

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. **MO0132365**

Owner: Freedom Ready Mix
Owner Address: PO Box 4007, Waynesville, MO 65583-4007

Continuing Authority: Frank and Sandy Farris
Continuing Authority Address: PO Box 408, Waynesville, MO 65583-0408

Facility Name: Freedom Ready Mix
Facility Address: 18502 Superior Rd., St. Robert, MO 65584

Legal Description: NW ¼, NE ¼, Sec. 31, T36N, R11W, Pulaski County
UTM Coordinates: (X = 0572246, Y = 4184970)

Receiving Stream: Burchard Hollow (U) (losing)
First Classified Stream and ID: Roubidoux Creek (C) (01513) (losing)
USGS Basin and Sub-watershed No.: (10290201-060005)

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

FACILITY DESCRIPTION

All Outfalls – (As listed in permit application) – Standard Industrial Classification (SIC) Code # 1422 – Crushed and Broken Limestone – Stormwater and other specified discharges from limestone and other rock quarries, concrete, glass, and asphalt industries

This site-specific operating permit authorizes stormwater, discharges under the Law and the National Pollutant Discharge Elimination System. This site-specific operating permit does not apply to other regulated areas. This site-specific operating permit may be appealed in accordance with the Law, Section 644.051.6., RSMo, and Section 621.250, RSMo, and Missouri Clean Water Commission regulations [10 CSR 20-6.020], Permits, Public Participation, Hearings and Notice to Governmental Agencies and [10 CSR 20-1.020], Organizations, Clean Water Commission Appeals and Requests for Hearings.

January 19, 2011
Effective Date

January 19, 2011
Renewal Date


Sara Parker Pauley, Acting Director, Department of Natural Resources

January 18, 2016
Expiration Date

Gary L. Gaines, P.E., Director, Southeast Regional Office

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Permittee authorized to discharge from outfall(s) with serial number(s) as specified in the application for this site-specific operating permit. **Final effluent limitations** shall become effective upon issuance (renewal) date of this site-specific operating permit and shall remain in effect until site-specific operating permit expiration date. Such discharges shall be controlled, limited and monitored by 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
Non-Stormwater Discharges (Note 1)						
Flow	GPD	*		*	Once per quarter**	24 hour estimate
Total Suspended Solids	mg/L	70		70	Once per quarter**	grab
Oil and Grease	mg/L	15		10	Once per quarter**	grab
pH	SU	***		***	Once per quarter**	grab

MONITORING REPORTS SHALL BE SUBMITTED Quarterly. FIRST REPORT DUE: April 28, 2011.

Stormwater Discharges (Note 2)						
Flow	GPD	*		*	Once per year	24 hour estimate
Settleable Solids****	mL/L/hr	1.5		1.0	Once per year	grab
Oil and Grease	mg/L	15		10	Once per year	grab
pH	SU	***		***	Once per year	grab

MONITORING REPORTS SHALL BE SUBMITTED Annually. FIRST REPORT DUE: October 28, 2011. 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 SITE-SPECIFIC OPERATING PERMIT SUBJECT TO 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

** Sample once per quarter in the months of March, June, September and December

*** pH measured in pH standard units (SU) and is not to be averaged. pH limited to the range of 6.5-9.0 pH SUs

**** An emergency exceedence of final effluent limitations for the Settleable Solids parameter is authorized due to precipitation exceeding the highest 1-in-10-year, 365-day rainfall or the highest 25-year, 24-hour storm event. The burden of proof lies with permittee to document that the precipitation event occurred. This exemption from final effluent limitations does not apply to dry weather flows such as dewatering of pits

Note 1 – Non stormwater discharges shall include wastewater generated from process-related activities such as truck washing, and all dry-weather discharges from processing plants and mine pit dewatering

Note 2 – The annual report for stormwater discharge monitoring is due by October 28th of each calendar year. Sampling may occur in any month

APPLICABILITY

1. This site-specific operating permit authorizes the following discharges from facilities with the Standard Industrial Classification (SIC) Code # 1422 (Crushed and Broken Limestone), limestone and other rock quarries, concrete plants, concrete products industries, asphalt plants, glass products industries and clay products industries (excluding clay pits and mining which are covered under a MOG84 general operating permit):
 - (a) Stormwater runoff;
 - (b) Quarry pit or mine de-watering; and/or
 - (c) Vehicle and equipment wash water without added detergents, acids, caustics, solvents, or other additives.
2. Vehicle and equipment washing with detergents, acids, caustics, solvents, or other additives is authorized if the total volume of water used is less than 500 gallons per day and the wash water is not discharged. This means that the wash water with said additives must not enter settling basins or other treatment device. Wash water must soak into the ground, evaporate or be contained in a tank onsite.
3. This site-specific operating permit does not authorize the mining activity, only stormwater discharges that result from the activity. An operating permit authorizing mining activities must be obtained from the Department's Division of Environmental Quality's Land Reclamation Program.
4. The general operating permit (MOG49) does not apply to any of the following:
 - (a) Mining operations other than limestone and other rock quarries;
 - (b) Quarries producing any products other than crushed rock, dimension rock, lime, asphalt or concrete;
 - (c) Sand and gravel washing operations (covered by a MOG50 general operating permit);
 - (d) Clay pits or clay mining operations (covered by a MOG84 general operating permit);
 - (e) Any discharges other than those described under item 1 of this APPLICABILITY section; and/or
 - (f) Any discharges within 300 feet of wetlands or waters that have been identified as losing streams, or a lake or reservoir used for public drinking water supplies, or within 1,000 feet of designated critical habitat for endangered species or biocriteria reference streams. Facilities with discharges located in these areas must apply for a site-specific operating permit.
5. The general operating permit (MOG49) does not apply to facilities that would discharge to Outstanding National Scenic and State Resource Waters and drainages thereto, as defined in Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-7.015(6)], Water Quality, Effluent Regulations, Effluent Limitations for Special Streams.
6. Holders of current individual, site-specific operating permits who desire to apply for inclusion under the general operating permit (MOG49) should contact the Department for application requirements and procedures.
7. The Director may require any permittee authorized by a general operating permit to apply for and obtain an individual site-specific operating permit. Any interested person may petition the Department to take action under this subsection. Cases where an individual site-specific operating permit may be required include, but are not limited to, the following:
 - (a) The discharge(s) is a significant contributor of pollution which impairs the beneficial uses of the receiving stream;
 - (b) The discharger is not in compliance with the conditions of this operating permit; and/or
 - (c) A Water Quality Management Plan or Total Maximum Daily Load (TMDL) containing requirements applicable to these point sources is approved by the Department.
8. If at any time, the owner of the permitted facility should desire to apply for an individual permit, the owner may do so.

APPLICABILITY (continued)

9. This site-specific operating permit may be transferred to a new owner by submitting to the Department an "Application for Transfer of Operating Permit" signed by the seller and buyer of the facility, along with the appropriate modification fee.
10. Concrete and/or asphalt plants contained within the boundaries of a quarry may be included under one (1) general operating permit or site-specific operating permit.
11. Facilities located within the watershed of a 303(d) listing of impaired waters will need to be evaluated, on a case-by-case basis, for inclusion under the general operating permit (MOG49). Facilities that are found to be discharging the listed pollutant(s) of concern may be required to obtain a site-specific operating permit.
12. This site-specific operating permit does not authorize discharges of waste material, such as concrete and water from washing of concrete delivery trucks into waters of the state. This site-specific operating permit does not authorize discharges to waters of the state from any location other than the outfall(s) described on page one (1) or page two (2) of this site-specific operating permit. Waste concrete from delivery trucks shall be washed into a dedicated shallow depression or other device designed to capture the concrete and allow it to dry. Washing waste concrete into waters of the state or in a location where it is likely to enter waters of the state, such as a drainage ditch, is prohibited per the Missouri Clean Water Law, Section 644.051, RSMo, and Missouri Clean Water Commission regulation [10 CSR 20-6.010], Permits, Construction and Operating Permits.

MONITORING AND REPORTING REQUIREMENTS

1. Non-stormwater discharges are those caused by something other than stormwater runoff and include mine pit dewatering, vehicle and equipment wash water, and all dry-weather discharges from processing plants. This site-specific operating permit does not authorize the discharge of waters with added detergents, acids, caustics, solvents, or other additives, except as allowed under the APPLICABILITY section above.
2. Stormwater samples shall be collected within the first 60 minutes of storm events of one-tenth (0.1) inches or greater, that result in a discharge.
3. Samples shall be collected prior to or at the property boundary or before the discharge enters waters of the state on the property.
4. Effluent parameters listed in Part A., Effluent Limitations and Monitoring Requirements, above are to be monitored or collected and analyzed quarterly in the months of March, June, September and December. Permittee is to submit analytical results of the required monitoring and sampling to the Department on a quarterly basis by the deadline established in Part A., Effluent Limitations and Monitoring Requirements, above. If a discharge does not occur during the quarter or reporting period, permittee shall submit a report of "no discharge" to the Department.

OTHER REQUIREMENTS

1. Permittee shall provide sediment and erosion control sufficient to prevent pollution to waters of the state, and comply with the effluent limitations and other permit conditions. This may require construction of properly designed sediment basins or other treatment structures. Permittee shall not allow mined material or overburden to enter waters of the state.
2. If vehicle or equipment washing/rinsing is conducted at the facility or other similar process wastewater is generated, permittee shall treat the resulting wastewater prior to discharge to waters of the state in order to meet the effluent limitations and other permit conditions. A construction permit must be obtained from the Department prior to construction of any treatment structure or device.
3. If dumping or disposal of waste concrete, waste asphalt, waste clay or glass products, or waste rock is conducted at the facility, permittee shall prevent the material from entering waters of the state. Any resulting wastewater or leachate from these activities must be treated prior to discharge. Discharging these materials into waters of the state during offsite activities is also prohibited.
4. Permittee shall prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment maintenance, or warehousing activities and thereby prevent the contamination of stormwater from these substances.

OTHER REQUIREMENTS (continued)

5. Permittee shall provide collection facilities and arrange for proper disposal of waste products, including but not limited to, petroleum waste products and solvents.
6. Permittee shall store all paint, solvents, petroleum products, petroleum waste products and storage containers (such as drums, cans, or cartons) so that these materials are not exposed to stormwater, or provide other prescribed Best Management Practices (BMPs) such as plastic lids, portable spill pans or containment to prevent the commingling of stormwater with container contents. Commingled water may not be discharged under this site-specific operating permit. Permittee shall provide spill prevention, control, countermeasures and/or BMPs 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.
7. Permittee shall designate an individual as responsible for environmental matters at the facility who will serve as a contact for the Department. Permittee shall notify the Department in writing of a personnel change for this position. One (1) individual may be the contact for multiple facilities so long as that person can effectively communicate with the Department on every facility.
8. Permittee shall provide for onsite inspection by facility staff, at least once per month, of all stormwater pollution prevention structures, stormwater and wastewater treatment structures, and of the facility in general to ensure that structures are properly maintained and effective, and that any Best Management Practices (BMPs) are continually implemented and effective. Inspections must be documented in the form of a written report or checklist. Said inspection reports must note any spills, leaks, or maintenance needs of any of the structures or BMPs. Said inspection reports must also describe action taken to correct or repair deficiencies. Areas of a quarry that have been permanently or temporarily stabilized need only be inspected once per year. Said monthly inspections shall continue if the stabilized area is re-disturbed for any reason. Written records of inspections must be kept onsite and made available to the Department upon request.
9. Permittee shall maintain records of all pumped discharges that enter surface waters of the state. These records must include an estimate of the volume, the date and time(s) and the location of each discharge.
10. All outfalls must be clearly marked in the field or clearly identified on a map submitted to the Department and kept on file at the facility's office. Outfall locations may be added or deleted by permittee following notification to the Department. Notification shall include a map identifying the added or deleted outfall(s).
11. Stormwater discharge monitoring is not required of areas stabilized by a durable non-erosive surface, such as hauling roads that are completely covered with gravel. Monitoring or further improvements may be required if Department staff determine that the improvements are not adequate to protect water quality.
12. This site-specific operating 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 site-specific operating permit; or
 - (2) Controls any pollutant not limited in the site-specific operating 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 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 current 303(d) list.

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

OTHER REQUIREMENTS (continued)

13. Water Quality Standards

- (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-7.031(3) and (4)], Water Quality, Water Quality Standards, General Criteria and Specific 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; and
 - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in the Missouri Solid Waste Management Law, Section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to Sections 260.200-260.247, RSMo.

TERMINATION OF SITE-SPECIFIC OPERATING PERMIT

If the activities covered by this site-specific operating permit have ceased and no significant materials [as defined by Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-6.200], Permits, Storm Water Regulations] remain on the property, permittee may request termination of this site-specific operating permit. To request termination, permittee must submit *Form J-Request for Termination of a State Operating Permit* to the Department.

SITE-SPECIFIC OPERATING PERMIT TRANSFER

This site-specific operating permit may be transferred to a new permittee by submitting an *Application for Transfer of Operating Permit* to the Department signed by the transferor and transferee of the facility, along with the appropriate modification fee.

SITE-SPECIFIC OPERATING PERMIT RENEWAL REQUIREMENTS

Unless this site-specific operating permit is terminated, permittee shall submit an application to the Department for the renewal of this site-specific operating permit (*Form A-Application for Construction or Operating Permit and Form C-Application for Discharge Permit-Manufacturing, Commercial, Mining and Silviculture Operations*) no later than six (6) months prior to site-specific operating permit's expiration date.

DUTY OF COMPLIANCE

Permittee shall comply with all conditions of this site-specific operating permit. Any noncompliance with this site-specific operating permit constitutes a violation of the Missouri Clean Water Law, Chapter 644, and Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-6.200], Permits, Storm Water Regulations. Noncompliance may result in enforcement action, termination of this authorization, or denial of permittee's renewal request.

PUBLIC NOTICE

As required by Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-6.020], Permits, Public Participation, Hearings and Notice to Governmental Agencies, operating permits proposed to be issued to newly constructed limestone or other rock quarries must undergo public notification in accordance with MCWC regulation [10 CSR 20-6.020], Permits, Public Participation, Hearings and Notice to Governmental Agencies, prior to issuance. Public Notice of reissuance is required if the facility possesses a site-specific operating permit or was found to be in significant noncompliance during the time of the previous general operating permit per MCWC regulation [10 CSR 20-6.020(1)(C)], Permits, Public Participation, Hearings and Notice to Governmental Agencies, Public Participation, Public Notice for General Permits.

Missouri Department of Natural Resources
Fact Sheet
for the Purpose of Renewing
Missouri State Operating Permit # MO0132365
Freedom Ready Mix, St. Robert, Pulaski County

The Federal Water Pollution Control Act (“Clean Water Act”, Section 402, Public Law 92-500, as amended) established the National Pollutant Discharge Elimination System (NPDES) operating permit program. This program regulates pollutant(s) discharges from point sources into the waters of the United States, and the stormwater releases from certain point sources. All such discharges are unlawful without an operating permit (Section 301 of the “Clean Water Act”). After an operating permit is obtained, a discharge not in compliance with all operating 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 (operating permits) are issued for a period of five (5) calendar years unless otherwise specified.

As per [40 CFR Part 124.8(a)], Protection of Environment, Environmental Protection Agency, Water Programs, Procedures for Decisionmaking, General Program Requirements, Fact sheet, and Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-6.020(1)(A)2.], Permits, Public Participation, Hearings and Notice to Governmental Agencies, Public Participation, a Fact Sheet shall be prepared to give pertinent information regarding applicable regulations, development rationale for effluent limitations and conditions, and public participation process for the Missouri State Operating Permit (MSOP) listed below.

A Fact Sheet gives pertinent information regarding applicable regulations, National Pollutant Discharge Elimination System (NPDES) Missouri State Operating Permit (MSOP) (operating permit) development rationale, and the public notification and the public participation process for the operating permit listed below.

A Fact Sheet is not an enforceable part of a general operating permit and/or an operating permit.

This Fact Sheet is for a(n):

Major ; Minor ; Industrial Facility ; Variance ; Master General Permit ;
General Permit Covered Facility ; Operating permit with widespread public interest

Part I - Facility Information

The following Facility Information shall appear on the coverage document issued to a General Permit Covered Facility.

NPDES #:

Owner:

Owner Address:

Continuing Authority:

Continuing Authority Address:

Facility Name:

Facility Address:

Facility Standard Industrial Classification (SIC) Code(s): #1422 (Crushed and Broken Limestone)

Facility Description: Stormwater and other specified discharges from limestone and other rock quarries, concrete, glass, and asphalt industries.

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

Application Date: October 4, 2010

Expiration Date: December 22, 2010

Last Inspection: March 8, 2010

In compliance ; From the March 9, 2010, environmental compliance report narrative: “On March 8, 2010, a follow-up environmental compliance inspection was conducted *[as required per environmental compliance inspection conducted*

January 27, 2010, where facility was issued Notice of Violation # 18711SE by the Department for Missouri State Operating Permit (MSOP), Missouri Clean Water Commission (MCWC) regulation and Missouri Clean Water Law (MCWL) violations]. Deficiencies: There were no deficiencies noted during the inspection [conducted March 8, 2010]. Observations and Recommendations: (1) Concrete Washout. Facility has recently rebuilt a temporary sediment basin directly south of the cement plant. Due to inclement weather and frozen ground, facility was unable to construct a more permanent treatment structure to washout concrete trucks. As soon as weather permits, facility has plans to construct a more accessible, multi-cell sediment basin for proper treatment of wash water; (2) Stormwater Pollution Prevention. Facility has recently created a slight berm paralleling the receiving stream. This will allow further treatment of any stormwater and/or wash water accumulated around the cement plant prior to discharge. Facility is aware that both stormwater and wash water that is discharged must be sampled and tested in accordance with their MSOP; and (3) Monthly Inspections. Facility has created a monthly log sheet identifying water pollution prevention structures that have been installed around the cement plant. [Inspector] encouraged [permittee] to expand the monthly inspection log to contain a Comments/Actions Taken section to the existing log. This will further explain and record maintenance tasks that have been requested and/or conducted around the facility. For example, the dredging of facility's sediment basins should be documented with information such as the date of the dredging and the name of the person conducting the dredging. Closing Remarks: At this time, facility appears to be operating their facility in accordance with their MSOP and associated MCWC regulations. However, facility must continue to take a proactive approach to maintaining their stormwater and washwater pollution prevention best management structures.”; Non-compliance

OUTFALLS: A full description of each outfall shall appear on the coverage document issued to a General Permit Covered Facility. The following information is required for each outfall:

Outfall # 001

Legal Description:

UTM Coordinates:

Receiving Stream:

First Classified Stream and ID:

USGS Basin and Sub-watershed No.:

Receiving Water Body's Water Quality and Facility Performance History: Facility located on a site that discharges to a Losing Stream as defined by Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-2.010(36)], Definitions, Losing stream, and [10 CSR 20-7.031(1)(N)], Water Quality, Water Quality Standards, Definitions, Losing Stream

Comments: None.

Part II – Operator Certification Requirements

As per Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-6.010(8)], Permits, Construction and Operating Permits, Terms and Conditions of a Permit, permittees shall operate and maintain facilities to comply with the Missouri Clean Water Law (MCWL) and applicable permit conditions and regulations. Operators or supervisors of operations at regulated wastewater treatment facilities shall be certified in accordance with MCWC regulation [10 CSR 20-9.020(2)], Treatment Plant Operations, Classification of Wastewater Treatment Systems, Wastewater Treatment Systems Requirements, and any other applicable state law or regulation. As per MCWC regulation [10 CSR 20-9.010(2)(A)], Treatment Plant Operations, Classification of Wastewater Treatment Systems, Wastewater Treatment Systems Requirements, requirements for operation by certified personnel shall apply to all wastewater treatment systems, if applicable, as listed below:

Owned or operated by or for:

Municipalities ; Public Sewer District ; County ; Public Water Supply District ;
Private sewer company regulated by the Public Service Commission ; State of Federal Agencies

Each of the above entities are only applicable if they have a Population Equivalent greater than (>) two-hundred (200) and/or fifty (50) or more service connections.

Department required: Yes ; No

; Facility does not currently retain an operator with the correct level of certification required to operate the wastewater treatment facility. The Missouri Clean Water Law (MCWL) and its implementing Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-9.020(2)(F)], Treatment Plant Operations, Classification of Wastewater Treatment Systems, Wastewater Treatment Systems Requirements, allows the Department to develop a schedule of activities including the date by which compliance shall be obtained. This schedule of activities may be established in this operating permit as a Schedule of

Compliance (SOC) or following Department consultation with permittee

; Facilities of this type are not required to have a certified operator

Part III – Receiving Stream Information

APPLICABLE DESIGNATIONS OF WATERS OF THE STATE: As per Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-7.015], Water Quality, Effluent Regulations, 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 LIMITATIONS TABLE** below and further discussed in the **DERIVATION AND DISCUSSION OF INTERIM AND/OR FINAL EFFLUENT LIMITATIONS** section below.

Missouri or Mississippi River [10 CSR 20-7.015(2)]	<input checked="" type="checkbox"/>
Lake or Reservoir [10 CSR 20-7.015(3)]	<input checked="" type="checkbox"/>
Losing [10 CSR 20-7.015(4)]	<input checked="" type="checkbox"/>
Metropolitan No-Discharge [10 CSR 20-7.015(5)]	<input type="checkbox"/>
Special Stream [10 CSR 20-7.015(6)]	<input type="checkbox"/>
Subsurface Water [10 CSR 20-7.015(7)]	<input type="checkbox"/>
All Other Waters [10 CSR 20-7.015(8)]	<input checked="" type="checkbox"/>

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

RECEIVING WATER BODY TABLE:

WATER BODY NAME	CLASS	WBID*	DESIGNATED USES**	8-DIGIT HUC***	EDU****
Burchard Hollow (losing)	U	---	General Criteria	10290201	Smith Branch Roubidoux Creek
Roubidoux Creek (losing)	C	01513	LWW; AQL; CLF; WBC (A); SCR		

* - Water body identification number (WBID)

** - Irrigation (IRR); Livestock and 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)

*** - Hydrologic unit code (HUC)

**** - Ecological Drainage Unit (EDU)

***** - Use Attainability Analysis (UAA), for above stated water body, conducted [DATE], and approved [DATE], supporting Whole Body Contact (WBC) Recreation use designation retention

***** - Use Attainability Analysis (UAA) has not been conducted for above stated water bodies

RECEIVING WATER BODY LOW-FLOW VALUES TABLE:

WATER BODY NAME	CLASS	WBID*	LOW-FLOW VALUES (CFS**)		
			1Q ₁₀ ***	7Q ₁₀ ***	30Q ₁₀ ***
Burchard Hollow (losing)	U	--	--	--	--
Roubidoux Creek (losing)	C	01513	0.1	0.1	1.0

* - Water body identification number (WBID)

** - Cubic feet per second (CFS)

*** - Average minimum flow for one (1) consecutive calendar day that has a probable recurrence interval of once-in-ten (10) calendar years (1Q₁₀); Average minimum flow for seven (7) consecutive calendar days that has a probable recurrence interval of once-in-ten (10) calendar years (7Q₁₀); Average minimum flow for 30 (30) consecutive calendar days that has a probable recurrence interval of once-in-ten (10) calendar years (30Q₁₀)

RECEIVING WATER BODY MONITORING REQUIREMENTS: No receiving water monitoring requirements recommended at this time.

MIXING CONSIDERATIONS: Mixing Zone: Not Allowed per Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-7.031(4)(A)4.B.(I)(a)], Water Quality, Water Quality Standards, Specific Criteria, For mixing zones, Streams with seven (7)-day

Q₁₀ low flows of less than 0.1 cfs Mixing zone. Zone of Initial Dilution: Not Allowed per MCWC regulation [10 CSR 20-7.031(4)(A)4.B.(I)(b)], Water Quality, Water Quality Standards, Specific Criteria, For mixing zones, Streams with seven (7)-day Q₁₀ low flows of 0.1 cfs, Zone of initial dilution

Part IV – Rationale and Derivation of Effluent Limitations, and Permit Conditions

ALTERNATIVE EVALUATIONS FOR NEW FACILITIES: As per Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-7.015(4)(A)], Water Quality, Effluent Regulations, Effluent Limitations for Losing Streams, 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.

Applicable. Facility located on a site that discharges to a Losing Stream as defined by Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-2.010(36)], Definitions, Losing stream, and [10 CSR 20-7.031(1)(N)], Water Quality, Water Quality Standards, Definitions, Losing Stream

Not Applicable. Facility does not discharge to a Losing Stream as defined by Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-2.010(36)], Definitions, Losing Streams, and [10 CSR 20-7.031(1)(N)], Water Quality, Water Quality Standards, Definitions, Losing stream

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

; New facility. Backsliding does not apply

; All limits in this Fact Sheet are at least as protective as those previously established; therefore, backsliding does not apply

; Interim and/or final effluent limitations in this operating permit for the reissuance of this general operating permit and/or operating permit conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Act, and [40 CFR Part 122.44], Protection of Environment, Environmental Protection Agency [EPA], Water Programs, EPA Administered Permit Programs: The National Pollutant Discharge Elimination System [NPDES], Permit Conditions, Establishing limitations, standards, and other permit conditions (applicable to State NPDES programs)

ANTIDEGRADATION: In accordance with Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-7.031(2)], Water Quality, Water Quality Standards, Antidegradation, the Department shall 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 and/or modification. No degradation proposed and no further review necessary

New and/or expanded discharge. As per Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-7.031(2)(D)], Water Quality, Water Quality Standards, Antidegradation, the three (3) levels of protection provided by the antidegradation policy in subsections (A), (B) and (C) of this section shall be implemented according to procedures developed by the Department. On April 20, 2007, the MCWC approved the *Missouri Antidegradation Rule and Implementation Procedure* (Antidegradation Rule), which is applicable to new or upgraded/expanded facilities. The implementation of the Antidegradation Rule occurred on August 31, 2008. Any construction permit application or other applicable permit applications submitted prior to August 31, 2008, will not be required to have an Antidegradation Review

; Master General Permit Antidegradation Review conducted during template development

APPLICABLE PERMIT PARAMETERS: Interim and/or final effluent parameters contained in a Fact Sheet and Missouri State Operating Permits (MSOPs) are obtained from a Technology Based Effluent Limit (TBEL), Missouri Clean Water Commission (MCWC) regulations [10 CSR 20-7.015], Water Quality, Effluent Regulations, and [10 CSR 20-7.031], Water Quality, Water Quality Standards, previous MSOPs and from operating permit applications.

AREA-WIDE WASTE TREATMENT MANAGEMENT AND CONTINUING AUTHORITY: As per Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-6.010(3)(B)], Permits, Construction and Operating Permits, Continuing Authorities: "... 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:".

BIO-SOLIDS, SLUDGE AND SEWAGE SLUDGE: Bio-solids are solid materials resulting from wastewater treatment that meet federal and state criteria for beneficial uses (i.e., fertilizer). Sludge is any solid, semi-solid or liquid waste generated from a municipal, commercial or industrial wastewater treatment plant; water supply treatment plant; air pollution control facility; or any other such waste having similar characteristics and effect. 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(es); 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.

Applicable (renewal and/or modification to existing operating permit). Permittee has proposed to land apply sludge and bio-solids. Facility approved to land apply per MSOP, Part B., Standard Conditions, Part III, Sludge and Biosolids from Domestic Wastewater Treatment Facilities, and a Department-approved bio-solids management plan

Applicable (renewal and/or modification to existing operating permit). Permittee has proposed that sludge and bio-solids are to be removed by a contract hauler for this facility

Applicable (new operating permit). Permittee has proposed that sludge and bio-solids are not to be removed by a contract hauler for this facility. Permittee has proposed to land apply the sludge and bio-solids as per MSOP, Part B., Standard Conditions, Part III, Sludge and Biosolids from Domestic Wastewater Treatment Facilities. The Department has reviewed and approved permittee's bio-solids management plan, and therefore, permittee and/ or facility is approved to land apply said sludge and bio-solids as a means of treatment or disposal.

Not applicable. This term and/or condition not applicable to permittee for this specific facility

COMPLIANCE AND ENFORCEMENT: Enforcement is the action taken by the Department's Division of Environmental Quality's Water Protection Program's Water Pollution Control Branch's Compliance and Enforcement Section to bring an entity into compliance with the Missouri Clean Water Law (MCWL); it's implementing Missouri Clean Water Commission (MCWC) regulations; and/or any terms and conditions of an operating permit. The primary purpose of the enforcement activity in the Department's Division of Environmental Quality's Water Protection Program's Water Pollution Control Branch's Compliance and Enforcement Section is to resolve violations and return the entity to compliance.

Applicable; Not applicable. Permittee and/or facility not currently under the Department's Division of Environmental Quality's Water Protection Program's Water Control Pollution Branch's Compliance and Enforcement Section enforcement action. Facility issued Notice of Violation # 18711SE on January 27, 2010, for Missouri State Operating Permit (MSOP), Missouri Clean Water Commission (MCWC) regulation and Missouri Clean Water Law (MCWL) violations. Facility appeared to have returned to compliance as of a follow-up environmental compliance inspection conducted March 8, 2010

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 Publicly-Owned Treatment Works (POTW), or combination of POTW, operated by the same authority and/or municipality, with a total design flow greater than (>) five-point-zero (5.0) million gallons per day (MGD) and receiving industrial wastes that interfere with or pass through the POTW or are otherwise subject to the pretreatment standards. Pretreatment programs can also be required at a POTW/municipality with a design flow less than (<) 5.0 MGD if needed to prevent interference with operations or pass through. Several special conditions pertaining to permittee's and/or facility's pretreatment program may be included in an operating permit, and are as follows:

- Implementation and enforcement of the pretreatment 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

Applicable. This permittee and/or facility have an approved pretreatment program in accordance with the requirements of [40 CFR Part 403] and Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-6.100], Permits, General Pretreatment Regulation, and said permittee and/or facility is expected to implement and enforce its approved pretreatment program

Not applicable. Permittee and/or facility, at this time, not required to have a pretreatment program or do not have a Department-approved pretreatment program

PUBLIC NOTICE OF COVERAGE FOR AN INDIVIDUAL FACILITY: The need for an individual public notification process shall be

determined and identified in a general operating permit per Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-6.020(1)(C)5.], Permits, Public Participation, Hearings and Notice to Governmental Agencies, Public Participation, Public Notice for General Permits.

Applicable. As new general operating permits are created, the need for individual facility public notification process shall be determined and identified in the general operating permit. Public Notice required since facility was previously permitted under a site-specific operating permit

Not applicable. As new general permits are created, the need for individual facility public notification process shall be determined and identified in the general permit. Public Notice determined not to be required

REASONABLE POTENTIAL ANALYSIS (RPA): Federal regulation [40 CFR Part 122.44(d)(1)(i)], Protection of Environment, Environmental Protection Agency [EPA], Water Programs, EPA Administered Permit Programs: The National Pollutant Discharge Elimination System [NPDES], Permit Conditions, Establishing limitations, standards, and other permit conditions (applicable to State NPDES programs), Water quality standards and State requirements, 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)], referenced above, if the Department permit writer determines that any give pollutant has the reasonable potential to cause, or contribute to an in-stream excursion above the Water Quality Standard, the operating permit must contain effluent limitations for that pollutant.

Applicable. A Reasonable Potential Analysis (RPA) conducted on appropriate parameters

Not applicable. A Reasonable Potential Analysis (RPA) not conducted for this facility. Data not available to conduct RPA for the Ammonia parameter (no monitoring required by previous operating permit)

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–Five (5)-day (BOD₅) and Total Suspended Solids (TSS) for Publicly-Owned Treatment Works (POTW)/municipalities (see the United States Environmental Protection Agency’s (US EPA’s) Web site for interpretation of percent removal requirements for National Pollutant Discharge Elimination System (NPDES) Permit Application Requirements for Publicly-Owned Treatment Works and Other Treatment Works Treating Domestic Sewage at: www.epa.gov/fedrgstr/EPA-WATER/1999/August/Day-04/w18866.htm.

Applicable. Secondary Treatment (85% removal) per [40 CFR Part 133.102(a)(3) and (b)(3)], Protection of Environment, Secondary Treatment Regulation, Secondary treatment, BOD₅ and SS. Facility is a Publicly-Owned Treatment Works (POTW)

Applicable. Equivalent to Secondary Treatment (65% removal) per [40 CFR Part 133.105(a)(3) and (b)(3)], Protection of Environment, Secondary Treatment Regulation Treatment equivalent to secondary treatment, BOD₅ and SS

Applicable. Facility not a Publicly Owned Treatment Works (POTW); however, influent monitoring is being required to determine percent removal

Not applicable. Influent monitoring not being required for this facility to determine percent removal

SANITARY SEWER OVERFLOWS (SSOs), BYPASSES, INFLOW AND INFILTRATION (I&I) – PREVENTION/REDUCTION: Sanitary Sewer Systems (SSSs) are municipal wastewater collection systems that convey domestic, commercial and industrial wastewater, and limited amounts of infiltrated groundwater and stormwater [i.e., inflow and infiltration (I&I)] to a Publicly-Owned Treatment Works (POTW). SSSs are not designed to collect large amounts of stormwater runoff from precipitation events. Untreated or partially treated discharges from SSSs are commonly referred to as Sanitary Sewer Overflows (SSOs). SSOs have a variety of causes including: blockages; line breaks; sewer defects that allow excess stormwater and ground water to overload SSS; lapses in sewer system operation and maintenance; inadequate sewer design and construction; power failures; and vandalism. A SSO is defined as an untreated or partially treated sewage release from a SSS. SSOs can occur at any point in an SSS, during dry weather or wet weather. SSOs include overflows that reach waters of the state. SSOs also include overflows out of manholes and onto city streets, sidewalks and other terrestrial locations. SSSs can back up into buildings including private residences. When sewage backups are caused by problems in the publicly-owned portion of an SSS, said sewage backups are considered SSOs.

Applicable. Permittee and/or facility required to develop or implement a program for maintenance and repair of the collection system and shall be required in this MSOP by either means of a Special Condition or Schedule of Compliance (SOC). In addition, the Department considers the development of this program as an implementation of this condition

At this time, the Department recommends the United States Environmental Protection Agency’s (US EPA’s) *Guide for Evaluating Capacity, Management, Operation and Maintenance (CMOM) Programs At Sanitary Sewer Collection*

Systems (Document # EPA 305-B-05-002). The *CMOM* identifies some of the criteria used by the US EPA to evaluate a collection system's management, operation and maintenance, and was intended for use by the US EPA, state, regulated community and/or third party entities. The *CMOM* is applicable to small, medium and large systems; both public and privately owned; and both regional and satellite collection systems. The *CMOM* does not substitute for the Federal Clean Water Act, the Missouri Clean Water Law (MCWL), Missouri Clean Water Commission (MCWC) regulations, and both federal and state regulations, as said *CMOM* is not a regulation.

Not applicable. Permittee and/or facility not required to develop and/or implement a program for maintenance and repair of the collection system; however, it is a violation of the Missouri Clean Water Law and associated MCWC regulations to allow untreated wastewater to discharge to waters of the state

At this time, the Department recommends the United States Environmental Protection Agency's (US EPA's) *Guide for Evaluating Capacity, Management, Operation and Maintenance (CMOM) Programs At Sanitary Sewer Collection Systems* (Document # EPA 305-B-05-002). The *CMOM* identifies some of the criteria used by the US EPA to evaluate a collection system's management, operation and maintenance, and was intended for use by the US EPA, state, regulated community and/or third party entities. The *CMOM* is applicable to small, medium and large systems; both public and privately owned; and both regional and satellite collection systems. The *CMOM* does not substitute for the Federal Clean Water Act, the Missouri Clean Water Law (MCWL), Missouri Clean Water Commission (MCWC) regulations, and both federal and state regulations, as said *CMOM* is not a regulation.

SCHEDULE OF COMPLIANCE (SOC): A schedule of remedial measures included in an operating permit, including an enforceable sequence of interim requirements (actions, operations or milestone events) leading to compliance with the Missouri Clean Water Law (MCWL), and implementing Missouri Clean Water Commission (MCWC) regulations, and/or the terms and conditions of an operating permit.

Applicable. The time given for effluent limitations of this operating permit listed under Paragraph A., Effluent Limitations and Monitoring Requirements, via Interim and/or Final Effluent Limitations, were established in accordance with Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-7.031(10)], Water Quality, Water Quality Standards, Compliance with Water Quality Based Limitations

Not applicable. This operating permit does not contain a Schedule of Compliance (SOC)

STORMWATER POLLUTION PREVENTION PLAN (SWPPP): In accordance with [40 CFR 122.44(k)], Protection of Environment, Environmental Protection Agency [EPA], EPA Administered Permit Programs: The National Pollutant Discharge Elimination System [NPDES], Permit Conditions, Establishing limitations, standards, and other permit conditions, Best Management Practices [BMPs], BMPs are required 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 United States Environmental Protection Agency's (US EPA's) *Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices* [EPA 832-R-92-006] (Storm Water Management), Best Management Practices (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(es), activity(ies), or physical structure(s). Additionally, in accordance with the Stormwater Management, a Stormwater Pollution Prevention Plan (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 Stormwater Pollution Prevention Plan (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 SWPPP

Not applicable. At this time, permittee and/or facility not required to develop and implement a Stormwater Pollution Prevention Plan (SWPPP)

VARIANCE: As per the Missouri Clean Water Law (MCWL), Section 644.061.4, RSMo, variances shall be granted for such period of time and under such terms and/or conditions as shall be specified by the Missouri Clean Water Commission (MCWC) in its order. Said variance(s) may be extended by affirmative action of the MCWC. In no event shall the variance(s) be granted for a period of time greater than is reasonably necessary for complying with the MCWL, Sections 644.006-644.141, RSMo, or any standard, rule or MCWC regulation promulgated pursuant to the MCWL, Sections 644.006-644.141, RSMo.

Applicable; Not applicable. This operating permit not drafted under premises of a petition for variance(s)

WASTELOAD ALLOCATIONS (WLA) FOR INTERIM AND/OR FINAL EFFLUENT LIMITATIONS: As per Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-2.010(78)], Definitions, Waste load allocation, the amount of pollutant each discharger is allowed by the department to release into a given stream after the department has determined total amount of pollutant that may be discharged into that stream without endangering its water quality.

Applicable ; Wasteload allocations (WLAs) calculated where applicable using water quality criteria or water quality model results and the dilution equation below:

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

Where C = downstream concentration

C_s = upstream concentration

Q_s = upstream flow

C_e = effluent concentration

Q_e = effluent flow

Chronic wasteload allocations (WLAs) were determined using applicable chronic water quality criteria (CCC: criteria continuous concentration) and stream volume of flow at the edge of the mixing zone (MZ). Acute WLAs were determined using applicable water quality criteria (CMC: criteria maximum concentration) and stream volume of flow at the edge of the zone of initial dilution (ZID). Water quality based maximum daily and average monthly interim and/or final effluent limitations were calculated using methods and procedures outlined in the United States Environmental Protection Agency's (US EPA's) "Technical Support Document For Water Quality-based Toxics Control" (EPA/505/2-90-001).

Not applicable. Wasteload allocations (WLAs) not calculated

WASTELOAD ALLOCATIONS (WLA) MODELING: There are two (2) 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 WQBELs must be used.

Applicable. A wasteload allocations (WLA) study including modeling was submitted to the Department by _____. The wasteload allocations (WLA) study determined that the (parameter) for _____.

Not applicable. A wasteload allocations (WLA) study was either not submitted or determined not applicable by Department staff

WATER QUALITY STANDARDS: Per Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-7.031(3)], Water Quality, Water Quality Standards, General Criteria, shall be applicable to all waters of the state at all times including mixing zones. Additionally, [40 CFR 122.44(d)(1)], Protection of Environment, Environmental Protection Agency [EPA], EPA Administered Permit Programs: The National Pollutant Discharge Elimination System [NPDES], Permit Conditions, Establishing limitations, standards, and other permit conditions, Water quality standards and State requirements, directs the Department to establish, in each NPDES operating permit, 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) TESTING: A Whole Effluent Toxicity (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.

Applicable. In accordance with the Clean Water Act (CWA) [§101(a)(3)], requiring Whole Effluent Toxicity (WET) testing is reasonably appropriate for site-specific MSOPs for discharges to waters of the state issued under the National Pollutant Discharge Elimination System (NPDES). Furthermore, WET testing is a means by which the Department determines that Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-7.031(3)(D), (F) and (G)], Water Quality, Water Quality Standards, General Criteria, are being met by the permitted facility. In addition to justification for WET testing, WET tests are required under MCWC regulation [10 CSR 20-6.010(8)(A)4.], Construction and Operating Permits, Terms and Conditions of Permits, to be performed by specialists who are properly trained in conducting WET testing according to the methods prescribed by the Federal Government as referenced in [40 CFR Part 136], Protection of Environment, Environmental Protection Agency, Water Programs, Guidelines Establishing Test Procedures for the Analysis of Pollutants. WET testing shall be required by all facilities meeting the following criteria:

; Facility designated Major

- Facility continuously or routinely exceeds its design flow
- Industrial facility that alters production process throughout the year
- Facility handles large quantities of toxic substances, or substances that are toxic in large amounts
- Facility has interim and/or final effluent Water Quality-based Effluent Limitations (WQBELs) for toxic substances (Total Residual Chlorine) [other than ammonia (NH₃)]
- Facility is a Publicly-Owned Treatment Works (POTW), municipality or domestic discharger with a design flow greater than or equal to (≥) twenty-two-thousand-five-hundred (22,500) gallons per day (gpd)
- Facility is a Publicly-Owned Treatment Works (POTW), municipality or domestic discharger with a design flow less than (<) (≥) twenty-two-thousand-five-hundred (22,500) gallons per day (gpd)
- Other

Not applicable. At this time, permittee and/or facility not required to conduct Whole Effluent Toxicity (WET) testing for this facility

303(d) LIST AND 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 recreation (WBC) (such as swimming), maintaining fish and other aquatic life (AQL), and providing drinking water for people (DWS), livestock and wildlife watering (LWW). 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 Total Maximum Daily Load (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.

Applicable. First classified water body [NAME] listed on the [YEAR] Missouri 303(d) List for [POLLUTANT] (source: [NAME])

Facility not considered to be a source of the above listed pollutant(s) or not considered to contribute to the impairment of the above referenced water body

Facility considered to be a source of the above listed pollutant(s), considered to contribute to the above listed pollutant(s), considered to contribute or has the potential to contribute to the impairment of the above referenced water body

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

Part V – Interim and/or Effluent Limits Determination

ALL OUTFALLS

EFFLUENT LIMITATIONS TABLE:

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS GENERAL PERMIT LIMITATIONS
NON-STORMWATER	---	---	---	---	---	---	---
FLOW	GPD	1	*	N/A	*	NO	N/A
TOTAL SUSPENDED SOLIDS (TSS)	MG/L	1	70	N/A	70	NO	N/A
OIL & GREASE	MG/L	1	15	N/A	10	NO	N/A
PH	SU	1	**	N/A	**	NO	N/A
STORMWATER	---	---	---	---	---	---	---
FLOW	GPD	1	*	N/A	*	NO	N/A
SETTLABLE SOLIDS	ML/L/H R	1	1.5	N/A	1.0	NO	N/A
OIL AND GREASE	MG/L	1	15	N/A	10	NO	N/A
PH	SU	1	**	N/A	**	NO	N/A

* Monitoring requirement only

** pH measured in pH standard units (SU) and is not to be averaged. pH limited to the range of 6.5-9.0 pH SUs

Basis for Limitations Codes:

1. State or Federal Regulation/Law
2. Water Quality Standard (includes Reasonable Potential Analysis (RPA))
7. Antidegradation Policy
8. Water Quality Model

3. Water Quality Based Effluent Limits
4. Lagoon Policy
5. Ammonia Policy
6. Dissolved Oxygen Policy

9. Best Professional Judgment
10. Total Maximum Daily Load (TMDL) or Permit in lieu of TMDL
11. Whole Effluent Toxicity (WET) Test Policy

ALL OUTFALLS – DERIVATION AND DISCUSSION OF INTERIM AND/OR FINAL EFFLUENT LIMITATIONS:

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)], Protection of Environment, Environmental Protection Agency [EPA], EPA Administered Permit Programs: The National Pollutant Discharge Elimination System [NPDES], Permit Conditions, Establishing limitations, standards, and other permit conditions (applicable to state NPDES programs), Monitoring requirements, the volume of effluent discharged from each outfall is required to assure compliance with Missouri State Operating Permit (MSOP) interim and/or final effluent limitations. If permittee is unable to obtain effluent flow, then it is permittee’s responsibility to inform the Department, which may require an operating permit modification submittal.
- **Total Suspended Solids (TSS).** Final effluent limitations reassessed, verified to still be protective of receiving water body’s water quality retained from previous Master General Permit (70 mg/L maximum monthly average and 70 mg/L daily maximum) per Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-7.031(4)(H)], Water Quality, Water Quality Standards, Specific Criteria, Solids.
- **Oil and Grease.** Final effluent limitations reassessed, verified to still be protective of receiving water body’s water quality and retained from previous Master General Permit. Conventional pollutant and protection of aquatic life (10 mg/L maximum monthly average and 15 mg/L daily maximum) per Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-7.031, Table A], Water Quality, Water Quality Standards, Criteria for Designated Uses.
- **pH.** Final effluent limitations reassessed, verified to still be protective of receiving water body’s water quality and retained from previous Master General Permit. Water contaminants shall not cause pH to be outside the range of 6.5 to 9.0 per Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-7.031(4)(E)], Water Quality, Water Quality Standards, Specific Criteria, pH.
- **Settleable Solids.** Final effluent limitations reassessed, verified to still be protective of receiving water body’s water quality and retained from previous Master General Permit (1.0 mL/L/hr maximum monthly average and 1.5 mL/L/hr daily maximum) per Missouri Clean Water Commission (MCWC) regulation [10 CSR 20-7.031(4)(H)], Water Quality, Water Quality Standards, Specific Criteria, Solids.
- **Minimum Sampling and Reporting Frequency Requirements.** If no discharge occurs, facility shall report as “no-discharge” for reporting period.

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
NON-STORMWATER (NOTE 1)	ONCE PER QUARTER	ONCE PER QUARTER
FLOW	ONCE PER QUARTER	ONCE PER QUARTER
TOTAL SUSPENDED SOLIDS (TSS)	ONCE PER QUARTER	ONCE PER QUARTER
OIL AND GREASE	ONCE PER QUARTER	ONCE PER QUARTER
pH*	ONCE PER QUARTER	ONCE PER QUARTER
STORMWATER (NOTE 2)	ONCE PER YEAR	ONCE PER YEAR
FLOW	ONCE PER YEAR	ONCE PER YEAR
SETTLEABLE SOLIDS**	ONCE PER YEAR	ONCE PER YEAR
OIL AND GREASE	ONCE PER YEAR	ONCE PER YEAR
pH*	ONCE PER YEAR	ONCE PER YEAR

* pH measured in pH standard units (SU) and is not to be averaged. pH limited to the range of 6.5-9.0 pH SUs
 ** An emergency exceedence of final effluent limitations for Settleable Solids is authorized due to precipitation exceeding the highest 1-in-10-year, 365-day rainfall or the highest 25-year, 24-hour storm event. The burden of proof lies with permittee to document that the precipitation event occurred. This exemption from final effluent limitations does not apply to dry weather flows such as dewatering of pits

Note 1 – Non-stormwater discharges shall include wastewater generated from process-related activities such as truck washing, and all dry-weather discharges from processing plants and mine pit dewatering. Once per quarter is the minimum sampling frequency requirement for this parameter. If samples are collected on a more frequent basis, the average of the sample results may be submitted. Sample once per quarter in the months of March, June, September and December. Submit discharge monitoring report by the 28th of the following month

Note 2 – The annual report for stormwater discharge monitoring is due by October 28th of each calendar year. Sampling may occur in any month. Once per year is the minimum sampling frequency requirement for this parameter. If samples are collected on a more frequent basis, the average of the sample results may be submitted

Part VI – 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 (MCWC), proposes to issue an operating permit(s) subject to certain effluent limitations, schedules, and special conditions contained herein and within the operating permit. Proposed determinations are tentative pending public comment.

PUBLIC NOTICE: As per the Missouri Clean Water Law, Missouri Clean Water Commission (MCWC) regulations, and the federal Clean Water Act, persons wishing to comment on Missouri State Operating Permits (MSOPs) are directed to do so by a Department-approved Public Notice coversheet. This Public Notice coversheet is attached to a Missouri State Operating Permit during the Public Notice period.

; The Public Notice period for the master general operating permit is tentatively scheduled to begin on June 16, 2006, or is in process

; The Public Notice period for the master general operating permit was from June 16, 2006, through July 16, 2006. No responses received or responses to the Public Notice of this general operating permit do not warrant the modification of interim and/or final effluent limitations and/or major modifications to the terms and conditions of this general operating permit

; The Public Notice period for this site-specific operating permit is tentatively scheduled to begin on December 3, 2010, or is in process

; The Public Notice period for this site- specific operating permit was from December 3, 2010, through January 2, 2011. No responses received or responses to the Public Notice of this general operating permit do not warrant the modification of interim and/or final effluent limitations and/or major modifications to the terms and conditions of this general operating permit

DATE OF INITIAL FACT SHEET: JUNE 12, 2006

COMPLETED BY: Division of Environmental Quality, Water Protection Program, Water Pollution Control Branch Staff

DATE OF REVISED FACT SHEET: AUGUST 20, 2010, NOVEMBER 23, 2010 AND JANUARY 19, 2011

COMPLETED BY:

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