

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-0126357

Owner: Missouri Petroleum Products Company, LLC
Address: 1620 Woodson Road, Overland, MO 63114

Continuing Authority: Same as above
Address: Same as above

Facility Name: Missouri Petroleum Products Company, LLC
Facility Address: 1620 Woodson Road, Overland, MO 63114

Legal Description: SE ¼, Sec. 32, T46N, R6E, St. Louis County
UTM Coordinates: X = 729698, Y = 4284977

Receiving Stream: Unnamed Tributary to River Des Peres (U)
First Classified Stream and ID: River Des Peres (P) (3827)
USGS Basin & Sub-watershed No.: (07140101-0403)

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

FACILITY DESCRIPTION

Outfall #001 – Asphalt Storage and Blending Facility – SIC # 2951
Storm water discharge only from areas around above ground storage tanks (total capacity petroleum products over 250,000 gallons). Best management practices (BMP) provide for spill prevention, control and containment for fuel storage facilities. Oil-water separator discharges to Metropolitan St. Louis Sewer District (MSD).
Design flow: 2.4 MGD
Actual Flow is dependent upon precipitation.

This permit authorizes only 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.

February 1, 2013
Effective Date

Sara Parker Pauley, Director, Department of Natural Resources

June 30, 2017
Expiration Date

John Madras, Director, Water Protection Program

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 2 of 5	
					PERMIT NUMBER MO-0126357	
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 upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001</u>						
Flow	MGD	*		*	once/quarter**	24 hr. estimate
Chemical Oxygen Demand	mg/L	120		90	once/quarter**	grab
Total Suspended Solids	mg/L	100		50	once/quarter**	grab
pH	SU	***		***	once/quarter**	grab
Oil & Grease	mg/L	15		10	once/quarter**	grab
Benzene	µg/L	*		*	once/quarter**	grab
Toluene	µg/L	*		*	once/quarter**	grab
Ethylbenzene	µg/L	*		*	once/quarter**	grab
Xylene	µg/L	*		*	once/quarter**	grab
Total Petroleum Hydrocarbons (TPH) (ORO, DRO, GRO)	mg/L	*		*	once/quarter**	grab
Ammonia (as N)	mg/L	*		*	once/quarter**	grab
Aluminum, Total Recoverable	µg/L	750		750	once/quarter**	grab
Iron, Total Recoverable	µg/L	1,000		1,000	once/quarter**	grab
MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY ; THE FIRST REPORT IS DUE APRIL 28, 2013 . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED Part I STANDARD CONDITIONS DATED October 1, 1980 , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- ** See table below for quarterly sampling.

Minimum Sampling Requirements			
Quarter	Months	Effluent Parameters	Report is Due
First	January, February, March	Sample at least once during any month of the quarter	April 28 th
Second	April, May, June	Sample at least once during any month of the quarter	July 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

*** pH is measured in pH units and is not to be averaged. The pH is limited to 6.5-9.0 pH units.

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. 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 in Part A of the permit by the Director.
 - (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.
4. Report as no-discharge when a discharge does not occur during the report period.

5. Water Quality Standards

- (a) 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;

C. SPECIAL CONDITIONS (continued)

- (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.
6. The permittee shall develop and implement a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must be prepared and implemented within 90 days of permit issuance. The SWPPP must be kept on-site and should not be sent to DNR 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 storm water. Minimum BMPs are listed in SPECIAL CONDITIONS #8.
 - (b) The SWPPP must include a schedule for monthly site inspections and brief written reports. The inspections must include observation and evaluation 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. Any corrective measure that necessitates major construction may also need a construction permit. 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 DNR 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 DNR.
7. Permittee shall adhere to the following minimum Best Management Practices:
- (a) Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, or warehouse activities and thereby prevent the contamination of storm water from these substances.
 - (b) Provide collection facilities and arrange for proper disposal of waste products including but not limited to petroleum waste products, and solvents.
 - (c) Store all paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) so that these materials are not exposed to storm water or provide other prescribed BMP's such as plastic lids and/or portable spill pans to prevent the commingling of storm water with container contents. Commingled water may not be discharged under this permit. Provide spill prevention control, and/or management sufficient to prevent any spills of these pollutants from entering waters of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater.
 - (d) Provide good housekeeping practices on the site to keep trash from entry into waters of the state.

5. SPECIAL CONDITIONS (continued)

- (e) Provide sediment and erosion control sufficient to prevent or control sediment loss off of the property. This could include the use of straw bales, silt fences, or sediment basins, if needed, to comply with effluent limits.
- 8. 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.
- 9. All paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) shall be stored so that these materials are not exposed to storm water. Spill prevention, control, and/or management shall be provided sufficient to prevent any spills of these pollutants from entering a water 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.
- 10. Collection facilities shall be provided on-site, and arrangement made for proper disposal of waste products, including but not limited to petroleum waste products and solvents.
- 11. Good housekeeping practices shall be maintained on the site to keep solid waste from entry into waters of the state.
- 12. All fueling facilities present on the site shall adhere to applicable federal and state regulations concerning underground storage, above ground storage, and dispensers, including spill prevention, control and counter measures.
- 13. An individual shall be designated by the permittee as responsible for environmental matters. Staff of the permitted facility shall inspect, on each workday, any structures that function to prevent pollution of storm water or to remove pollutants from storm water and of the facility in general to ensure that any Best Management Practices are continually implemented and effective.
- 14. All involved personnel shall be trained in material handling and storage, and housekeeping of areas having materials exposed to stormwater. Upon request, proof of training shall be submitted to the Department.
- 15. Before releasing water that has accumulated in secondary containment areas it must be examined for hydrocarbon odor and presence of sheen. When the presence of hydrocarbons is indicated, and at a minimum of once/quarter, this water must be tested for Total Petroleum Hydrocarbons (TPH). The suggested analytical method for testing TPH is non-Halogenated Organic by Gas Chromatography method 8015 (also known as OA1 and OA2). However, if the permittee so desires to use other approved testing methods (i.e. EPA 1664), they may do so. If the concentration for TPH exceeds 10 mg/L, the water shall be taken to a WWTP for treatment.
- 16. Substances, regulated by federal law under the Resource Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), that are transported, stored, or used for maintenance, cleaning or repair, shall be managed according to RCRA and CERCLA.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
FACT SHEET
FOR THE PURPOSE OF RENEWAL
OF
MO-0126357
MISSOURI PETROLEUM PRODUCTS

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

As per [40 CFR Part 124.8(a)] and [10 CSR 20-6.020(1)2.] a Factsheet shall be prepared to give pertinent information regarding the applicable regulations, rationale for the development of effluent limitations and conditions, and the public participation process for the Missouri State Operating Permit (operating permit) listed below.

A Factsheet is not an enforceable part of an operating permit.

This Factsheet is for an Industrial Facility

Part I – Facility Information

Facility Type: IND
Facility SIC Code(s): 2951

Facility Description:

Missouri Petroleum distributes various road oils for direct application on highways. The primary operation at this facility is handling and blending of asphalt materials, bulk storage of these materials and the loading of them onto bulk tanker trailers. The discharge from this facility is stormwater only.

The tank farm is diked and all stormwater through this area is contained and run through the oil-water separator. The wastewater discharge from the oil-water separator goes to Metropolitan St. Louis Sewer District (MSD).

Have any changes occurred at this facility or in the receiving water body that effects effluent limit derivation?
 - No.

Application Date: 08/24/2012
Expiration Date: 04/12/2012

OUTFALL(S) TABLE:

OUTFALL	DESIGN FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE	DISTANCE TO CLASSIFIED SEGMENT (MI)
001	3.72	BMP	Stormwater	~0.3

Outfall #001 – Asphalt Storage and Blending Facility – SIC # 2951

Storm water discharge only from areas around above ground storage tanks with total capacity petroleum products over 250,000 gallons. Best management practices (BMP) provide for Spill Prevention, Control and Containment (SPCC) for fuel storage facilities. Oil-water separator discharges to Metropolitan St. Louis Sewer District.

Design flow: 2.4 MGD

Actual Flow is dependent upon precipitation.

Legal Description: Sec. 32, T46, R6, St. Louis County

UTM Coordinates: X = 729698, Y = 4284977

Receiving Stream: Tributary to River Des Peres (U)

First Classified Stream and ID: River Des Peres (P) (3827)

USGS Basin & Sub-watershed No.: 07140101-0403
Receiving Water Body's Water Quality & Facility Performance History:
There appears to be no impairment on record for this waterbody.

Comments:

REASONABLE POTENTIAL ANALYSIS

Symbol	Analyte	CMC	RWC Acute	CCC	RWC Chronic	Reasonable Potential	n	CV
Al	Aluminum, Total Recoverable	750.00	0.58	750.00	0.58	NO	13	0.461993
Fe	Iron, Total Recoverable	1000.00	0.16	1000.00	0.16	NO	22	0.376025
Units are (µg/L) unless otherwise noted.								

LIMITATION EXCEEDANCES: PERMIT CYCLE APRIL 13, 2007 – APRIL 12, 2012

MPED	Parameter	Monthly Limit mg/L		DMR	Daily Limit mg/L		DMR
12/31/2009	Chemical Oxygen Demand (COD)	90	Monthly Avg.	326	120	Daily Max.	326
09/30/2009	Chemical Oxygen Demand (COD)	90	Monthly Avg.	310	120	Daily Max.	310
06/30/2009	Chemical Oxygen Demand (COD)	90	Monthly Avg.	324	120	Daily Max.	324
03/31/2009	Chemical Oxygen Demand (COD)	90	Monthly Avg.	317	120	Daily Max.	317
12/31/2008	Chemical Oxygen Demand (COD)	90	Monthly Avg.	358	120	Daily Max.	358
09/30/2008	Chemical Oxygen Demand (COD)	90	Monthly Avg.	365	120	Daily Max.	365
06/30/2008	Chemical Oxygen Demand (COD)	90	Monthly Avg.	327	120	Daily Max.	327
03/31/2008	Chemical Oxygen Demand (COD)	90	Monthly Avg.	319	120	Daily Max.	319
12/31/2007	Chemical Oxygen Demand (COD)	90	Monthly Avg.	318	120	Daily Max.	318
09/30/2007	Chemical Oxygen Demand (COD)	90	Monthly Avg.	303	120	Daily Max.	303

SIC #2951

Establishments primarily engaged in manufacturing asphalt and tar paving mixtures; and paving blocks made of asphalt and various compositions of asphalt or tar with other materials.

- Asphalt and asphaltic mixtures for paving, not made in refineries
- Asphalt paving blocks, not made in petroleum refineries
- Asphaltic concrete, not made in petroleum refineries
- Coal tar paving materials, not made in petroleum refineries
- Composition blocks for paving
- Concrete, bituminous
- Mastic floor composition, hot and cold
- Road materials, bituminous: not made in petroleum refineries
- Tar and asphalt mixtures for paving, not made in petroleum refineries

Part II – Operator Certification Requirements

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

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

Part III – Receiving Stream Information

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.

All Other Waters [10 CSR 20-7.015(8)]:

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/or 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)].

RECEIVING STREAM(S) TABLE:

WATERBODY NAME	CLASS	WBID	DESIGNATED USES*	12-DIGIT HUC**
Unnamed Tributary to River Des Peres	U	-	General Criteria	07140101-0403
River Des Peres	P	3827	LWW, AQL, WBC-A, SCR	

* - Irrigation (IRR), Livestock & Wildlife Watering (LWW), Protection of Warm Water Aquatic Life and Human Health-Fish Consumption (AQL), Cool Water Fishery(CLF), Cold Water Fishery (CDF), Whole Body Contact Recreation (WBC), Secondary Contact Recreation (SCR), Drinking Water Supply (DWS), Industrial (IND), Groundwater (GRW).

** - Hydrological Unit Code

RECEIVING STREAM(S) LOW-FLOW VALUES TABLE:

RECEIVING STREAM (U, C, P)	LOW-FLOW VALUES (CFS)		
	1Q10	7Q10	30Q10
Unnamed Tributary to River Des Peres (U)	0	0	0

MIXING CONSIDERATIONS

Mixing Zone: Not Allowed [10 CSR 20-7.031(4)(A)4.B.(I)(a)].

Zone of Initial Dilution: Not Allowed [10 CSR 20-7.031(4)(A)4.B.(I)(b)].

Part IV – 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.

- All limits in this operating permit are at least as protective as those previously established; therefore, backsliding does not apply. Total BTEX has been replaced with Benzene, Toluene, Ethylbenzene, and Xylene. Color has been removed from Table A since it is already covered under the Water Quality Standard section of the permit. MTBE has no Water Quality Standard therefore the parameter has been removed.

ANTIDegradation:

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

- Renewal no degradation proposed and no further review necessary.

AREA-WIDE WASTE TREATMENT MANAGEMENT & CONTINUING AUTHORITY:

As per [10 CSR 20-6.010(3)(B)], ...An applicant may utilize a lower preference continuing authority by submitting, as part of the application, a statement waiving preferential status from each existing higher preference authority, providing the waiver does not conflict with any area-wide management plan approved under section 208 of the Federal Clean Water Act or any other regional sewage service and treatment plan approved for higher preference authority by the Department.

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://dnr.mo.gov/env/wpp/pub/index.html>, 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.

PRETREATMENT PROGRAM:

The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a Publicly Owned Treatment Works [40 CFR Part 403.3(q)].

Pretreatment programs are required at any POTW (or combination of POTW operated by the same authority) and/or municipality with a total design flow greater than 5.0 MGD and receiving industrial wastes that interfere with or pass through the treatment works or are otherwise subject to the pretreatment standards. Pretreatment programs can also be required at POTWs/municipals with a design flow less than 5.0 MGD if needed to prevent interference with operations or pass through.

Several special conditions pertaining to the permittee's pretreatment program may be included in the permit, and are as follows:

- Implementation and enforcement of the program,
- Annual pretreatment report submittal,
- Submittal of list of industrial users,
- Technical evaluation of need to establish local limitations, and
- Submittal of the results of the evaluation

Not Applicable;
The permittee, at this time, is not required to have a Pretreatment Program or does not have an approved pretreatment program.

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)(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.

REMOVAL EFFICIENCY:

Removal efficiency is a method by which the Federal Regulations define Secondary Treatment and Equivalent to Secondary Treatment, which applies to Biochemical Oxygen Demand 5-day (BOD₅) and Total Suspended Solids (TSS) for Publicly Owned Treatment Works (POTWs)/municipals.

Not Applicable;

Influent monitoring is not being required to determine percent removal.

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

Sanitary Sewer Overflows (SSOs) are defined as an untreated or partially treated sewage release are considered bypassing under state regulation [10 CSR 20-2.010(11)] and should not be confused with the federal definition of bypass. SSO's have a variety of causes including blockages, line breaks, and sewer defects that allow excess storm water and ground water to (1) enter and overload the collection system, and (2) overload the treatment facility. Additionally, SSO's can be also be caused by lapses in sewer system operation and maintenance, inadequate sewer design and construction, power failures, and vandalism. SSOs also include overflows out of manholes and onto city streets, sidewalks, and other terrestrial locations.

Additionally, Missouri RSMo §644.026.1 mandates that the Department require proper maintenance and operation of treatment facilities and sewer systems and proper disposal of residual waste from all such facilities.

Not applicable;

This facility is not required to develop or implement a program for maintenance and repair of the collection system; however, it is a violation of Missouri State Environmental Laws and Regulations to allow untreated wastewater to discharge to waters of the state.

SCHEDULE OF COMPLIANCE (SOC):

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

Not Applicable;

This permit does not contain a SOC.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP):

In accordance with 40 CFR 122.44(k) *Best Management Practices (BMPs)* to control or abate the discharge of pollutants when: (1) Authorized under section 304(e) of the Clean Water Act (CWA) for the control of toxic pollutants and hazardous substances from ancillary industrial activities; (2) Authorized under section 402(p) of the CWA for the control of storm water discharges; (3) Numeric effluent limitations are infeasible; or (4) the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA.

In accordance with the EPA's *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (Document number EPA 833-B-09-002) [published by the United States Environmental Protection Agency (USEPA) in February 2009], BMPs are measures or practices used to reduce the amount of pollution entering (regarding this operating permit) waters of the state. BMPs may take the form of a process, activity, or physical structure.

Additionally in accordance with the Storm Water Management, a SWPPP is a series of steps and activities to (1) identify sources of pollution or contamination, and (2) select and carry out actions which prevent or control the pollution of storm water discharges.

Applicable;

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

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(3)], 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.

40 CFR 122.41(M) - BYPASSES:

The federal Clean Water Act (CWA), Section 402 prohibits wastewater dischargers from “bypassing” untreated or partially treated sewage (wastewater) beyond the headworks. A bypass, which includes blending, is defined as an intentional diversion of waste streams from any portion of a treatment facility, [40 CFR 122.41(m)(1)(i)]. Additionally, Missouri regulation 10 CSR 20-2.010(11) defines a bypass as the diversion of wastewater from any portion of wastewater treatment facility or sewer system to waters of the state. Only under exceptional and specified limitations do the federal regulations allow for a facility to bypass some or all of the flow from its treatment process. Bypasses are prohibited by the CWA unless a permittee can meet all of the criteria listed in 40 CFR 122.41(m)(4)(i)(A), (B), & (C). Any bypasses from this facility are subject to the reporting required in 40 CFR 122.41(l)(6) and per Missouri’s Standard Conditions I, Section B, part 2.b. Additionally, Anticipated Bypasses include bypasses from peak flow basins or similar devices designed for peak wet weather flows.

Not Applicable;
This facility does not bypass.

303(d) LIST & TOTAL MAXIMUM DAILY LOAD (TMDL):

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.

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. 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 does not discharge to a 303(d) listed stream.

Part V – Effluent Limits Determination

Basis for Effluent Limits

In general, the Clean Water Act (CWA) requires that the effluent limits for a particular pollutant be the more stringent of either technology-based limits or water quality-based limits. Technology-based limits are set according to the level of treatment that is achievable using available technology. A water quality-based effluent limit is designed to ensure that the water quality standards applicable to a waterbody are being met and may be more stringent than technology-based effluent limits.

How Water Quality-based Effluent Limits are derived

The first step in developing a water quality-based effluent limit is to develop a wasteload allocation (WLA) for the pollutant. A wasteload allocation is the concentration or loading of a pollutant that the permittee may discharge without causing or contributing to an exceedance of water quality standards in the receiving water.

In cases where a mixing zone is not authorized, either because the receiving water already exceeds the criterion, the receiving water flow is too low to provide dilution, or the State does not authorize one, the criterion becomes the WLA. Establishing the criterion as the wasteload allocation ensures that the permittee will not cause or contribute to an exceedance of the criterion. The following discussion details the specific water quality-based effluent limits in the draft permit.

Chronic WLA: $C_e = ((\text{design flow} + 7Q_{10} \text{ MZ}) \text{ WQ Criterion} - (7Q_{10} \text{ MZ} * \text{background concentration upstream})) / \text{design flow}$
 $C_e = \text{xx } \mu\text{g/L}$

Acute WLA: $C_e = ((\text{design flow} + 7Q_{10} \text{ ZID}) \text{ WQ Criterion} - (7Q_{10} \text{ ZID} * \text{background concentration upstream})) / \text{design flow}$
 $C_e = \text{xx } \mu\text{g/L}$

$$C_e = [((Q_e + Q_s) * C) - (Q_s * C_s)] / Q_e$$

Where:

Q_e = volume of effluent discharge (design flow in cfs)

Q_s = volume of receiving stream available for mixing (7Q10 of MZ in cfs for chronic; use ZID for acute)

C_e = concentration of a pollutant of concern in the effluent (effluent limit)

C_s = upstream concentration of pollutant of concern (background concentration)

Outfall #001 – Main Facility Outfall

EFFLUENT LIMITATIONS TABLE:

PARAMETER	UNIT	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	MGD	*		*	NO	*
CHEMICAL OXYGEN DEMAND	MG/L	120		90	NO	120/90
TOTAL SUSPENDED SOLIDS	MG/L	100		50	NO	100/50
pH	SU	6.5-9.0		6.5-9.0	YES	≥ 6.0
OIL & GREASE	MG/L	15		10	NO	15/10
BENZENE	µG/L	*		*	YES	0.05/0.05 MG/L
TOLUENE	µG/L	*		*	NEW PARAMETER	
ETHYLBENZENE	µG/L	*		*	NEW PARAMETER	
XYLENE	µG/L	*		*	NEW PARAMETER	
TOTAL PETROLEUM HYDROCARBON	MG/L	10		10	NO	10/10
AMMONIA AS N	MG/L	*		*	NO	*
ALUMINUM, TOTAL RECOVERABLE	µG/L	750		750	NO	0.75/0.75 MG/L
DISSOLVED IRON, TOTAL RECOVERABLE	µG/L	1000		1000	NO	1.0/1.0 MG/L

* - Monitoring requirement only.

OUTFALL #001 – DERIVATION AND DISCUSSION OF LIMITS:

- **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.
- **Chemical Oxygen Demand (COD).** Effluent limits of 120 mg/L daily maximum and 90 mg/L monthly average were retained from the previous permit. The daily maximum limit is based on the EPA’s MSGP benchmark for COD. The facility’s 5-year DMR showed COD concentrations ranging from 10 mg/L - 365 mg/L.
- **Total Suspended Solids (TSS).** Effluent limits of 100 mg/L daily maximum and 50 mg/L monthly average were retained from the previous permit. The daily maximum limit was derived from the EPA’s Multi-Sector General Permit - Sector D benchmark for TSS. The facility’s 5-year DMR showed concentrations ranging 4 mg/L – 14 mg/L.
- **pH.** In accordance with [10 CSR 20-7.031(4)(E)], pH shall be maintained in the range from six and one-half to nine (6.5-9.0) standard units.
- **Oil & Grease.** Conventional pollutant, effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum. The facility’s 5-year DMR showed O&G concentrations ranging from 0.005 mg/L - 8 mg/L.
- **Total BTEX.** This parameter has been broken down into individual parameters: Benzene, Toluene, Ethylbenzene, and Xylene.
- **Benzene.** The 0.05 mg/L (50 µg/L) limit from the previous permit could not be verified. Therefore, monitoring requirement only. The facility’s 5-year DMR showed Benzene concentrations’ ranging from 0.002 mg/L – 0.03268 mg /L. Water Quality Criteria for Benzene are the following: 71 µg/L HHF, 5 µg/L DWS, 5 µg/L GRW. Benzene is a component of products derived from coal and petroleum and is found in gasoline and other fuels.
- **Toluene.** Monitoring requirement only. This parameter is added to gasoline, used to produce benzene, and used as a solvent.
- **Ethylbenzene.** Monitoring requirement only. This parameter is used as a solvent, as a constituent of asphalt and naphtha, and in fuels.
- **Xylene.** Monitoring requirement only. This parameter is used as a solvent and used in gasoline.

- **Total Petroleum Hydrocarbon.** TPH is a surrogate for pollutants of concern associated with fuel storage. Limits of 10 mg/L daily maximum and monthly average retained from the previous permit. The facility's 5-year DMR did contain TPH.
- **Surfactants (MBAS).** REMOVED. Missouri Petroleum stated that the facility does not use surfactants. Surfactants would be used at facility that produces asphalt concrete (asphalt cement, sand and aggregate). The Missouri Petroleum facility only stores and blends asphalt cement but does not produce asphalt concrete.
- **Color.** REMOVED. Parameter is already covered under Water Quality Standard of the permit.
- **Methyl Tertiary Butyl Ether.** REMOVED. There is no Water Quality Criteria for this parameter.

MTBE is commonly used as a gasoline additive to reduce engine knocks. The U. S. Environmental Protection Agency is working to reduce the use of MTBE as a gasoline additive as a result of the taste and odor problems in water and unreasonable risk to the environment. EPA is continuing to evaluate the available information and is doing additional research to seek more definitive estimates of potential risks to humans from drinking water.

- **Temperature (Effluent).** REMOVED. Parameter is not applicable to stormwater discharges. The facility's 5-year DMR showed Temperature ranging from 23°F – 86.5 °F.
- **Ammonia as N.** Monitoring requirement remains. The facility's 5-year DMR showed NH₃ concentration of 0.01 mg/L.
- **Total Recoverable Aluminum.** Limits of 0.75 mg/L (750 µg/L) daily maximum and monthly average were retained from the previous permit. This limitation is the acute Water Quality Criteria (10 CSR 20-7, Table A) for Aluminum for the protection of aquatic life (AQL). The facility's 5-year DMR showed Aluminum concentrations ranging from 0.05 mg/L - 0.2626 mg/L. Form C's concentration was 0.05 mg/L.
- **Total Recoverable Iron.** Limits of 1.0 mg/L (1000 µg/L) daily maximum and monthly average were retained from the previous permit. This limitation is the chronic Water Quality Criteria (10 CSR 20-7, Table A) for Iron for the protection of aquatic life (AQL).The facility's 5-year DMR showed Iron concentrations ranging from 0.029mg/L - 0.093 mg/L. Form C's concentration was 0.05 mg/L.

Part VI - Finding of Affordability

Pursuant to Section 644.145, RSMo, the Department is required to determine whether a permit or decision is affordable and makes a finding of affordability for certain permitting and enforcement decisions. This requirement applies to discharges from combined or separate sanitary sewer systems or publically-owned treatment works.

Not Applicable;

The Department is not required to determine findings of affordability because the facility is not a **combined or separate sanitary sewer system for a publically-owned treatment works.**

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.

This permit will expire on **June 30, 2017** in order to meet the permit synchronization goals.

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 is tentatively scheduled to begin in December 28, 2012.

The Public Notice period for this operating permit was from December 14, 2012 to January 14, 2013. No comments received.

PRE-PUBLIC NOTICE COMMENTS:

1. C. Special Conditions 7. (b) Require that the SWPPP include a schedule for twice per month site inspections. The current permit in C. Special Conditions 7 (d) only requires a monthly inspection. The EPA guidance document, EPA-833-B-09-002, referenced in the draft permit indicates minimum inspection frequency typically ranges from once per month to once per quarter for routine inspections. We request that the SWPPP inspection frequency remain once per month.

Response:

Special Condition 7.b has been changed to monthly site inspection.

2. Fact Sheet Part I – Facility Information. Under Facility Description, first sentence – “Missouri Petroleum produces asphaltic paving and roofing materials.” Missouri Petroleum does not produce roofing materials. Please remove this from the fact sheet.

Response:

2. “Missouri Petroleum produces asphaltic paving and roofing materials” has been removed from the draft permit.

3. Fact Sheet Part V – Effluent Limits Determination Surfactants (MBAS). Missouri Petroleum does not use a surfactant at this facility. The surfactant would be used at facility that produces asphalt concrete (asphalt cement, sand and aggregate). The surfactant would be sprayed on the metal bed of a dump truck to keep asphalt concrete from adhering to the bed. As The Missouri Petroleum facility only stores and blends asphalt cement but does not produce asphalt concrete. We request that the analysis for surfactant be removed even though it is for monitoring purposes only. The facility will be spending money to perform an analysis on a material that is not used.

Response:

Surfactant (MBAS) has been removed from the draft permit. The comment email sent serves as a certification from the facility that no surfactant is being used in its operation.

DATE OF FACT SHEET: JANUARY 17, 2013

COMPLETED BY:

JOY JOHNSON, ENVIRONMENTAL SPECIALIST III
NPDES PERMITS UNIT
WATER PROTECTION PROGRAM
joy.johnson@dnr.mo.gov