

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-0130184
Owner:	Tyson Foods Inc.
Address:	2210 W. Oaklawn Drive, Springdale, AR 72765
Continuing Authority:	Same as Above
Address:	Same as Above
Facility Name:	Tyson Foods Inc. - Monett
Facility Address:	800 County Road, Monett MO 65708
Legal Description:	See page two (2)
UTM (X/Y):	See page two (2)
Receiving Stream:	See page two (2)
First Classified Stream and ID:	See page two (2)
USGS Basin & Sub-watershed No.:	See page two (2)

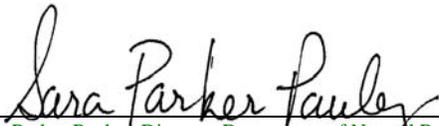
is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

See page two (2)

This permit authorizes only wastewater 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 Section 644.051.6 of the Law.

December 17, 2010 May 22, 2012
Effective Date (Revised)


Sara Parker Pauley, Director, Department of Natural Resources

December 16, 2015
Expiration Date


John Madras, Director, Water Protection Program

FACILITY DESCRIPTION (Continued):

Outfall #001: Poultry processing facility – SIC #2015

Discontinued. This outfall was combined into Outfall #004. For record management purposes the outfall will retain its number.

Outfall #002: Poultry processing facility – SIC #2015

Discontinued. This outfall was combined into Outfall #004. For record management purposes the outfall will retain its number.

Outfall #003: Poultry processing facility – SIC #2015

Discontinued. This outfall was combined into Outfall #004. For record management purposes the outfall will retain its number.

Outfall #004: Poultry processing facility – SIC #2015

Legal description: SE¼, SW¼, Sec. 32, T26N, R27W, Barry County

UTMS: 418586 / 4085963

Receiving Stream: Unnamed Tributary to Clear Creek (U)

First Classified Stream and ID: Clear Creek (C) (03239) 303 (d)

USGS Basin & Sub-watershed No.: (11070207-030001)

Storm water Discharge only.

Flow = 231,638 sq feet * 0.013 feet/day*7.48gallons/ft³ = 22,524 gpd

Actual Flow is dependent upon rainfall

Outfall #005: Poultry processing facility – SIC #2015

Legal description: NE¼, SW¼, Sec. 32, T26N, R27W, Barry County

UTMS: 418595 / 4086147

Receiving Stream: Unnamed Tributary to Clear Creek (U)

First Classified Stream and ID: Clear Creek (C) (03239) 303 (d)

USGS Basin & Sub-watershed No.: (11070207-030001)

Storm water discharge from driveway of truck unloading entrance.

Flow = 1,764 sq feet * 0.013 feet/day*7.48gallons/ft³ = 171.5 gpd

Actual Flow is dependent upon rainfall

Outfall #006: Poultry processing facility – SIC #2015

Legal description: NE¼, SW¼, Sec. 32, T26N, R27W, Barry County

UTMS: 418611 / 4086317

Receiving Stream: Unnamed Tributary to Kelly Creek (U)

First Classified Stream and ID: Clear Creek (C) (03239) 303 (d)

USGS Basin & Sub-watershed No.: (11070207-030001)

Storm water Discharge only.

First Flush System. Approximately 1 inch of rainfall or 88,000 gallons will be diverted to Monett Wastewater Treatment Facility. Anything above this amount will be discharge through the outfall

Flow = 142,442 sq feet * 0.013 feet/day*7.48gallons/ft³ = 13,425 gpd

Actual Flow is dependent upon rainfall

Outfall #007: Poultry processing facility – SIC #2015

Legal description: NE¼, SW¼, Sec. 32, T26N, R27W, Barry County

UTMS: 418665 / 4086529

Receiving Stream: Unnamed Tributary to Kelly Creek (U)

First Classified Stream and ID: Clear Creek (C) (03239) 303 (d) (All Outfalls)

USGS Basin & Sub-watershed No.: (11070207-030001) (All Outfalls)

Storm water Discharge only.

Flow = 177,513 sq feet * 0.013 feet/day*7.48gallons/ft³ = 17,261 gpd

Actual Flow is dependent upon rainfall

Outfall #008: Poultry processing facility – SIC #2015

Discontinued. This outfall was combined into Outfall #007. For record management purposes the outfall will retain its number.

Outfall #009: Poultry processing facility – SIC #2015

Discontinued. This outfall was combined into Outfall #007. For record management purposes the outfall will retain its number.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective **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 #004</u>						
Flow	GPD	*		*	once/quarter**	24 hr. estimate
Biochemical Oxygen Demand ₅	mg/L	45		30	once/quarter**	grab
Total Suspended Solids	mg/L	*		*	once/quarter**	grab
pH – Units	SU	***		***	once/quarter**	grab
<i>E. coli</i>	#/100 ml	*		*	once/month**	grab
Total Phosphorus as P	mg/L	*		*	once/quarter**	grab
Rainfall (Note 1)	inches	*		*	daily	grab
Settleable Solids	mL/L/hr	****		****	once/quarter**	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE July 28, 2012. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM, OR WATER WITH A VISIBLE SHEEN. THERE SHALL BE NO DISCHARGE OF WATER THAT CAUSES A DISCERNABLE COLOR CHANGE IN THE RECEIVING STREAM.

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #006</u>						
Flow	GPD	*		*	once/quarter **	24 hr. estimate
Biochemical Oxygen Demand ₅	mg/L	*		*	once/quarter**	grab
Total Suspended Solids	mg/L	*		*	once/quarter**	grab
pH – Units	SU	*		*	once/quarter**	grab
<i>E. coli</i>	#/100 ml	*		*	once/quarter**	grab
Total Phosphorus as P	mg/L	*		*	once/quarter**	grab
Settleable Solids	ml/L/h	****		****	once/quarter**	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE July 28, 2012. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM, OR WATER WITH A VISIBLE SHEEN. THERE SHALL BE NO DISCHARGE OF WATER THAT CAUSES A DISCERNABLE COLOR CHANGE IN THE RECEIVING STREAM.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)				PAGE NUMBER 4 of 7		
				PERMIT NUMBER MO-0130184		
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 #007</u>						
Flow	GPD	*		*	once/quarter**	24 hr. estimate
Biochemical Oxygen Demand ₅	mg/L	45		30	once/quarter**	grab
Total Suspended Solids	mg/L	*		*	once/quarter**	grab
pH – Units	SU	***		***	once/quarter**	grab
<i>E. coli</i>	#/100 ml	*		*	once/quarter**	grab
Total Phosphorus as P	mg/L	*		*	once/quarter**	grab
Settleable Solids	ml/L/h	****		****	once/quarter**	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>July 28, 2012</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM, OR WATER WITH A VISIBLE SHEEN. THERE SHALL BE NO DISCHARGE OF WATER THAT CAUSES A DISCERNABLE COLOR CHANGE IN THE RECEIVING STREAM.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

* Monitoring requirement only.

** **All samples shall be collected from a discharge resulting from a precipitation event greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable precipitation event. For Quarterly sampling, it shall occur once per quarter in the periods of January through March, April through June, July through September, and October through December, please note that monitoring reports shall be submitted no later than the 28th day of the month following the monitoring period (April 28th, July 28th, October 28th, and January 28th, respectively). If a precipitation event does not occur within the reporting period, report as no discharge.**

*** pH is measured in pH units and is not to be averaged. The pH for all facilities except lagoons is limited to the range of 6.5-9.0 pH units.

**** See Special Condition number eleven (#11)

Note 1 - The total precipitation for the event sampled must be reported. Only one Outfall needs to include rain data. For record keeping purposes, rainfall will be recorded under Outfall #004.

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.
 - (d) Address any situation where the discharge prevents full maintenance of the beneficial or designated uses of the receiving stream. This includes violations of General Criteria, which are applicable at all times including mixing zones.

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. There shall be no discharge of toxic pollutants at levels which would cause an exceedance of water quality standards.
4. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established 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.
5. Report as no-discharge when a discharge does not occur during the report period.
 6. The discharge of any pollutant not documented in the application for this permit is prohibited. This includes any chemical, biological material, radiological material, or any other material that may affect the ability of the receiving stream to fully support its beneficial and designated uses.
 7. There shall be no discharge of a solid waste to waters of the state.
 8. It is a violation of the Missouri Clean Water Law to fail to pay fees associated with this permit (644.055 RSMo).
 9. The permittee shall develop and implement a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must be kept on-site. The SWPPP must be reviewed and updated, if needed, every year 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 #10 below.

C. SPECIAL CONDITIONS (continued)

- (b) The SWPPP must include a schedule for once per month site inspections and brief written reports. These reports must be kept on file with the SWPPP at the facility. The inspections must include observation and evaluation of BMP effectiveness, noting any deficiencies. Deficiencies must be documented within 24 hours of discovery. Corrective action to address deficiencies must be documented within fourteen (14) days and shall be included with the written report. 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.

10. 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.
- (e) Provide sediment and erosion control sufficient to prevent or control sediment loss off of the property. This could include the use of straw bales, silt fences, or sediment basins, if needed, to comply with effluent limits.
- (f) Provide good housekeeping or any other best management practice to reduce the *E. coli* in the storm water discharge leaving the site.
- (g) Try to prevent storm water from coming into contact with polluting materials. This is generally more effective, and less costly, than trying to remove pollutants from stormwater
- (h) You must divert, infiltrate, reuse, contain, or otherwise reduce stormwater runoff, to minimize pollutants in your discharges.
- (i) The following are specific BMPs for Outfall #004 and its drainages.
 - (1) Drainages of outfall 004 shall not contain any live poultry hauling trailers.
 - (2) Drainages of outfall 004 shall not contain any fluid leaking refrigerator trailers. Refrigerated trailers containing ice-packed meat products shall be parked on the drainage pad that drains to a concrete storage tank that is directed to the City of Monett's WWTF.
 - (3) Utilize structures, already in place, to reduce the velocity of stormwater in the drainage of outfall 004.
 - (4) Utilize the existing settling basin to reduce solids in the stormwater discharged at outfall 004.
- (j) The following are specific BMPs for Outfall #005
 - (1) Areas exposed to regulated stormwater that discharge to outfall #005 shall be Disinfected once per day during plant operation. This excludes days when precipitation is actively falling during the entire work day.
 - (2) Areas exposed to regulated stormwater shall be cleared of debris via sweeping prior to disinfection.

11. The following Benchmark Limitation is considered necessary to protect existing water quality and should not be exceeded during discharges resulting from a precipitation event exceeding 0.1 inches during a 24 hour period. The BMPs at the facility should be designed to meet this limit during rainfall event up to the 1-in-10 year, 24 hour rain event. The Benchmark does not constitute numeric effluent limitations. **A benchmark exceedance alone, therefore, is not a permit violation.** If a sample exceeds a benchmark concentration a review of the facilities SWPPP and BMPs shall take place to determine whether any improvement or additional controls are needed to reduce that pollutant in the storm water discharge. The facility may demonstrate via a Corrective Action Report that the benchmark limitation cannot be achieved through the application of BMPs representing the available technology and the benchmark is not feasible because no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice. Upon concurrence with a Corrective Action report by the Department, the facility may return to normal quarterly reporting. This evaluation must be kept on file with the SWPPP. Failure to evaluate and improve BMPs to address a Benchmark Limitation exceedance is a permit violation.

Parameter	Benchmark
Settleable Solids	1.5 mL/L/hr

12. The purpose of the SWPPP and the BMPs listed herein is the prevention of pollution of waters of the state. A deficiency of a BMP means it was not effective in preventing pollution [10 CSR 20-2.010(56)] of waters of the state, and corrective actions means the facility took steps to eliminate the deficiency.
13. A copy of the SWPPP shall be submitted to the Department upon request.
14. Upon renewal of this permit, E. coli data from outfalls 004, 006, and 007 will be considered by the Department to determine the appropriateness of a performance based benchmarks. If appropriate, performance based benchmarks will be applied to outfalls 004, 006, and 007 upon renewal.

Missouri Department of Natural Resources
Statement of Basis
Tyson Foods Inc. - Monett
MSOP #: MO-0130184
Barry County

A Statement of Basis (Statement) gives pertinent information regarding the applicable regulations and rationale for the development of the NPDES Missouri State Operating Permit (operating permit). This Statement includes Wasteload Allocations, Water Quality Based Effluent Limitations, and Reasonable Potential Analysis calculations as well as any other calculations that effect the effluent limitations of this operating permit. This Statement does not pertain to operating permits that include sewage sludge land application plans and variance procedures, and does not include the public comment process for this operating permit.

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

Part I – Facility Information

Facility Type: (NON-POTW)
Facility SIC Code(s): 2015
Facility Description:

Outfall #001 - #003 – Discontinued and combined into Outfall #004.

Outfall #004 – Storm water discharge only

Outfall #005 – Storm water Discharge

Outfall #006 – Storm water Discharge only

Outfall #007 – Storm water Discharge only

Outfall #008 - #009 – Discontinued and combined with Outfall #007

OUTFALL(S) TABLE:

OUTFALL	DESIGN FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE	DISTANCE TO CLASSIFIED SEGMENT (MI)
004	0.034	Primary	Storm water	~2.56
005	0.0050	Primary	Storm water	~2.56
006	0.021	Primary	Storm water	~2.56
007	0.027	Primary	Storm water	~2.56

Water Quality History: Missing September 2010 for Outfall #005. Total Residual Chlorine for Outfall #005 was not reported for June 2010.

Comments: The facility has placed a first flush system in for Outfall #006. The first flush will handle the first 88,000 gpd of storm water discharge which will be sent to Monett Wastewater Treatment Facility. This is approximately up to one inch rain event. If discharge is still occurring after this, samples will be collected.

This facility is a poultry processing facility that is located in a losing area. Clear Creek is on the 303 (d) list for Low DO, and nutrients. The facility is approximately 2.5 miles upstream of this impaired creek. Per EPA in an April 29, 2011 letter, the Dissolved Oxygen parameter cannot be delisted from the 303(d) list because the exceedance of the Dissolved Oxygen Water Quality Standard requires that the water body be listed for that impairment. Nutrients will also remain on the impaired 303(d) list.

The composite sampling was removed to make sampling easier. If the facility wants the composite sampling added back to the permit, the Department can add it back in.

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. As per [10 CSR 20-9.010(2)(A)], requirements for operation by certified personnel shall apply to all wastewater treatment systems, if applicable, as listed below:

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.

- Missouri or Mississippi River [10 CSR 20-7.015(2)]:
- Lake or Reservoir [10 CSR 20-7.015(3)]:
- Losing [10 CSR 20-7.015(4)]:
- Metropolitan No-Discharge [10 CSR 20-7.015(5)]:
- Special Stream [10 CSR 20-7.015(6)]:
- Subsurface Water [10 CSR 20-7.015(7)]:
- 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*	8-DIGIT HUC	EDU**
Unnamed Tributary to Clear Creek and Unnamed Tributary to Kelly Creek	U	N/A	General Criteria and Losing	11070207	Ozark / Neosho
Clear Creek	C	03239	AQL, LWW, WBC-B		

* - 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).

** - Ecological Drainage Unit

RECEIVING STREAM(S) LOW-FLOW VALUES TABLE:

RECEIVING STREAM (U, C, P)	LOW-FLOW VALUES (CFS)		
	1Q10	7Q10	30Q10
Unnamed Tributary to Clear Creek	0	0	0
Unnamed Tributary to Kelly Creek	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.

- Backsliding proposed in this statement for the reissuance of this permit conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Act, and 40 CFR Part 122.44. New information has been gathered.

AREA-WIDE WASTE TREATMENT MANAGEMENT & CONTINUING AUTHORITY:

As per [10 CSR 20-6.010(8)(A)10.], when a Continuing Authority under paragraph 10 CSR 20-6.010(3)(B)1. or 2. is expected to be available for connection within the next five (5) years, any operating permit issued to a permittee under this paragraph, located within the service area of the paragraph (3)(B)1. or 2. facility, shall contain the following special condition... This language is contained in Special Condition #3 of this operating permit.

ANTIDegradation:

Policies which ensure protection of water quality for a particular water body where the water quality exceeds levels necessary to protect fish and wildlife propagation and recreation on and in the water. This also includes special protection of waters designated as outstanding natural resource waters. Antidegradation requirements are consistent with 40 CFR 131.12 that outlines methods used to assess activities that may impact the integrity of a water and protect existing uses. This policy may compel the state to maintain a level of water quality above those mandated by criteria.

Not Applicable ;

Renewal no degradation proposed and no further review necessary.

APPLICABLE PERMIT PARAMETERS:

Effluent parameters for conventional, non-conventional, and toxic pollutants have been obtained from the previous NPDES operating permit for this facility, technology based effluent limits, and from appropriate sections of the renewal application.

Bio-solids, Sludge, & 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, or 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; 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:

Action taken by the Department to resolve violations of the Missouri Clean Water Law, its implementing regulations, and/or any terms and condition of an operating permit.

Not Applicable ;

The permittee/facility is not under enforcement action and is considered to be in compliance with the Missouri Clean Water Law, its implementing regulations, and/or any terms and condition of an operating permit.

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):

Limitations must control all pollutants or pollutant parameters that are or may be discharged at a level which will cause, have reasonable potential to cause, or contribute to an excursion above the Missouri Water Quality Standards.

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). Please see the United States Environmental Protection Agency's (EPA) website for interpretation of percent removal requirements for National Pollutant Discharge Elimination System Permit Application Requirements for Publicly Owned Treatment Works and Other Treatment Works Treating Domestic Sewage @ www.epa.gov/fedrgstr/EPA-WATER/1999/August/Day-04/w18866.htm

Not Applicable ;

This wastewater treatment facility is not a POTW. Influent monitoring is not being required to determine percent removal.

SANITARY SEWER OVERFLOWS (SSOs), BYPASSES, INFLOW & INFILTRATION (I&I) – PREVENTION/REDUCTION:

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 .

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 *Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices* [EPA 832-R-92-006] (Storm Water Management), 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. Ensure that the BMPs are reducing the amount of pollutants leaving the site. *E. coli* numbers should reduce as the BMPs are improved to address this and other high contaminants leaving the site.

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 to 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:

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.

- 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

Applicable ;

Clear Creek is listed on the 2008 Missouri 303(d) List for low Dissolved Oxygen and nutrients.

– This facility may be considered to be a source of or has the potential to contribute to the above listed pollutant(s). Even though currently the impaired list the City of Monett as the source, to improve the stream other facilities may have to be included in the future. This facility is located upstream of where the impairment begins.

Adjusted Design Flow:

10 CSR 20-6.011(1)(B)1. provides for an Adjusted Design Flow when calculating permit fees on human sewage treatment facilities. If the average flow is sixty percent (60%) or less than the system's design flow, the average flow may be substituted for the design flow when calculating the permit fee on human sewage treatment facilities. If the facility's actual average flow is consistently 60% or less than the permitted design flow, the facility may qualify for a reduction in your fee when:

- The facility has a valid permit, or has applied for re-issuance, is in compliance with the terms, conditions and effluent limitations of the permit, and the facility has a good compliance history; and
- Flow is not expected to exceed 60% of design flow for the remaining term of the existing operating permit.

Not Applicable ;

Municipalities, POTWs, and Industrials do not qualify for Adjusted Design flows.

Outfall #004– Main Facility Outfall EFFLUENT LIMITATIONS TABLE:

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	MGD	1	*		*	NO	S
BOD ₅	MG/L	8	45		30	YES	15, 10
TSS	MG/L	8	*		*	NO	S
PH (S.U.)	SU	1	6.5-9.0		6.5-9.0	NO	S
SETTLABLE SOLIDS	ML/L/H	8	**		**	YES	1.0, 0.5
ESCHERICHIA COLI****	***	1, 8	*		*	NO	S
TOTAL PHOSPHORUS	MG/L	8	*		*	NO	S
RAINFALL	INCHES	8	*		*	NO	S
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

* - Monitoring requirement only

** Benchmark set, see below

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

**** Ecoli monitoring is not required at outfall 005 at this time.

N/A – Not applicable

S – Same as previous operating permit

Basis for Limitations Codes:

- | | |
|--|-----------------------------------|
| 1. State or Federal Regulation/Law | 6. Antidegradation Policy |
| 2. Water Quality Standard (includes RPA) | 7. Water Quality Model |
| 3. Water Quality Based Effluent Limits | 8. Best Professional Judgment |
| 4. Lagoon Policy | 9. TMDL or Permit in lieu of TMDL |
| 5. Ammonia Policy | 10. WET test Policy |

OUTFALL #004– 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.

Biochemical Oxygen Demand (BOD₅).

The limit was retained from the last renewal cycle. The limit does not impose any additional impairments to the stream. Through Best Management Practices the facility must reduce the amount of BOD loading going into the stream as much as possible.

Total Suspended Solids (TSS).

Monitoring only and should reduce the about of solids from leaving the site by improving the BMPs at the site.

pH. – pH is to be maintained at or above 6.5 pH units. for Daily Maximum and Monthly Average, as per [10 CSR 20-7.015]. pH is measured in pH units and is not to be averaged.

Escherichia coli (E. coli).

Outfall 004 Monitoring only. The facility is in the process of improving their BMPs for this site. Due to the construction and implementation of the BMPs, monitoring only is appropriate at this time. During the next renewal evaluation of Discharge Monitoring Reports for this parameter will be done to determine a performance based Benchmark. Therefore monthly sampling required at outfall 004. Since the facility will be conducting daily disinfecting of exposed areas discharging to outfall 005 when in operation, Ecoli monitoring is not required at outfall 005 at this time.

Total Phosphorus

Monitoring only. The stream is impaired with nutrients and Total Phosphorus is present at the site. Through BMPs the facility will need to look at ways to reduce the pollutant.

Settleable Solids

Benchmark established. 1.5 ml/L/h.

Rainfall

Due to the discharge occurring only during storm water events, a daily record of rainfall is needed to ensure sampling is occurring properly.

Minimum Sampling and Reporting Frequency Requirements.

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
FLOW	QUARTERLY	QUARTERLY
BOD ₅	QUARTERLY	QUARTERLY
TSS	QUARTERLY	QUARTERLY
pH	QUARTERLY	QUARTERLY
SETTLEABLE SOLIDS	QUARTERLY	QUARTERLY
<i>E. COLI</i>	MONTHLY	QUARTERLY
RAINFALL	DAILY	QUARTERLY
TOTAL PHOSPHORUS	QUARTERLY	QUARTERLY

Outfall #006

EFFLUENT LIMITATIONS TABLE:

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	MGD	1	*		*	NO	S
BOD ₅	MG/L	8	*		*	NO	S
TSS	MG/L	8	*		*	NO	S
pH (S.U.)	SU	8	*		*	NO	S
SETTLABLE SOLIDS	MG/L	8	**		**	YES	*
ESCHERICHIA COLI	***	8	*		*	NO	*
TOTAL PHOSPHORUS	MG/L	8	*		*	NO	S
RAINFALL	INCHES	8	*		*	NO	S
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

* - Monitoring requirement only

** Benchmark set, see below

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

N/A – Not applicable

S – Same as previous operating permit

Basis for Limitations Codes:

- | | |
|--|-----------------------------------|
| 1. State or Federal Regulation/Law | 6. Antidegradation Policy |
| 2. Water Quality Standard (includes RPA) | 7. Water Quality Model |
| 3. Water Quality Based Effluent Limits | 8. Best Professional Judgment |
| 4. Lagoon Policy | 9. TMDL or Permit in lieu of TMDL |
| 5. Ammonia Policy | 10. WET test Policy |

OUTFALL #006 – 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.

Biochemical Oxygen Demand (BOD₅).

Monitoring only and should reduce the about of solids from leaving the site by improving the BMPs at the site and evaluate the first flush system.

Total Suspended Solids (TSS).

Monitoring only and should reduce the about of solids from leaving the site by improving the BMPs at the site and evaluate the first flush system.

pH.

Monitoring only and should reduce the about of solids from leaving the site by improving the BMPs at the site and evaluate the first flush system.

Escherichia coli (E. coli).

Monitoring only. The facility is in the process of improving their BMPs for this site. Due to the construction and implementation of the BMPs, monitoring only is appropriate at this time. During the next renewal evaluation of Discharge Monitoring Reports for this parameter will be done to determine a performance based Benchmark.

Settleable Solids

Benchmark established. 1.5 ml/L/h.

Total Phosphorus

Monitoring only. The stream is impaired with nutrients and Total Phosphorus is present at the site. Through BMPs the facility will need to look at ways to reduce the pollutant.

Minimum Sampling and Reporting Frequency Requirements.

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
FLOW	QUARTERLY	QUARTERLY
BOD ₅	QUARTERLY	QUARTERLY
TSS	QUARTERLY	QUARTERLY
PH	QUARTERLY	QUARTERLY
SETTLEABLE SOLIDS	QUARTERLY	QUARTERLY
<i>E. COLI</i>	QUARTERLY	QUARTERLY
TOTAL PHOSPHORUS	QUARTERLY	QUARTERLY

Outfall #007

EFFLUENT LIMITATIONS TABLE:

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	MGD	1	*		*	NO	S
BOD ₅	MG/L	8	45		30	YES	15, 10
TSS	MG/L	8	*		*	NO	S
PH (S.U.)	SU	1	6.5-9.0		6.5-9.0	NO	S
SETTLEABLE SOLIDS	ML/L/ H	8	**		**	YES	1.0 / 0.5
ESCHERICHIA COLI	***	1, 8	*		*	NO	*
TOTAL PHOSPHORUS	MG/L	8	*		*	NO	S
RAINFALL	INCHES	8	*		*	NO	S
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

* - Monitoring requirement only

** Benchmark set, see below

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

N/A – Not applicable

S – Same as previous operating permit

Basis for Limitations Codes:

- | | |
|--|-----------------------------------|
| 1. State or Federal Regulation/Law | 6. Antidegradation Policy |
| 2. Water Quality Standard (includes RPA) | 7. Water Quality Model |
| 3. Water Quality Based Effluent Limits | 8. Best Professional Judgment |
| 4. Lagoon Policy | 9. TMDL or Permit in lieu of TMDL |
| 5. Ammonia Policy | 10. WET test Policy |

OUTFALL #007, – 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.

Biochemical Oxygen Demand (BOD₅).

The limit was retained from the last renewal cycle. The limit does not impose any additional impairments to the stream. Through Best Management Practices the facility must reduce the amount of BOD loading going into the stream as much as possible.

Total Suspended Solids (TSS).

Monitoring only and should reduce the about of solids from leaving the site by improving the BMPs at the site.

pH.

– pH is to be maintained at or above 6.5 pH units. for Daily Maximum and Monthly Average, as per [10 CSR 20-7.015]. pH is measured in pH units and is not to be averaged.

Escherichia coli (E. coli).

Monitoring only. The facility is in the process of improving their BMPs for this site. Due to the construction and implementation of the BMPs, monitoring only is appropriate at this time. During the next renewal evaluation of Discharge Monitoring Reports for this parameter will be done to determine a performance based Benchmark.

Total Phosphorus

Monitoring only. The stream is impaired with nutrients and Total Phosphorus is present at the site. Through BMPs the facility will need to look at ways to reduce the pollutant.

Settleable Solids

Benchmark established. 1.5 ml/L/h.

Minimum Sampling and Reporting Frequency Requirements.

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
FLOW	QUARTERLY	QUARTERLY
BOD ₅	QUARTERLY	QUARTERLY
TSS	QUARTERLY	QUARTERLY
PH	QUARTERLY	QUARTERLY
SETTLEABLE SOLIDS	QUARTERLY	QUARTERLY
<i>E. COLI</i>	QUARTERLY	QUARTERLY
RAINFALL	DAILY	QUARTERLY
TOTAL PHOSPHORUS	QUARTERLY	QUARTERLY

Sampling Frequency Justification:

Combining the 4 outfalls together, their actual flow combined is 204,256 (based on a two year average). Per Appendix U, sample frequency can be based on actual flow and a sample should be taken every 25,000 gpd. This would come to 8 samples a year. Placing 8 samples in the permit can be accomplished however the data obtained from quarterly sampling appears appropriate to determine if the BMPs the facility has established is reducing the pollutants appropriately.

Sampling Type Justification

Due to the discharge being storm water only, grab sample is more appropriate.

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.

Date of Factsheet: November 1, 2011

Kristen Pattinson
WP Permitting and Assistance Unit
(417) 891-4300
kristen.pattinson@dnr.mo.gov

Revised February 24, 2012
Chris Wieberg
Environmental Specialist
Water Protection Program, Permits and Engineering
(573)526-5781
chris.wieberg@dnr.mo.gov