing no reasonable potential to exceed the limits and cause violations of general criteria. For this reason, the permit writer has used best professional judgement to remove effluent limitation and replace with monitoring only. Additionally, a benchmark value will be implemented for this parameter. The benchmark value will be set at 1.5 mL/L/hr.

DMR History over previous permit cycle:

#001: 0.2-0.5 mL/L/hr; #002: 0.2-0.21 mL/L/hr; #003: 0.2-0.5 mL/L/hr; #004: 0.2-0.5 mL/L/hr

Sulfate

Parameter removed from permit. This parameter only has a water quality standard for protection of drinking water. This facility does not discharge to a losing stream, nor is there a losing stream within 2 miles downstream of the discharge points. Additionally, chloride plus sulfate is listed as a monitoring requirement in this permit. Therefore, it is the permit writer's best professional judgement to remove this parameter from the permit.

DMR History over previous permit cycle:

#001: 17.6-225 mg/L; #002: 22.4-192 mg/L; #003: 8.5-79 mg/L; #004: 2.6-27.6 mg/L

Total Suspended Solids

Effluent limitations removed and replaced with monitoring only for all outfalls. There is no water quality standard for TSS; however, sediment discharges can negatively impact aquatic life habitat. TSS is also a valuable indicator parameter that may indicate uncontrolled materials leaving the site. Outfalls #001, #003 and #004 show performance values well below 100 mg/L. However, outfall #002 had two values reported on the DMR above 100 mg/L. Since there are no water quality standards or effluent limitation guidelines for this pollutant, that value cannot be considered a standard to base reasonable potential determinations on. Storm events are highly variable in nature and can cause fluctuations in sediment discharged over several events. Therefore, it is the permit writer's best professional judgement to remove limits for all outfalls and require monitoring only with a benchmark value of 100 mg/L.

DMR History over previous permit cycle:

#001: 10-90.2 mg/L; #002: 10-251 mg/L; #003: 10-63.3 mg/L; #004: 10-44 mg/L

Total Toxic Organics

Parameter removed from permit. The previous permit indicated that the parameter was added to address the agricultural fields on the property. The permittee indicated that those agricultural fields are leased to private farmers and do not contain any industrial activity. In accordance with 10 CSR 20-6.200(1)(B)6., agricultural stormwater discharges and irrigation return flows are exempt from permitting. Therefore, it is the permit writer's best professional judgment to remove this parameter from the permit.

PETROLEUM RELATED:

Benzene

Parameter removed from permit. The performance data shows that the facility is well below any water quality standard and does not have reasonable potential to cause impairment to the receiving streams with this parameter. Additionally, the permittee will still be required to test for oil and grease at all the outfalls. Oil and grease will capture petroleum products and indicate release of these substances into the environment. Having both parameters as indicators of petroleum products in the discharge is redundant and unnecessary. Therefore, it is the permit writer's best professional judgement to remove this parameter from the permit.

DMR History over previous permit cycle:

#001: 1.0 µg/L (5 samples); #002: not required; #003: 1.0 µg/L (18 samples); #004: 1.0 µg/L (18 samples)

Ethylbenzene

Parameter removed from permit. The performance data shows that the facility is well below any water quality standard and does not have reasonable potential to cause impairment to the receiving streams with this parameter. Additionally, the permittee will still be required to test for oil and grease at all the outfalls. Oil and grease will capture petroleum products and indicate release of these substances into the environment. Having both parameters as indicators of petroleum products in the discharge is redundant and unnecessary. Therefore, it is the permit writer's best professional judgement to remove this parameter from the permit.

DMR History over previous permit cycle:

#001: 1.0 µg/L (5 samples); #002: not required; #003: 1.0 µg/L (18 samples); #004: 1-3 µg/L

Oil & Grease.

Effluent limitations removed and replaced with monitoring only and associated benchmark. This is a conventional pollutant, in accordance with 10 CSR 20-7.031 Table A: *Criteria for Designated Uses*; 10 mg/L monthly average (chronic standard). The performance data from the previous permit cycle shows that the levels for this parameter were at or below the detection limit for all outfalls, and well below the criteria of 10 mg/L. The facility does not have reasonable potential to exceed water quality standards. Therefore, it is the permit writer’s best professional judgement to remove limits and replace with monitoring only. Additionally, a benchmark value will be set at the water quality standard of 10 mg/L.

DMR History over previous permit cycle:

#001: 5.1 mg/L (18 samples); #002: 5.1 mg/L (18 samples); #003: 5.1 mg/L (18 samples); #004: 5.1 mg/L (18 samples)

Total Xylene

Parameter removed from permit. The performance data shows that the facility is well below any water quality standard and does not have reasonable potential to cause impairment to the receiving streams with this parameter. Additionally, the permittee will still be required to test for oil and grease at all the outfalls. Oil and grease will capture petroleum products and indicate release of these substances into the environment. Having both parameters as indicators of petroleum products in the discharge is redundant and unnecessary. Therefore, it is the permit writer’s best professional judgement to remove this parameter from the permit.

DMR History over previous permit cycle:

#001: 3.0 µg/L (5 samples); #002: not required; #003: 3.0 µg/L (18 samples); #004: 3.0-4.4 µg/L

METALS:

Effluent limitations for total recoverable metals were developed using methods and procedures outlined in the “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 193 mg/L is used in the conversion below.

Due to the absence of contemporaneous effluent and instream data for total recoverable metals, dissolved metals, hardness, and total suspended solids with which to calculate metals translators, partitioning between the dissolved and absorbed phases was assumed to be minimal (Section 5.7.3, EPA/505/2-90-001). Freshwater criteria conversion factors for dissolved metals were used as the metals translator as recommended in guidance (Section 1.3, 1.5.3, and Table 1, EPA 823-B-96-007). If concurrent site-specific data for total recoverable metals, dissolved metals, hardness, and total suspended solids are provided to the Department, partitioning evaluations may be considered and site-specific translators developed.

METAL	CONVERSION FACTORS	
	ACUTE	CHRONIC
Antimony	NA	NA
Arsenic	1	1
Beryllium	NA	NA
Cadmium	0.916	0.881
Chromium III	0.316	0.860
Chromium VI	NA	NA
Copper	0.960	0.960
Iron	NA	NA
Lead	0.695	0.695
Mercury	0.85	NA
Nickel	0.998	0.997
Selenium	NA	NA
Silver	0.850	NA
Thallium	NA	NA
Zinc	0.980	0.980

Conversion factors for Cd and Pb are hardness dependent. Values calculated using equation found in Section 1.3 of EPA 823-B-96-007 and hardness = 193 mg/L. N/A = not applicable.

Metals Remaining in the Permit

Monitoring only requirement continued from previous permit for the following metals. There is insufficient data to confidently make a reasonable potential determination on whether the facility will exceed water quality standards. For this reason, the permit writer has used best professional judgement to continue monitoring for this parameter, with increased sampling frequency in order to obtain necessary amount of data to make a determination. The permittee was not required to monitor for these metals at outfall #003 and #004, and will not be required to in this permit.

Selenium, Total Recoverable.

The permittee reported seven values for each outfall on the DMR's. All values, including those listed as below the detection limit are above the chronic criterion. It appears that the permittee did not use a sufficiently sensitive method for detecting this pollutant in the sample. The permit writer cannot confidently determine that the facility will not cause or contribute to an exceedance of chronic criteria once a storm event has ceased and stream flows return to the seven day average low flow.

Protection of Aquatic Life Chronic Criterion = 5 µg/L.

DMR History over previous permit cycle:

#001: four values < 15 µg/L, two values < 20 µg/L, and one value of 33.2 µg/L;

#002: four values < 15 µg/L, two values < 20 µg/L, and one value of 28.0 µg/L

Thallium, Total Recoverable.

The permittee reported six values for each outfall on the DMR's. All values are listed as below the detection limit but are above the chronic criterion. It appears that the permittee did not use a sufficiently sensitive method for detecting this pollutant in the sample. The permit writer cannot confidently determine that the facility will not cause or contribute to an exceedance of chronic criteria once a storm event has ceased and stream flows return to the seven day average low flow.

Protection of Human Health – Fish Consumption Chronic Criterion = 6.3 µg/L.

DMR History over previous permit cycle:

#001: three values < 15 µg/L, three values < 20 µg/L;

#002: three values < 15 µg/L, three values < 20 µg/L;

Metals Removed from the Permit

Iron, Total Recoverable.

Parameter removed from permit. The permittee submitted an engineering report titled Iron Source in Stormwater Outfalls Investigation Report in 2012. This report determined that iron found in discharge sample analyses is coming from naturally occurring sources, including the soils on and around the site and in the receiving stream, upstream of the outfalls. The department granted a modification request to remove the limits for iron in 2012. The permit writer has used best professional judgement to completely remove the parameter from the permit. Since the department has already agreed that the industrial activity at the site is not a source of the iron in the discharge, there is no need to continue monitoring for this parameter.

The following metals have been removed from the permit. There are no water quality standards for any of the designated uses applied to the receiving streams and first classified streams for each outfall. Therefore, it is the permit writer's best professional judgement to remove this parameter from the permit.

Barium, Total Recoverable.

Parameter removed from permit.

Manganese, Total Recoverable.

Parameter removed from permit.

The following metals have been removed from the permit. The permit writer has used best professional judgement to determine that the facility does not have reasonable potential to exceed water quality standards for these parameters. Each parameter had 10 or more samples reported on the DMR, which allows for a confident reasonable potential determination.

Chromium (III), Total Recoverable.

The permittee reported twelve values below the detection limit for both outfalls. All values are well below the water quality standards. For this reason, the permit writer has determined that this facility has no reasonable potential to exceed water quality standards.

Protection of Aquatic Life Chronic Criteria = 127 µg/L, Acute Criteria = 976 µg/L. Protection of Irrigation = 100 µg/L.

Criteria based on conversion factors:

Chronic	=	127/0.860	=	147.69 µg/L
Acute	=	976/0.316	=	3,089.64 µg/L

DMR History over previous permit cycle:

#001: twelve values < 10 µg/L; #002: twelve values < 10 µg/L

Chromium (VI), Dissolved.

The permittee reported eleven values for each outfall below detection limits of 10 µg/L and 50 µg/L. Ten of the values are below a detection limit of 10 µg/L, while one is listed as below 50 µg/L for each outfall. Although one value was reported using a method not sufficiently sensitive to detect below the acute water quality standard, the permit writer has used best professional judgement to remove this parameter. The other ten values reported as below 10 µg/L shows that the facility may have also had a concentration on this parameter below the acute criteria at the time the 50 µg/L detection limit was used. It is reasonable to assume that the facility will not cause or contribute to an exceedance of the acute or chronic criteria.

Protection of Aquatic Life Chronic Criteria = 10 µg/L, Acute Criteria = 15 µg/L.

DMR History over previous permit cycle:

#001: ten values < 10 µg/L and one value < 50 µg/L; #002: ten values < 10 µg/L and one value < 50 µg/L

Copper, Total Recoverable.

The permittee reported twelve values below the detection limit for both outfalls. All values are well below the water quality standards. For this reason, the permit writer has determined that this facility has no reasonable potential to exceed water quality standards.

Protection of Aquatic Life Chronic Criterion = 15.7 µg/L, Acute Criterion = 25 µg/L. Protection of Livestock Wildlife Watering = 500 µg/L.

Criteria based on conversion factors:

Chronic	=	15.7/0.960	=	16.36 µg/L
Acute	=	25/0.960	=	26.00 µg/L

DMR History over previous permit cycle:

#001: twelve values < 10 µg/L; #002: twelve values < 10 µg/L

Lead, Total Recoverable.

The permittee reported eleven values below the detection limit for both outfall #001 and #002. Only one value from each outfall was above the detection limit; 3.3 µg/L from outfall #001 and 5.7 µg/L from outfall #002. These values are all below the acute water quality standard. For this reason, the permit writer has determined that this facility has no reasonable potential to exceed water quality standards.

Protection of Aquatic Life Chronic Criteria = 5.1 µg/L, Acute Criteria = 131 µg/L.

Criteria based on conversion factors:

Chronic	=	5.1/0.695	=	7.35 µg/L
Acute	=	131/0.695	=	188.47 µg/L

DMR History over previous permit cycle:

#001: eight values < 3 µg/L, three values < 10 µg/L, one value of 3.3 µg/L;

#002: eight values < 3 µg/L, three values < 10 µg/L, one value of 5.7 µg/L

Silver, Total Recoverable.

The permittee reported twelve values below the detection limit and below the acute water quality standard for both outfall #001 and #002. For this reason, the permit writer has determined that this facility has no reasonable potential to exceed water quality standards.

Protection of Aquatic Life Acute Criterion = 10 µg/L.

Criteria based on conversion factors:

Chronic	=	Not Applicable		
Acute	=	10/0.850	=	11.75 µg/L

DMR History over previous permit cycle:

#001: twelve values < 10 µg/L; #002: twelve values < 10 µg/L

The following metals have been removed from the permit. The permit writer has used best professional judgement to determine that the facility does not have reasonable potential to exceed water quality standards for these parameters. Although these parameters do not have 10 or more data points in the DMR's being evaluated, the permit writer is confident that the facility has no reasonable potential to exceed water quality standards.

Antimony, Total Recoverable.

There are no acute criteria for any of the use designations listed in the regulations for this parameter and all values reported are below the chronic criteria listed in the regulations. Therefore, the permit writer is using best professional judgment to determine that the data collected are at levels that will not cause or contribute to an exceedance of chronic criteria once a storm event has ceased and stream flows return to the seven day average low flow. The data shown of the DMR's are all below the detection limits and far below the water quality standard. For this reason, the permit writer has determined that this facility has no reasonable potential to exceed water quality standards.

Protection of Human Health – Fish Consumption Chronic Criterion = 4,300 µg/L.

DMR History over previous permit cycle:

#001: three values < 10 µg/L and three values < 20 µg/L; #002: three values < 10 µg/L and three values < 20 µg/L;

Arsenic, Total Recoverable.

There are no acute criteria for any of the use designations listed in the regulations for this parameter and all values reported are below the chronic criteria listed in the regulations. Therefore, the permit writer is using best professional judgment to determine that the data collected are at levels that will not cause or contribute to an exceedance of chronic criteria once a

storm event has ceased and stream flows return to the seven day average low flow. The data shown of the DMR's are all below the detection limits and far below the water quality standard. For this reason, the permit writer has determined that this facility has no reasonable potential to exceed water quality standards.

Protection of Aquatic Life Chronic Criterion = 20 µg/L. Protection of Irrigation Chronic Criterion = 100 µg/L.

DMR History over previous permit cycle:

#001: five values < 10 µg/L and two values < 20 µg/L; #002: five values < 10 µg/L and two values < 20 µg/L;

Beryllium, Total Recoverable.

There are no acute criteria for any of the use designations listed in the regulations for this parameter and all values reported are below the chronic criteria listed in the regulations. Therefore, the permit writer is using best professional judgment to determine that the data collected are at levels that will not cause or contribute to an exceedance of chronic criteria once a storm event have ceased and stream flows return to the seven day average low flow. The data shown of the DMR's are all below the detection limits and below the water quality standard. For this reason, the permit writer has determined that this facility has no reasonable potential to exceed water quality standards.

Protection of Aquatic Life Chronic Criterion = 5 µg/L. Protection of Irrigation Chronic Criterion = 100 µg/L.

DMR History over previous permit cycle:

#001: six values < 5 µg/L; #002: six values < 5 µg/L

Boron, Total Recoverable.

There are no acute criteria for any of the use designations listed in the regulations for this parameter and all values reported are below the chronic criteria listed in the regulations. Therefore, the permit writer is using best professional judgment to determine that the data collected are at levels that will not cause or contribute to an exceedance of chronic criteria once a storm event have ceased and stream flows return to the seven day average low flow. The data shown of the DMR's are all below the detection limits, except for one value from Outfall #002, and far below the water quality standard. For this reason, the permit writer has determined that this facility has no reasonable potential to exceed water quality standards.

Protection of Irrigation Chronic Criterion = 2,000 µg/L.

DMR History over previous permit cycle:

#001: seven values < 150 µg/L; #002: six values < 150 µg/L and one value of 261 µg/L;

Cadmium, Total Recoverable.

The data shown of the DMR's are all below the detection limits and below the acute water quality standard. For this reason, the permit writer has determined that this facility has no reasonable potential to exceed water quality standards.

Protection of Aquatic Life Chronic Criterion = 0.4 µg/L, Acute Criterion = 9.0 µg/L.

Chronic = 0.4/0.881 = 0.44 µg/L

Acute = 9.0/0.916 = 9.83 µg/L

DMR History over previous permit cycle:

#001: four values < 1 µg/L, one value < 2 µg/L and two values < 3 µg/L; #002: four values < 1 µg/L, one value < 2 µg/L and two values < 3 µg/L;

Cobalt, Total Recoverable.

There are no acute criteria for any of the use designations listed in the regulations for this parameter and all values reported are well below the chronic criteria listed in the regulations. Therefore, the permit writer is using best professional judgment to determine that the data collected are at levels that will not cause or contribute to an exceedance of chronic criteria once a storm event have ceased and stream flows return to the seven day average low flow. The data shown of the DMR's are all below the detection limits and far below the chronic water quality standard. For this reason, the permit writer has determined that this facility has no reasonable potential to exceed water quality standards. Protection of Livestock Wildlife Watering

Chronic Criterion = 1,000 µg/L.

DMR History over previous permit cycle:

#001: seven values < 10 µg/L; #002: 10 µg/L seven values < 10 µg/L;

Mercury, Total Recoverable.

The data shown of the DMR's are all below the detection limits and below the water quality standards. For this reason, the permit writer has determined that this facility has no reasonable potential to exceed water quality standards.

Protection of Aquatic Life Chronic Criterion = 0.5 µg/L, Acute Criterion = 2.4 µg/L.

Chronic = 0.5 µg/L

Acute = 2.4/0.850 = 2.82 µg/L

DMR History over previous permit cycle:

#001: seven values of < 0.2 µg/L; #002: seven values of < 0.2 µg/L;

Nickel, Total Recoverable

The data shown of the DMR's are all below the detection limits and below the water quality standards. For this reason, the permit writer has determined that this facility has no reasonable potential to exceed water quality standards.

Protection of Aquatic Life Chronic Criterion = 90.8 µg/L, Acute Criterion = 817 µg/L.

Chronic = 90.8/0.997 = 91.03 µg/L
Acute = 817/0.998 = 818.84 µg/L

DMR History over previous permit cycle:

#001: seven values < 20 µg/L; #002: seven values < 20 µg/L;

Zinc, Total Recoverable

The data shown of the DMR's are all below the detection limits with the exception of one value from outfall #001 and two values from outfall #002. However, all values are below the water quality standards. For this reason, the permit writer has determined that this facility has no reasonable potential to exceed water quality standards.

Protection of Aquatic Life Chronic Criterion = 204.97 µg/L, Acute Criterion = 204.97 µg/L.

Chronic = 204.97/0.980 = 209.16 µg/L
Acute = 204.97/0.980 = 209.16 µg/L

DMR History over previous permit cycle:

#001: six values < 20 µg/L, and one value of 23.1 µg/L;
#002: five values < 20 µg/L, one value of 74.3 µg/L and one value of 59.9 µg/L

NUTRIENTS:

Ammonia, Total as Nitrogen

Monitoring requirement continued. The previous permit required only one sampling event per year for this parameter. Ammonia as N varies throughout the year based on temperature and pH. These seasonal variations are not captured in the sampling and reporting that has been conducted in the past. There is insufficient data to confidently make a reasonable potential determination on whether the facility will exceed water quality standards. For this reason, the permit writer has used best professional judgement to continue monitoring for this parameter, with increased sampling frequency in order to obtain necessary amount of data within the summer and winter seasons to make a determination. The permittee was not required to monitoring for ammonia as N at outfall #003 and #004, and will not be required to in this permit.

Early Life Stages Present Total Ammonia Nitrogen criteria apply [10 CSR 20-7.031(4)(B)7.C. & Table B3] default pH 7.8 SU
Background total ammonia nitrogen = 0.01 mg/L.

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

SAMPLING AND REPORTING REQUIREMENTS:

Due to upcoming federal regulations, all facilities will need to begin submitting their discharge monitoring reports electronically. To begin the process, please visit <http://dnr.mo.gov/env/wpp/edmr.htm>. This process is expected to save time, lessen paperwork, and reduce operating costs for both the facilities and the water protection program. Additional information may also be found at <http://dnr.mo.gov/pubs/pub2474.pdf>.

Sampling Frequency Justification

Sampling and Reporting Frequency was increased to quarterly for all parameters. This will allow the permittee to determine if the best management practices employed on site are effective throughout the year. This will also provide the permittee and the department with sufficient data to make reasonable potential determinations during the following permit renewal.

Sampling Type Justification

Sampling Types have been set at grab samples. Grab samples will capture the first flush nature of stormwater discharges and best capture the impact of contaminated stormwater leaving the property. These types of samples are most representative of the 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 with 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 month but should be continued more frequently if BMPs continue to fail. If failures do occur, continue this trial and error process until appropriate BMPs have been established. 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. 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.

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 began on December 4, 2015 and ended on January 4, 2015. No comments were received during this Public Notice period.

DATE OF FACT SHEET: JULY 2, 2015

COMPLETED BY:

**LOGAN COLE, ENVIRONMENTAL SPECIALIST
MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
OPERATING PERMITS SECTION - INDUSTRIAL UNIT
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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;
 - 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.



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- 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
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THE MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION
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- 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.



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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.



September 13, 2013

Certified Mail

Southwest Regional Office
2040 W. Woodland
Springfield, MO
65807-5912

Subject: NPDES Stormwater Permit Renewal Application for MO 0111082,
3M Commercial Graphics, 2120 East Austin Blvd., Nevada, MO 64772

To whom it may concern,

Enclosed please find the NPDES Stormwater Permit Coverage Renewal forms, attachments and addendum for continued stormwater discharges from the above referenced facility.

The facility would like to make a correction to the previous SIC codes identified in past permit renewals and permit modifications. All previous permit renewals have listed SIC codes 3081, 2672, and 3861. SIC code 3861 is no longer an activity that is occurring on-site and we request that it be removed. In the last permit modification dated August 28, 2012, SIC code 3082 was inadvertently listed. This should have been SIC code 3081. We would like to make sure this is corrected going forward. In summary, the current site SIC codes are 3081 and 2672, with 3081 being the primary.

The facility would also like to correct the description for outfall 001 as noted in the current permit. The description states that trench dewater discharges from outfall 001 in addition to stormwater. According to the facilities Leachate Extraction System Construction Documentation Report drawings, all leachate discharges into a closed sump, which we believe was labeled 'trench dewater' and then to a force main running north along the eastern edge of the landfill. All leachate is discharged to the sanitary sewer; none is discharged through the outfall with stormwater. We request that trench dewater be removed from the outfall 001 description.

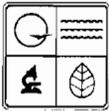
If you should have any questions concerning this submittal, please feel free to contact me at (651) 737-3604 or via email at cmathison@mmm.com.

Sincerely,

A handwritten signature in black ink that reads "Carie Mathison". The signature is written in a cursive, flowing style.

Carie Mathison
Advanced Environmental Scientist

Enclosure(s)



MISSOURI DEPARTMENT OF NATURAL RESOURCES
 WATER PROTECTION PROGRAM, WATER POLLUTION CONTROL BRANCH
**FORM A – APPLICATION FOR CONSTRUCTION OR OPERATING PERMIT
 UNDER MISSOURI CLEAN WATER LAW**

FOR AGENCY USE ONLY	
CHECK NUMBER	
DATE RECEIVED	FEE SUBMITTED
9/16/13	ESB

Note ▶ PLEASE READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM.

1. This application is for:

- An operating permit and antidegradation review public notice
- A construction permit following an appropriate operating permit and antidegradation review public notice
- A construction permit and concurrent operating permit and antidegradation review public notice
- A construction permit (submitted before Aug. 30, 2008 or antidegradation review is not required)
- An operating permit for a new or unpermitted facility Construction Permit # _____
- An operating permit renewal: permit # MO- 0111082 Expiration Date 3/18/2014
- An operating permit modification: permit # MO- _____ Reason: _____

1.1 Is the appropriate fee included with the application? (See instructions for appropriate fee) YES NO

2. FACILITY

NAME 3M Commercial Graphics		TELEPHONE WITH AREA CODE (417) 667-7851	
ADDRESS (PHYSICAL) 2120 East Austin Blvd.		FAX (417) 667-6365	
CITY Nevada	STATE MO	ZIP CODE 64772	

3. OWNER

NAME 3M Company		E-MAIL ADDRESS email: cmathison@mmm.com cmathison@mmm.com	TELEPHONE WITH AREA CODE (651) 737-3604
ADDRESS (MAILING) 3M Center, Building 0224-05-W-03		FAX (651) 737-3395	
CITY St. Paul	STATE MN	ZIP CODE 55144	

3.1 Request review of draft permit prior to public notice? YES NO

4. CONTINUING AUTHORITY

NAME Same as above		TELEPHONE WITH AREA CODE	
ADDRESS (MAILING) Same as above		FAX	
CITY	STATE	ZIP CODE	

5. OPERATOR

NAME Same as above		CERTIFICATE NUMBER	TELEPHONE WITH AREA CODE
ADDRESS (MAILING) Same as above		FAX	
CITY	STATE	ZIP CODE	

6. FACILITY CONTACT

NAME Carolyn S. Carrigan		TITLE Environmental Engineer	TELEPHONE WITH AREA CODE (417) 667-7851
		FAX (417) 667-6365	

7. ADDITIONAL FACILITY INFORMATION

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

001 SE ¼ NE ¼ Sec 10 T 35N R 31W Vern County
 UTM Coordinates Easting (X): +382805 Northing (Y): 4187712
For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)

002 SW ¼ NE ¼ Sec 10 T 35N R 31W Vern County
 UTM Coordinates Easting (X): +382341 Northing (Y): 4188076

003 NW ¼ NE ¼ Sec 10 T 35N R 31W Vern County
 UTM Coordinates Easting (X): +382711 Northing (Y): 4188484

004 NE ¼ NE ¼ Sec 10 T 35N R 31W Vern County
 UTM Coordinates Easting (X): +383085 Northing (Y): 4188472

7.2 Primary Standard Industrial Classification (SIC) and Facility North American Industrial Classification System (NAICS) Codes.

001 – SIC 3081 and NAICS 326113 002 – SIC 3081 and NAICS 326113
 003 – SIC 3081 and NAICS 326113 004 – SIC 3081 and NAICS 326113

8. ADDITIONAL FORMS AND MAPS NECESSARY TO COMPLETE THIS APPLICATION
(Complete all forms that are applicable.)

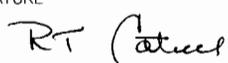
- A. Is your facility a manufacturing, commercial, mining or silviculture waste treatment facility? YES NO
 If yes, complete Form C (unless storm water only, then complete U.S. Environmental Protection Agency Form 2F per Item C below).
- B. Is your facility considered a "Primary Industry" under EPA guidelines: YES NO
 If yes, complete Forms C and D.
- C. Is application for storm water discharges only? YES NO
 If yes, complete EPA Form 2F.
- D. Attach a map showing all outfalls and the receiving stream at 1" = 2,000' scale.
- E. Is wastewater land applied? If yes, complete Form I. YES NO
- F. Is sludge, biosolids, ash or residuals generated, treated, stored or land applied? YES NO
 If yes, complete Form R.

9. DOWNSTREAM LANDOWNER(S) Attach additional sheets as necessary. See Instructions.
(PLEASE SHOW LOCATION ON MAP. SEE 8.D ABOVE).

NAME
 See additional sheets attached

ADDRESS	CITY	STATE	ZIP CODE
---------	------	-------	----------

10. I certify that I am familiar with the information contained in the application, that to the best of my knowledge and belief such information is true, complete and accurate, and if granted this permit, I agree to abide by the Missouri Clean Water Law and all rules, regulations, orders and decisions, subject to any legitimate appeal available to applicant under the Missouri Clean Water Law to the Missouri Clean Water Commission.

NAME AND OFFICIAL TITLE (TYPE OR PRINT) R. Todd Cantrell, Plant Manager	TELEPHONE WITH AREA CODE (417) 667-7851
SIGNATURE 	DATE SIGNED 9/12/2013

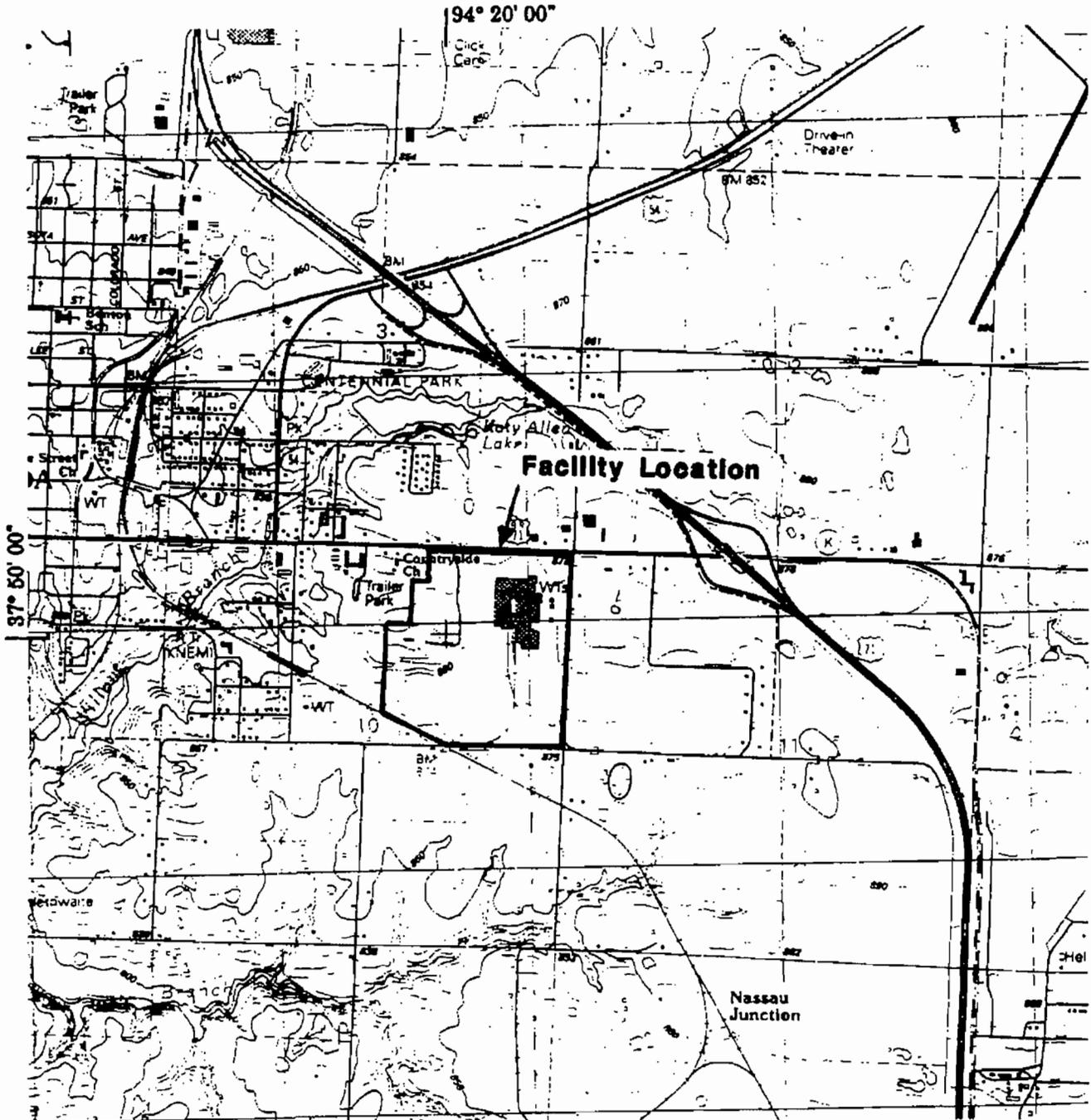
MO 780-1479 (01-09)

BEFORE MAILING, PLEASE ENSURE ALL SECTIONS ARE COMPLETED AND ADDITIONAL FORMS, IF APPLICABLE, ARE INCLUDED.

Submittal of an incomplete application may result in the application being returned.

HAVE YOU INCLUDED:

- Appropriate Fees?
- Map at 1" = 2000' scale?
- Signature?
- Form C, if applicable?
- Form D, if applicable?
- Form 2F, if applicable?
- Form I (Irrigation), if applicable?
- Form R (Sludge), if applicable?



USGS Quadrangle Maps Used:
Nevada

North

 Scale:
 1" = 2000'

3M - Nevada (NEVA)
 Nevada, Missouri

Facility Location Map

Figure
 1

FORM A – APPLICATION FOR CONSTRUCTION OR OPERATING PERMIT UNDER MISSOURI CLEAN WATER LAW

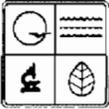
Section 9.00 DOWNSTREAM LANDOWNERS(S)

Name		Outfall	
3M		001	
Address	City	State	ZIP
See Form A	See Form A	See Form A	See Form A

Name		Outfall	
Elray Tillery		002	
Address	City	State	ZIP
319 S Alma Street	Nevada	MO	64772

Name		Outfall	
T.S.J. Nominee Trust		003	
Address	City	State	ZIP
7707 T. Street	Little Rock	AR	72207-4044

Name		Outfall	
Wilson Tire and Oil		004	
Address	City	State	ZIP
2121 East Austin	Nevada	MO	64772



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

FOR AGENCY USE ONLY	
CHECK NO.	
DATE RECEIVED	FEE SUBMITTED

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

1.00 NAME OF FACILITY
 3M Commercial Graphics

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER
 MO0111082

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).
 NA

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

A. FIRST 3081 B. SECOND 2672
 C. THIRD NA D. FOURTH NA

2.10 FOR EACH OUTFALL GIVE THE LEGAL DESCRIPTION.

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

See form A for a listing of each outfall and the legal description.

2.20 FOR EACH OUTFALL LIST THE NAME OF THE RECEIVING WATER

OUTFALL NUMBER (LIST)	RECEIVING WATER
Outfall 001, Outfall 002, Outfall 003, and Outfall 004	All outfalls discharge to an unnamed Tributary to Willow Branch and to the first classified stream Little Drywood Creek.

2.30 BRIEFLY DESCRIBE THE NATURE OF YOUR BUSINESS

3M Commercial Graphics produces an array of graphics. These products include decorative and specialty films for architectural, sign, fleet, commercial and automotive applications. Some of these products include:
 Colored vinyl films manufactured and sold under the Scotchcal™, Controltac™, and Panaflex™ brands that are used as substrates in a broad range of graphic and sign applications.

Silicone Release Liners
 Double Coated Tapes
 Vinyl and Urethane Protective Films
 Specialty Medical Products
 Post-It™ Bulletin Boards
 Printing and Embossing Cylinders

The facility has surface coating lines controlled by regenerative thermal oxidizers, film extruders, various coating mixing equipment, solvent storage tanks and boilers.

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

2.50 MAXIMUM PRODUCTION **Not applicable - stormwater runoff only**

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 <i>(list outfall numbers)</i>
A. QUANTITY PER DAY	B. UNITS OF MEASURE	C. OPERATION, PRODUCT, MATERIAL, ETC. <i>(specify)</i>	

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)
Pace Analytical	1700 Elm Street Suite 200 Minneapolis, MN 55414	612-607-1700	All parameters for outfalls 001, 002, 003, and 004.

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) R. Todd Cantrell, Plant Manager	TELEPHONE NUMBER WITH AREA CODE (417) 667-7851
SIGNATURE (SEE INSTRUCTIONS) 	DATE SIGNED 9/12/2013

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.
001

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)		
	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	
A. Biochemical Oxygen Demand (BOD)	Not Req.		Not Req.		Not Req.		4	mg/L	lb/day			
B. Chemical Oxygen Demand (COD)	34.4	215.2			27.7	109.3	4	mg/L	lb/day			
C. Total organic Carbon (TOC)	Not Req.		Not Req.		Not Req.							
D. Total Suspended Solids (TSS)	58.4	365.3			59.1	233.2	4	mg/L	lb/day			
E. Ammonia (as N)	0.098	0.6			0.098	0.39	1	mg/L	lb/day			
F. Flow	VALUE 0.75		VALUE 0.47		VALUE 0.47		3	MGD		VALUE		
G. Temperature (winter)	VALUE 1.7		VALUE		VALUE 3.1		4	°C		VALUE		
H. Temperature (summer)	VALUE 17.8		VALUE		VALUE 20.6		4	°C		VALUE		
I. pH	MINIMUM 6.2	MAXIMUM 6.2	MINIMUM 6.2	MAXIMUM 6.9			4	STANDARD UNITS				

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)		B. MAXIMUM 30 DAY VALUE (1) (if available)		C. LONG TERM AVRG. VALUE (1) (if available)		D. NO. OF ANALYSES	A. CONCEN- TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(2) MASS	(2) MASS	(2) MASS	(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	0	0					1	mg/L	lb/d			
F. Nitrate - Nitrate (as N)	X													

MO 780-1514 (06-13)

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 (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
G. Nitrogen, Total Organic (as N)	X*		*C-Ammonia and	0	Nitrite-Nitrate	0	0	0	4	mg/L	lb/d			
H. Oil and Grease	X			0	Results									
I. Phosphorus (as P), Total (7723-14-0)	X													
J. Sulfate (as SO ⁴) (14808-79-8)	X		108	68.8			675.5	271.4	4	mg/L	lb/d			
K. Sulfide (as S)		X												
L. Sulfite (as SO ³) (14255-45-3)		X												
M. Surfactants		X												
N. Aluminum, Total (7429-90-5)		X												
O. Barium, Total (7440-39-3)	X		56.1	0.4			56.1	0.2	4	mg/L	lb/d			
P. Boron, Total (7440-42-8)		X	0	0			0	0	4	mg/L	lb/d			
Q. Cobalt, Total (7440-48-4)		X	0	0			0	0	4	mg/L	lb/d			
R. Iron, Total (7439-89-6)	X		2.0	12.6			2.9	11.5	4	mg/L	lb/d			
S. Magnesium, Total (7439-95-4)		X												
T. Molybdenum, Total (7439-98-7)		X												
U. Manganese, Total (7439-96-5)	X		0.8	5.1			0.8	3.2	4	mg/L	lb/d			
V. Tin, Total (7440-31-5)		X												
W. Titanium, Total (7440-32-6)		X												

MO780-1514 (06-13)

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		B. NO. OF ANALYSES
			(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		0	0			0	0	4	mg/L	lb/d			
2M. Arsenic, Total (7440-38-2)	X		0	0			0	0	4	mg/L	lb/d			
3M. Beryllium, Total (7440-41-7)	X		0	0			0	0	4	mg/L	lb/d			
4M. Cadmium, Total (7440-43-9)	X		0	0			0	0	4	mg/L	lb/d			
5M. Chromium III (16065-83-1)	X		0	0			0	0	4	mg/L	lb/d			
6M. Chromium VI (18540-29-9)	X		0	0			0	0	4	mg/L	lb/d			
7M. Copper, Total (7440-50-8)	X		0	0			0	0	4	mg/L	lb/d			
8M. Lead, Total (7439-92-1)	X		0	0			0	0	4	mg/L	lb/d			
9M. Mercury, Total (7439-97-6)	X		0	0			0	0	4	mg/L	lb/d			
10M. Nickel, Total (7440-02-0)	X		0	0			0	0	4	mg/L	lb/d			
11M. Selenium, Total (7782-49-2)	X		33.2	0.2			33.2	0.1	4	mg/L	lb/d			
12M. Silver, Total (7440-22-4)	X		0	0			0	0	4	mg/L	lb/d			
13M. Thallium, Total (7440-28-0)	X		0	0			0	0	4	mg/L	lb/d			
14M. Zinc, Total (7440-66-6)	X		0	0			0	0	4	mg/L	lb/d			
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.
002

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)			
	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)	Not Req.				Not Req.		4	mg/L	lb/day			
B. Chemical Oxygen Demand (COD)	46.0	230.2			38.6	124.5	4	mg/L	lb/day			
C. Total organic Carbon (TOC)	Not Req.				Not Req.							
D. Total Suspended Solids (TSS)	185	925.7			70.2	226.4	4	mg/L	lb/day			
E. Ammonia (as N)	0.2	1.0			0.2	0.6	1	mg/L	lb/day			
F. Flow	VALUE 0.6		VALUE		VALUE 0.39		3	MGD		VALUE		
G. Temperature (winter)	VALUE 1.7		VALUE		VALUE 1.3		3	°C		VALUE		
H. Temperature (summer)	VALUE 17.8		VALUE		VALUE 19.9		3	°C		VALUE		
I. pH	MINIMUM 6.8	MAXIMUM 6.8	MINIMUM 6.8	MAXIMUM 6.9			2	STANDARD UNITS				

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 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)		B. MAXIMUM 30 DAY VALUE (1) (if available)		C. LONG TERM AVRG. VALUE (1) (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE (1)		B. NO. OF ANALYSES
			CONCENTRATION	(2) MASS	CONCENTRATION	(2) MASS	CONCENTRATION	(2) MASS				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	0	0					1	mg/L	lb/d			
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		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	
G. Nitrogen, Total Organic (as N)	X*		*C-Ammonia	and	Nitrite-Nitrate	Results								
H. Oil and Grease	X		0	0			0	0	4	mg/L	lb/d			
I. Phosphorus (as P), Total (7723-14-0)	X													
J. Sulfate (as SO ₄) (14808-79-8)	X		121.0	605.5			156.5	504.7	4	mg/L	lb/d			
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		87.8	0.4			87.8	0.4	4	mg/L	lb/d			
P. Boron, Total (7440-42-8)		X	0	0			0	0	4	mg/L	lb/d			
Q. Cobalt, Total (7440-48-4)		X	0	0			0	0	4	mg/L	lb/d			
R. Iron, Total (7439-89-6)	X		6.9	34.6			4.0	12.9	4	mg/L	lb/d			
S. Magnesium, Total (7439-95-4)		X												
T. Molybdenum, Total (7439-98-7)		X												
U. Manganese, Total (7439-96-5)	X		339.0	1696.4			339.0	1093.2	4	mg/L	lb/d			
V. Tin, Total (7440-31-5)		X												
W. Titanium, Total (7440-32-6)		X												

MO 780-1514 (06-13)

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>		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						
METALS, AND TOTAL PHENOLS														
1M. Antimony, Total (7440-36-9)	X		0	0			0	0	4	mg/L	lb/d			
2M. Arsenic, Total (7440-38-2)	X		0	0			0	0	4	mg/L	lb/d			
3M. Beryllium, Total (7440-41-7)	X		0	0			0	0	4	mg/L	lb/d			
4M. Cadmium, Total (7440-43-9)	X													
5M. Chromium III (16065-83-1)	X		0	0			0	0	4	mg/L	lb/d			
6M. Chromium VI (18540-29-9)	X		0	0			0	0	4	mg/L	lb/d			
7M. Copper, Total (7440-50-8)	X		0	0			0	0	4	mg/L	lb/d			
8M. Lead, Total (7439-92-1)	X		0	0			0	0	4	mg/L	lb/d			
9M. Mercury, Total (7439-97-6)	X		0	0			0	0	4	mg/L	lb/d			
10M. Nickel, Total (7440-02-0)	X		0	0			0	0	4	mg/L	lb/d			
11M. Selenium, Total (7782-49-2)	X		28.0	0.1			28.0	0.1	4	mg/L	lb/d			
12M. Silver, Total (7440-22-4)	X		0	0			0	0	4	mg/L	lb/d			
13M. Thallium, Total (7440-28-0)	X		0	0			0	0	4	mg/L	lb/d			
14M. Zinc, Total (7440-66-6)	X		0.1	0.4			0.1	0.2	4	mg/L	lb/d			
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)			
	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)	Not Req.				Not Req.		4	mg/L	lb/day			
B. Chemical Oxygen Demand (COD)	57.6	110.5			28.8	33.6	4	mg/L	lb/day			
C. Total organic Carbon (TOC)	Not Req.				Not Req.							
D. Total Suspended Solids (TSS)	24.5	47.0			17.7	20.7	4	mg/L	lb/day			
E. Ammonia (as N)	Not Req.				Not Req.							
F. Flow	VALUE 0.23				VALUE 0.14		3	MGD		VALUE		
G. Temperature (winter)	VALUE Not Req.				VALUE Not Req.			°C		VALUE		
H. Temperature (summer)	VALUE Not Req.				VALUE Not Req.			°C		VALUE		
I. pH	MINIMUM 7.1	MAXIMUM 7.1	MINIMUM 6.6	MAXIMUM 7.1			2	STANDARD UNITS				

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. 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. 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 <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>		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						
G. Nitrogen, Total Organic (as N)		X												
H. Oil and Grease	X		0.0	0.0			0.3	0.3	4	mg/L	lb/d			
I. Phosphorus (as P), Total (7723-14-0)	X													
J. Sulfate (as SO ⁴) (14808-79-8)	X		17.8	34.1			23.2	27.1	4	mg/L	lb/d			
K. Sulfide (as S)		X												
L. Sulfite (as SO ³) (14255-45-3)		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		1.0	1.8			0.8	0.9	4	mg/L	lb/d			
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												

MO 780-1514 (06-13)

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 ⁽¹⁾ CONCENTRATION		B. MAXIMUM 30 DAY VALUE ⁽¹⁾ <i>(if available)</i> CONCENTRATION		C. LONG TERM AVRG. VALUE ⁽¹⁾ <i>(if available)</i> CONCENTRATION		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE ⁽¹⁾ CONCENTRATION		B. NO. OF ANALYSES
			(2) MASS	(2) MASS	(2) MASS	(2) MASS	(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 (13540-29-9)	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.
004

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)			
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE <i>(if available)</i>		C. LONG TERM AVRG. VALUE <i>(if available)</i>		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)	Not Req.				Not Req.		4	mg/L	lb/day			
B. Chemical Oxygen Demand (COD)	19.7	32.9			9.9	9.9	4	mg/L	lb/day			
C. Total organic Carbon (TOC)	Not Req.				Not Req.							
D. Total Suspended Solids (TSS)	34.4	57.4			17.2	17.2	4	mg/L	lb/day			
E. Ammonia (as N)	Not Req.				Not Req.							
F. Flow	VALUE 0.2		VALUE		VALUE 0.12		3	MGD		VALUE		
G. Temperature (winter)	VALUE Not Req.		VALUE		VALUE Not Req.			°C		VALUE		
H. Temperature (summer)	VALUE Not Req.		VALUE		VALUE Not Req.			°C		VALUE		
I. pH	MINIMUM 7.1	MAXIMUM 7.1	MINIMUM 6.7	MAXIMUM 7.1			2	STANDARD UNITS				

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.

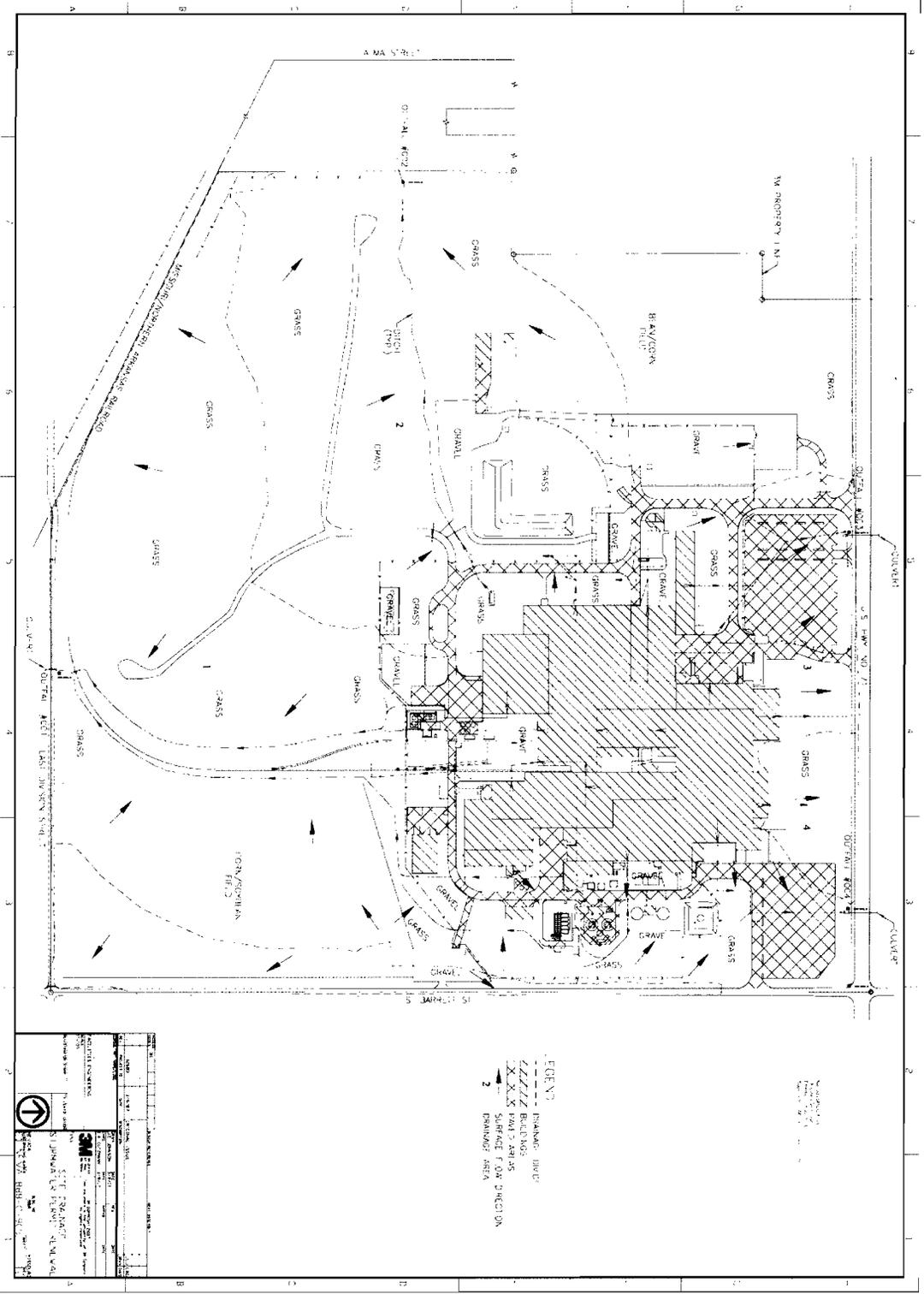
1. POLLUTANT AND CAS NUMBER <i>(if available)</i>	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE <i>(if available)</i>		C. LONG TERM AVRG. VALUE <i>(if available)</i>		D. NO. OF ANALYSES	A. CONCENTRATION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

MO 780-1514 (06-13)

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	
G. Nitrogen, Total Organic (as N)		X												
H. Oil and Grease	X		0	0			0	0	4	mg/L	lb/d			
I. Phosphorus (as P), Total (7723-14-0)	X													
J. Sulfate (as SO ₄) (14808-79-8)	X		7.6	12.7			7.1	7.1	4	mg/L	lb/d			
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		0.9	1.5			0.6	0.6	4	mg/L	lb/d			
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												

MO 780-1514 (05-13)

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>		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						
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												



NEVADA PERMIT NUMBER MO-0111082 ADDENDUEM

FORM A

Section 3: email cmathison@mmm.com

Section 7.1: Vernon County

Section 8: Per Allan Moreau, Central Office, we are not required to complete form EPA 2F.

Section 9: Downstream Landowners form and map attached separately.

FORM C

2.30 A. Line drawing showing the water flow through the facility:

According to Allan Moreau, Central Office, since we only have discharge of stormwater over land we would only need to submit the stormwater discharge map from the SWPPP.

3.00 Intake and Effluent Characteristics, Table 1, A for all outfalls.

A. Maximum Daily Value: All data from 6/5/2013 results, except for flow (winter), which is based on 3/17/2013 data.

D. No. of Analyses: Date range 6/5/2013 - 11/19/12

I. pH: Minimum and Maximum Date range 6/5/2013 - 11/19/12

Note: decisions from the last permit renewal application dated November 25, 2009 still stand:

1. COD is sufficient for an indication of oxygen demand. 3M was not required to provide BOD values.
2. Total Dissolved and Settable Solids could be substituted for Total Suspended Solids.
3. Ammonia and Nitrate-Nitrite could be substituted for Total Nitrogen values.