# 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, 92<sup>nd</sup> Congress) as amended.

Permit No.	MO-0108618
Owner:	George's, Inc.
Address:	P.O. Box G, Springdale, AR, 72765
Continuing Authority:	Same as above
Address:	Same as above
Facility Name:	George's Inc., Cassville Processing Plant
Facility Address:	9066 State Highway W, Cassville, MO 65625
Legal Description:	See page 2 to 7
UTM Coordinates:	See page 2 to 7
Receiving Stream:	See page 2 to 7
First Classified Stream and ID:	See page 2 to 7
USGS Basin & Sub-watershed No.:	See page 2 to 7

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

# FACILITY DESCRIPTION

SIC # 2015 - This facility is a poultry processing facility. Major operations consist of a hatchery, slaughtering, processing, and a feed mill. The processing plant includes evisceration, chilling/grading, sanitation, and second processing. Wastewater is generated during source water softening. Domestic wastewater is generated at the processing plant, hatchery and feed mill.

The process wastewater from the hatchery, slaughtering, processing and feed mill operations and wastewater from water softening of source water are treated by pretreatment screening, chlorination, and dissolved air flotation, followed by storage in aerated basins, non-aerated basins and then land application/irrigation. Domestic wastewater from the processing plant is sent to a septic tank before entering the storage basin and land application/irrigation system. Domestic wastewater from the hatchery and feedmill is treated by septic tanks and tile fields. Some of the second processing wastewater is transported to an offsite disposal facility.

This permit authorizes only land application of wastewater and sludge 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.

February 1, 2020 Effective Date

March 31, 2023 **Expiration Date** 

Edward B. Galbraith, Director, Division of Environmental Quality

Chris Wieberg, Director, Water Projection Program

Two, 2 cell no-discharge lagoons with land application. Each lagoon has one aerated and one non-aerated cell. Wastewater can be pumped between cells and lagoons. Land application occurs from any cell. Feathers and offal are rendered off-site and industrial sludge is removed by contract hauler.

Design Flows:	2.8 MGD
Average Flows:	2.0 MGD
Storage Basin Freeboard:	2.0 feet for each cell
Storage Volume:	65,800,000 gallons total storage of all cells
Design-Dry Weather Flows:	33 days
Design-1-in-10 Year Flows:	24 days
Permitted Feature #001 -East lagoon	, two cell lagoon
Legal Description:	Sec.35, T24N, R28W, Barry County

566.55, 12 III, 1626 IV, Bully County
X = 417619, Y = 4067471
Tributary to Pogue Creek (losing)
8-20-13 MUDD V1.0 (C) (3960) (losing)
(11070207-0702)

<u>Permitted Feature #01A</u> – West lagoon, two cell lagoon				
Legal Description:	Sec.35, T24N, R28W, Barry County			
UTM Coordinates:	X = 416645, Y = 4066986			
Receiving Stream:	Tributary to Pogue Creek (losing)			
First Classified Stream and ID:	8-20-13 MUDD V1.0 (C) (3960) (losing)			
USGS Basin & Sub-watershed No.:	(11070207-0702)			

Permitted Feature #002 - Stormwater Outfall #002 - Eliminated 2010. Discharge no longer authorized.

Permitted Feature #003 - Stormwater Outfall - Eliminated 2010.

Permitted Feature #004 - Stormwater Outfall - Eliminated 2010.

Permitted Feature #005 - Stormwater Outfall - Eliminated 2010.

Permitted Feature #006 - Stormwater Outfall - Eliminated 2010.

Permitted Feature #007 - Stormwater Outfall - Eliminated 2010.

Permitted Feature #008 - Stormwater Outfall - Eliminated 2019.

Permitted Feature #009 - Stormwater Outfall - Eliminated 2019.

Permitted Feature #010 - Stormwater Outfall - Eliminated 2019.

Permitted Feature #011 - Stormwater Outfall - Eliminated 2019.

Permitted Feature #012 - Outfall #012 - Eliminated 2010.

Permitted Feature #013 – MW#1 – groundwater monitoring well Legal Description: SE<sup>1</sup>/4, SE<sup>1</sup>/4, Sec. 35, T24N, R28W, Barry County, UTM coordinates, X= 418091, Y= 4067146

Permitted Feature #014 – MW#5 – groundwater monitoring well Legal Description: NE<sup>1</sup>/<sub>4</sub>, SE<sup>1</sup>/<sub>4</sub>, Sec. 35, T24N, R28W, Barry County, UTM coordinates, X= 418087, Y= 4067538

<u>Permitted Feature #015</u> – MW#7 – groundwater monitoring well Legal Description: NE<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>, Sec. 35, T24N, R28W, Barry County, UTM coordinates, X= 417189, Y= 4068453

Permitted Feature #016 - MW#2 - Eliminated 2010. Groundwater monitoring well removed from service.

Permitted Feature #017 - MW#3 - Eliminated 2010. Groundwater monitoring well removed from service.

Permitted Feature #018 - MW#4 - Eliminated 2010. Groundwater monitoring well removed from service.

Permitted Feature #019 - MW#6 - Eliminated 2010. Groundwater monitoring well removed from service.

Permitted Feature #020 – MW#8 – groundwater monitoring well Legal Description: NE¼, NE¼, Sec. 35, T24N, R28W, Barry County, UTM coordinates, X= 418065, Y= 4068404

Permitted Feature #021 - MW#9 - Eliminated 2019.

Permitted Feature #022 – MW#12 – Eliminated 2010. Groundwater monitoring well removed from service.

Permitted Feature #023 – MW#19 – Eliminated 2010. Groundwater monitoring well removed from service.

Permitted Feature #024 - MW#17 - Eliminated 2019.

Permitted Feature #025 – MW#18 – groundwater monitoring well Legal Description: SE<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub>, Sec. 02, T23N, R28W, Barry County, UTM coordinates, X= 418125, Y= 4066157

Permitted Feature #026 - MW#20 - Eliminated 2010.

Permitted Feature #027 - MW#21 - Eliminated 2010.

Permitted Feature #028 - MW#21A - Eliminated 2010.

Permitted Feature #029 – MW#22 – Eliminated 2010.

Permitted Feature #030 – MW#24 – Eliminated 2019.

Permitted Feature #031 – MW#25 – groundwater monitoring well Legal Description: SE<sup>1</sup>/4, SE<sup>1</sup>/4, Sec. 34, T24N, R28W, Barry County, UTM coordinates, X= 416266, Y= 4067220

Permitted Feature #032 – MW#26 – groundwater monitoring well Legal Description: NE<sup>1</sup>/<sub>4</sub>, SE<sup>1</sup>/<sub>4</sub>, Sec. 34, T24N, R28W, Barry County, UTM coordinates, X= 416266, Y=4067509

Permitted Feature #033 – MW#27 – groundwater monitoring well Legal Description: SW<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub>, Sec. 02, T23N, R28W, Barry County, UTM coordinates, X= 417597, Y= 4066193

Permitted Feature #034 – MW#28 – groundwater monitoring well Legal Description: SE<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub>, Sec. 10, T23N, R28W, Barry County, UTM coordinates, X= 416123, Y= 4064601

<u>Permitted Feature #035</u> – MW#29 – groundwater monitoring well Legal Description: NE<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub>, Sec. 10, T23N, R28W, Barry County, UTM coordinates, X= 416135, Y= 4065064

Permitted Feature #036 – MW#30 – groundwater monitoring well Legal Description: NE<sup>1</sup>/<sub>4</sub>, SE<sup>1</sup>/<sub>4</sub>, Sec. 03, T23N, R28W, Barry County, UTM coordinates, X= 416175, Y= 4065778

Permitted Feature #037 - MW#31 - Eliminated 2019.

Permitted Feature #038 - MW#23 - Eliminated 2010.

Permitted Feature #039 - MW#33 - Eliminated 2010.

Permitted Feature #040 - MW#35 - Eliminated 2010

Permitted Feature #041 - MW#32 - Eliminated 2019.

<u>Permitted Feature #042</u> – MW#36 – groundwater monitoring well Legal Description: SW¼, SW¼, Sec. 1, T23N, R28W, Barry County, UTM coordinates, X= 418363, Y= 4065298

Permitted Feature #043 – MW#37 – grour	ndwater monitoring well			
Legal Description: SE <sup>1</sup> /4, NE <sup>1</sup> /4, Sec. 11, T	T23N, R28W, Barry County, UTM coordinates, X= 417971, Y= 4064494			
Permitted Feature #044 – MW#34 – Eliminated 2019.				
Permitted Feature #045 – MW#38 – grour	ndwater monitoring well			
Legal Description: NW <sup>1</sup> /4, SE <sup>1</sup> /4, Sec. 11,	T23N, R28W, Barry County, UTM coordinates, X= 417550, Y= 4064104			
Permitted Feature #046 – MW#39 – grour	ndwater monitoring well			
Legal Description: NE <sup>1</sup> / <sub>4</sub> , NE <sup>1</sup> / <sub>4</sub> , Sec. 03,	T23N, R28W, Barry County, UTM coordinates, X= 416194, Y= 4066743			
Permitted Feature #047 – MW#40 – Elimi	inated 2019.			
Permitted Feature #048 – MW#41 – grour	ndwater monitoring well			
Legal Description: SE ¼, NE ¼, Sec. 03,	T23N, R28W, Barry County, UTM coordinates, X= 416178, Y= 4066157			
Irrigation Fields Receiving Stream Watershed: Design Irrigation volume per year: Actual Irrigation volume per year: Irrigation areas: Design Application rates per acre: Actual Application rates per acre: Field slopes: Equipment type: Vegetation: Application rate is based on:	Losing stream setting flowing into Pogue and Woodward Creeks. 730,000,000 gallons (including 1-in-10 year flows) 500,000,000 gallons (including 1-in-10 year flows) 1,270 acres at design loading 0.3 inch/hour; 0.4 inch/day; 3.0 inches/week; 22 inches/year 0.3 inch/hour; 0.4 inch/day; 3.0 inches/week; 15 inches/year less than 8 percent sprinklers/center pivot/traveling gun grass hay/row crops nutrient/hydraulic loading rate			
Permitted Feature #049 – Fixed Irrigation	System, Northeast Site – 260 acres			
Legal Description: Sec. 35, T24N, R28W	, Barry County, UTM coordinates, X= 417801, Y= 4067966			
Permitted Feature #050 – Traveling Gun S	System, SE-1 – 10 acres			
Legal Description: Sec. 02, T23N, R28W	, Barry County, UTM coordinates, X= 418084, Y= 4066681			
Permitted Feature #051 – Traveling Gun S	System, SE-2 – 14 acres			
Legal Description: Sec. 02, T23N, R28W	, Barry County, UTM coordinates, X= 417869, Y= 4066780			
Permitted Feature #052 – Traveling Gun S	System, S-7 – 8 acres			
Legal Description: Sec. 02, T23N, R28W	, Barry County, UTM coordinates, X= 416965, Y= 4066775			
Permitted Feature #053 – Traveling Gun S	System, S-8 – 10 acres			
Legal Description: Sec. 03, T23N, R28W	, Barry County, UTM coordinates, X= 416250, Y= 4066613			
Permitted Feature #054 – Traveling Gun S	System, S-9 – 4 acres			
Legal Description: Sec. 03, T23N, R28W	, Barry County, UTM coordinates, X= 416404, Y= 4066746			
Permitted Feature #055 – Traveling Gun S	System, S-10 – 7 acres			
Legal Description: Sec. 03, T23N, R28W	, Barry County, UTM coordinates, X= 416233, Y= 4065830			
Permitted Feature #056 – Traveling Gun S	System, S-11 – 3 acres			
Legal Description: Sec. 02, T23N, R28W	, Barry County, UTM coordinates, X= 417050, Y= 4065382			
Permitted Feature #057 – Traveling Gun S	System, S-12 – 3 acres			
Legal Description: Sec. 02, T23N, R28W	, Barry County, UTM coordinates, X= 417258, Y= 4066384			
Permitted Feature #058 – Traveling Gun S	System, S-15 – 7 acres			
Legal Description: Sec. 11, T23N, R28W	, Barry County, UTM coordinates, X= 416806, Y= 4064604			
<u>Permitted Feature #059</u> – Traveling Gun S	System, N-3 – 10 acres			
Legal Description: Sec. 35, T24N, R28W	, Barry County, UTM coordinates, X= 416929, Y= 4067399			

<u>Permitted Feature #060</u> – Traveling Gun System, N-4 – 9 acres Legal Description: Sec. 35, T24N, R28W, Barry County, UTM coordinates, X= 417175, Y= 4067923
<u>Permitted Feature #061</u> – Traveling Gun System, N-5 – 10 acres Legal Description: Sec. 34, T24N, R28W, Barry County, UTM coordinates, X= 416345, Y= 4068291
<u>Permitted Feature #062</u> – Traveling Gun System, N-6 – 3 acres Legal Description: Sec. 34, T24N, R28W, Barry County, UTM coordinates, X= 416330, Y= 4066963
<u>Permitted Feature #063</u> – Traveling Gun System, N-7 – 7 acres Legal Description: Sec. 35, T24N, R28W, Barry County, UTM coordinates, X= 416994, Y= 4067018
Permitted Feature #064 – Center Pivot System, #1 – 156 acres Legal Description: Sec. 35, T24N, R28W, Barry County, UTM coordinates, X= 416654, Y= 4067818
<u>Permitted Feature #065</u> – Center Pivot System, #2 – 24 acres Legal Description: Sec. 34, T24N, R28W, Barry County, UTM coordinates, X= 416428, Y= 4067440
<u>Permitted Feature #066</u> – Center Pivot System, #3 – 22 acres Legal Description: Sec. 02, T23N, R28W, Barry County, UTM coordinates, X= 417296, Y= 4066670
Permitted Feature #067 – Center Pivot System, #4 – 57 acres Legal Description: Sec. 02, T23N, R28W, Barry County, UTM coordinates, X= 416676, Y= 4066595
<u>Permitted Feature #068</u> – Center Pivot System, #5 – 18 acres Legal Description: Sec. 03, T23N, R28W, Barry County, UTM coordinates, X= 416312, Y= 4066285
<u>Permitted Feature #069</u> – Center Pivot System, #6 – 75 acres Legal Description: Sec. 02, T23N, R28W, Barry County, UTM coordinates, X= 417011, Y= 4066152
<u>Permitted Feature #070</u> – Center Pivot System, #7 – 42 acres Legal Description: Sec. 03, T23N, R28W, Barry County, UTM coordinates, X= 416511, Y= 4065995
<u>Permitted Feature #071</u> – Center Pivot System, #8 – 63 acres Legal Description: Sec. 02, T23N, R28W, Barry County, UTM coordinates, X= 416815, Y= 4065613
<u>Permitted Feature #072</u> – Center Pivot System, #9 – 30 acres Legal Description: Sec. 11, T23N, R28W, Barry County, UTM coordinates, X= 417314, Y= 4065098
<u>Permitted Feature #073</u> – Center Pivot System, #10 – 20 acres Legal Description: Sec. 11, T23N, R28W, Barry County, UTM coordinates, X= 416994, Y= 4065109
<u>Permitted Feature #074</u> – Center Pivot System, #11 – 121 acres Legal Description: Sec. 11, T23N, R28W, Barry County, UTM coordinates, X= 416509, Y= 4064928
<u>Permitted Feature #075</u> – Center Pivot System, #12 – 24 acres Legal Description: Sec. 35, T24N, R28W, Barry County, UTM coordinates, X= 417355, Y= 4067075
<u>Permitted Feature #076</u> – Center Pivot System, #13 – 49 acres Legal Description: Sec. 02, T23N, R28W, Barry County, UTM coordinates, X= 417685, Y= 4066492
Permitted Feature #077 – Center Pivot System, #14 – 41 acres Legal Description: Sec. 02, T23N, R28W, Barry County, UTM coordinates, X= 418080, Y= 4065986
Permitted Feature #078 – Center Pivot System, #15 – 13 acres Legal Description: Sec. 01, T23N, R28W, Barry County, UTM coordinates, X= 418278, Y= 4065470

Permitted Feature #079 – Center Pivot System, #16 – 90 acres Legal Description: Sec. 11, T23N, R28W, Barry County, UTM coordinates, X= 417567, Y= 4064466

Permitted Feature #080 – Center Pivot System, #17 – 36 acres Legal Description: Sec. 11, T23N, R28W, Barry County, UTM coordinates, X= 417044, Y= 4064681

<u>Permitted Feature #081</u> – Center Pivot System, #18 – 24 acres Legal Description: Sec. 11, T23N, R28W, Barry County, UTM coordinates, X= 417074, Y= 4064294

Permitted Feature #SM1 – Removed from permit.

Permitted Feature #SM2 – Removed from permit.

## A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PERMITTED FEATURE #001, #01A	Table A-1           Storage Basin Limitations And Monitoring Requirements					
The permittee is not authorized to discharge from this feature, except for emergency discharges in accordance with Table A-4. The permittee is authorized to operate from outfall(s) with serial number(s) as specified in the application for this permit. These operation and monitoring requirements shall become effective upon issuance and remain in effect until expiration of the permit:						
			FINAL EFFLUENT LIMITATIONS		MONITORING REQUIREMENTS	
EFFLUENT PARAMET	EFFLUENT PARAMETERS UNITS		Daily Maximum	Monthly Average	Measurement Frequency	Sample Type
Limit Set: OM			-	_	-	
STORAGE BASIN MONITORING	ũ					
Freeboard $\Phi$		feet	*		once/month	measured
Precipitation		inches	*		daily	total
MONITORING R	EPORTS SHALL	BE SUBMITT	ED <u>Monthly</u> ; The I	FIRST REPORT IS DU	JE MARCH 28, 2020	<u>)</u> .
THERE SHALL BE	NO DISCHARGE	E OF FLOATIN	G SOLIDS OR VISIBL	LE FOAM IN OTHER	THAN TRACE AMOUN	NTS.
Limit Set: IW						
LAND APPLIED WASTEWATER	₹¥					
Nitrate Nitrogen as N		mg/L	*		once/month	grab Ψ
Ammonia Nitrogen as N		mg/L	*		once/month	grab Ψ
Nitrogen, Total Kjeldahl		mg/L	*		once/month	grab Ψ
Phosphorous, Total		mg/L	*		once/month	grab Ψ
Oil & Grease		mg/L	*		once/month	grab Ψ
рН		SU	*		once/month	grab Ψ
MONITORING R THERE SHALL BE	MONITORING REPORTS SHALL BE SUBMITTED MONTHLY; THE FIRST REPORT IS DUE MARCH 28, 2020. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.					

OUTFALLS #013, #014, #015, #020, #025,				
#031 through #036, #042, #43, #45,				
#046, #048				
Groundwater Monitoring				

## TABLE A-2 Final 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:

		MONITORING REQUIREMENTS						
EFFLUENT PARAMETERS	UNITS	DAILY	MONTHLY	MEASUREMENT	SAMPLE			
		MAXIMUM	AVERAGE	FREQUENCY	TYPE			
LIMIT SET: MW	LIMIT SET: MW							
PHYSICAL								
Groundwater Depth	feet	*	*	once/quarter◊	measured			
$\mathrm{pH}$ $^{\dagger}$	SU	*	*	once/quarter◊	grab			
Nitrate Nitrogen as N	mg/L	*	10	once/quarter◊	grab			
MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE <u>APRIL 28, 2020</u> .								

#### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (CONTINUED)

#### **PERMITTED FEATURES** #049 through #081

#### TABLE A-3 LAND APPLICATION FIELD LIMITATIONS AND MONITORING REQUIREMENTS

		FINAL EFFLUEN	T LIMITATIONS	MONITORING REOUIREMENTS		
EFFLUENT PARAMETERS	UNITS	DAILY MAXIMUM	Monthly Average	Measurement Frequency	SAMPLE TYPE	
Limit Set: LA						
WASTEWATER APPLICATION $\Sigma$						
Application Area	Acres	*		daily	total	
Application Rate	Inches/Acre	*		daily	total	
Irrigation Period	Hours	*		daily	total	
Volume Irrigated	Gallons	*		daily	total	
MONITORING REPORTS SHALL THERE SHALL BE NO DISCHA	Be Submitted <u>By</u> arge Of Floatin	Y THE 28 <sup>th</sup> Day of IG Solids Or Visi	<u>f the Month Foli</u> ible Foam In Oth	LOWING LAND APPLI ER THAN TRACE MO	<u>CATION</u> . UNTS.	
SOIL MONITORING <b>V</b>						
pH (salt) $\Xi$	SU	*		once/permit cycle	composite	
Phosphorus, Bray P1 method	ppm £	*		once/permit cycle	composite	
MONITORING REPORTS SHALL BE	SUBMITTED <u>Once</u>	E PER PERMIT CYC	<u>CLE;</u> THE FIRST REF	PORT IS DUE <u>JANUAR</u>	<u>y 28, 2022</u> .	
<b>Outfalls #001, #01A</b> Emergency Discharge		TABLE A-4 Final Monitoring Reouirements				
The permittee is authorized to discharge and 2. Such discharges shall be controll	from these specif ed, limited, and m	fied features, but on nonitored by the p	only under the con- permittee as specific	ditions listed in Spec ed below:	ial Conditions 1	
The permittee is authorized to discharge and 2. Such discharges shall be controll	from these specified, limited, and n	fied features, but on nonitored by the p	only under the com- permittee as specific MONITORING	ditions listed in Spec ed below: REQUIREMENTS	ial Conditions 1	
The permittee is authorized to discharge and 2. Such discharges shall be controll EFFLUENT PARAMETERS	from these specif ed, limited, and n UNITS	fied features, but on nonitored by the p DAILY MAXIMUM	only under the con- permittee as specific MONITORING MEASU FREQU	ditions listed in Spec ed below: REQUIREMENTS REMENT JENCY	ial Conditions 1 SAMPLE TYPE	
The permittee is authorized to discharge and 2. Such discharges shall be controll EFFLUENT PARAMETERS LIMIT SET: U	from these specif ed, limited, and n UNITS	fied features, but on nonitored by the p DAILY MAXIMUM	only under the conv permittee as specific MONITORING MEASU FREQU	ditions listed in Spec ed below: REQUIREMENTS REMENT JENCY	ial Conditions 1 SAMPLE TYPE	
The permittee is authorized to discharge and 2. Such discharges shall be controll EFFLUENT PARAMETERS LIMIT SET: U PHYSICAL	from these specif ed, limited, and n UNITS	fied features, but on nonitored by the point of DAILY MAXIMUM	only under the conv permittee as specific MONITORING MEASU FREQU	ditions listed in Spec ed below: REQUIREMENTS REMENT JENCY	ial Conditions 1 SAMPLE TYPE	
The permittee is authorized to discharge and 2. Such discharges shall be controll EFFLUENT PARAMETERS LIMIT SET: U PHYSICAL Flow	from these specif ed, limited, and n UNITS	fied features, but on an iteration of the providence of the provid	MONITORING MONITORING FREQU	ditions listed in Spec ed below: REQUIREMENTS REMENT JENCY event <sup>‡</sup>	ial Conditions 1 SAMPLE TYPE event total	
The permittee is authorized to discharge and 2. Such discharges shall be controll EFFLUENT PARAMETERS LIMIT SET: U PHYSICAL Flow Duration	from these specified, limited, and n UNITS MGD days	fied features, but on an itored by the providence of the providenc	MONITORING MONITORING MEASU FREQU	ditions listed in Spec ed below: REQUIREMENTS REMENT JENCY event <sup>‡</sup> event <sup>‡</sup>	SAMPLE TYPE event total event total	
The permittee is authorized to discharge and 2. Such discharges shall be controll EFFLUENT PARAMETERS LIMIT SET: U PHYSICAL Flow Duration CONVENTIONAL	from these specified, limited, and n UNITS MGD days	fied features, but on an itored by the providence of the providenc	only under the conversion of t	ditions listed in Spec ed below: REQUIREMENTS REMENT JENCY event <sup>‡</sup> event <sup>‡</sup>	ial Conditions 1 SAMPLE TYPE event total event total	
The permittee is authorized to discharge and 2. Such discharges shall be controll EFFLUENT PARAMETERS LIMIT SET: U PHYSICAL Flow Duration CONVENTIONAL Biological Oxygen Demand, 5 Day	from these specified, limited, and n UNITS MGD days mg/L	fied features, but on an itored by the providence of the providenc	MONITORING MONITORING MEASU FREQU	ditions listed in Spec ed below: REQUIREMENTS REMENT JENCY event <sup>‡</sup> event <sup>‡</sup>	SAMPLE TYPE event total event total grab	
The permittee is authorized to discharge and 2. Such discharges shall be controll EFFLUENT PARAMETERS LIMIT SET: U PHYSICAL Flow Duration CONVENTIONAL Biological Oxygen Demand, 5 Day Dissolved Oxygen (Minimum△)	from these specified, limited, and n UNITS MGD days mg/L mg/L	fied features, but on an itored by the providence of the providenc	MONITORING MONITORING MEASU FREQU	ditions listed in Spec ed below: REQUIREMENTS REMENT JENCY event <sup>‡</sup> event <sup>‡</sup> event <sup>‡</sup>	ial Conditions 1 SAMPLE TYPE event total event total grab grab	
The permittee is authorized to discharge and 2. Such discharges shall be controll EFFLUENT PARAMETERS LIMIT SET: U PHYSICAL Flow Duration CONVENTIONAL Biological Oxygen Demand, 5 Day Dissolved Oxygen (Minimum△) pH <sup>†</sup>	from these specified, limited, and n UNITS MGD days mg/L mg/L SU	fied features, but on an itored by the providence of the providenc	MONITORING MONITORING MEASU FREQU	ditions listed in Spec ed below: REQUIREMENTS REMENT JENCY event <sup>‡</sup> event <sup>‡</sup> event <sup>‡</sup> event <sup>‡</sup> event <sup>‡</sup>	ial Conditions 1 SAMPLE TYPE event total event total grab grab grab grab	
The permittee is authorized to discharge and 2. Such discharges shall be controll EFFLUENT PARAMETERS LIMIT SET: U PHYSICAL Flow Duration CONVENTIONAL Biological Oxygen Demand, 5 Day Dissolved Oxygen (Minimum△) pH <sup>†</sup> Total Suspended Solids	from these specified, limited, and n UNITS MGD days mg/L SU mg/L MGL	fied features, but on an itored by the providence of the providenc	MONITORING MONITORING MEASU FREQU Once/ Once/ Once/ Once/ Once/ Once/ Once/	ditions listed in Spec ed below: REQUIREMENTS REMENT JENCY event <sup>‡</sup> event <sup>‡</sup> event <sup>‡</sup> event <sup>‡</sup> event <sup>‡</sup>	ial Conditions 1 SAMPLE TYPE event total event total grab grab grab grab grab	
The permittee is authorized to discharge and 2. Such discharges shall be controll EFFLUENT PARAMETERS LIMIT SET: U PHYSICAL Flow Duration CONVENTIONAL Biological Oxygen Demand, 5 Day Dissolved Oxygen (Minimum△) pH <sup>†</sup> Total Suspended Solids Oil & Grease	from these specified, limited, and n UNITS UNITS MGD days MGD days Mg/L gU mg/L gU mg/L mg/L mg/L mg/L	fied features, but on an itored by the providence of the providenc	MONITORING MONITORING MEASU FREQU	ditions listed in Spec ed below: REQUIREMENTS REMENT JENCY event <sup>‡</sup> event <sup>‡</sup> event <sup>‡</sup> event <sup>‡</sup> event <sup>‡</sup> event <sup>‡</sup> event <sup>‡</sup> event <sup>‡</sup>	ial Conditions 1 SAMPLE TYPE event total event total grab grab grab grab grab	
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\* Monitoring requirement only

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\*\* Monitoring and reporting requirement with benchmark. See Special Conditions for additional requirements.

Φ Storage Basin freeboard shall be reported as Storage Basin water level in feet below the overflow level.

¥ Report as "No Application" when land application does not occur during the report period.

- Ψ For wastewater that is land applied, collect a grab sample from each lagoon cell and combine into one sample.
- X Reporting is only required for permitted features where land application occurred during the month. If no land application occurs at a permitted feature, no reporting is required. These are unscheduled parameters.
- ▼ Sample the upper 6 to 8 inches of soil. Composite samples shall be collected from each permitted land application site. See Section D. Land Application Condition #3(i) Soil Monitoring for additional guidance.
- $\triangle$  Report the minimum value obtained if more than one sample was taken.
- $\Xi$  Soil pH shall be maintained in a range that is optimal for plant growth.
- £ Some soils test results may be in lbs./acre. To convert to ppm multiply lbs./acre by 0.5 to get ppm.
- † pH: the facility will report the minimum and maximum values; pH is not to be averaged.
- <sup>‡</sup> Once per event means the facility must take a sample at least once per discharge event. If there was no discharge, a report is not necessary; if a discharge occurred, the facility must report all results of sampling into the eDMR system by the 28<sup>th</sup> day of the month following the completion of the discharge.
- See table below for quarterly sampling

MINIMUM QUARTERLY SAMPLING REQUIREMENTS					
QUARTER	MONTHS	EFFLUENT PARAMETERS	<b>REPORT IS DUE</b>		
First	January, February, March	Sample at least once during any month of the quarter	April 28th		
Second	April, May, June	Sample at least once during any month of the quarter	July 28th		
Third	July, August, September	Sample at least once during any month of the quarter	October 28 <sup>th</sup>		
Fourth	October, November, December	Sample at least once during any month of the quarter	January 28th		

#### **B. STANDARD CONDITIONS**

In addition to specified conditions stated herein, this permit is subject to the attached <u>Part I</u> standard conditions dated <u>August 1, 2014</u> and hereby incorporated as though fully set forth herein.

#### C. SPECIAL CONDITIONS

- 1. This permit does not authorize the discharge of wastewater or sludge. An emergency discharge is authorized when rainfall exceeds the 10-year 365-day rainfall event (chronic) or the 25-year 24-hour rainfall event (catastrophic) storm criteria. and in accordance with Land Application Condition 1 and 5, and Table A-4. Other materials, chemicals and substances not considered wastewater or sludge being treated and disposed of by the land application system are not authorized to be discharged regardless of weather conditions.
- 2. Spills, Overflows, and Other Unauthorized Discharges.
  - (a) Any spill, overflow, or other discharge(s) not specifically authorized above are unauthorized discharges.
  - (b) Should an unauthorized discharge cause or permit any contaminants to discharge or enter waters of the state, the unauthorized discharge must be reported to the regional office as soon as practicable but no more than 24 hours after the discovery of the discharge. If the spill or overflow needs to be reported after normal business hours or on the weekend, the facility must call the Department's 24 hour spill line at 573-634-2436.
  - (c) Monitoring. Any unauthorized discharge shall be monitored for the parameters in the table below at least once during the discharge event. Additional monitoring may be required by the Department on a case-by-case basis. The facility shall submit test results, along with the number of days the storage basin(s) has discharged during the month via the Electronic Discharge Monitoring Report (eDMR) Submission System by the 28<sup>th</sup> day of the month after the discharge ceases. Permittee shall monitor for the following constituents:

Constituent	Units
Effluent Flow	MGD
Biochemical Oxygen Demand <sub>5</sub>	mg/L
Total Suspended Solids	mg/L
Ammonia as N	mg/L
pH – Units	SU
Oil & Grease	mg/L
E. coli*	#/100mL
Total Nitrogen	mg/L
Total Phosphorous	mg/L

\*Sampling for E. coli is only required during the recreational months of April – October.

#### C. SPECIAL CONDITIONS (CONTINUED)

3. Electronic Discharge Monitoring Report (eDMR) Submission System.

Once the permittee is activated in the eDMR system:

- (a) Discharge Monitoring Reporting Requirements. The permittee must electronically submit compliance monitoring data via the eDMR system. In regards to Standard Conditions Part I, Section B, #7, the eDMR system is currently the only Department approved reporting method for this permit.
- (b) Programmatic Reporting Requirements. The following reports (if required by this permit) must be electronically submitted as an attachment to the eDMR system until such a time when the current or a new system is available to allow direct input of the data:
  - (1) Collection System Maintenance Annual Reports;
  - (2) Wastewater Irrigation Annual Reports;
  - (3) Any additional report required by the permit excluding bypass reporting.

After such a system has been made available by the department, required data shall be directly input into the system by the next report due date.

- (c) Other actions. The following shall be submitted electronically after such a system has been made available by the department:
  - (1) General Permit Applications/Notices of Intent to discharge (NOIs);
  - (2) Notices of Termination (NOTs);
  - (3) Bypass reporting, See Special Condition #XX for 24-hr. bypass reporting requirements.
- (d) Electronic Submissions. To access the eDMR system, use the following link in your web
- browser: https://edmr.dnr.mo.gov/edmr/E2/Shared/Pages/Main/Login.aspx.
- (e) Waivers from Electronic Reporting. The permittee must electronically submit compliance monitoring data and reports unless a waiver is granted by the department in compliance with 40 CFR Part 127. The permittee may obtain an electronic reporting waiver by first submitting an eDMR Waiver Request Form: <u>http://dnr.mo.gov/forms/780-2692-f.pdf</u>. The department will either approve or deny this electronic reporting waiver request within 120 calendar days. Only permittees with an approved waiver request may submit monitoring data and reports on paper to the Department for the period that the approved electronic reporting waiver is effective.
- 4. Reporting of Non-Detects:
  - (a) An analysis conducted by the permittee or their contracted laboratory shall be conducted in such a way that the precision and accuracy of the analyzed result can be enumerated.
  - (b) The permittee shall not report a sample result as "Non-Detect" without also reporting the detection limit of the test. Reporting as "Non-Detect" without also including the detection limit will be considered failure to report, which is a violation of this permit.
  - (c) The permittee shall report the "Non-Detect" result using the less than sign and the minimum detection limit (e.g. <10).
  - (d) Where the permit contains a Minimum Level (ML) and the permittee is granted authority in the permit to report zero in lieu of the < ML for a specified parameter (conventional, priority pollutants, metals, etc.), then zero (0) is to be reported for that parameter.
  - (e) See Standard Conditions Part I, Section A, #4 regarding proper detection limits used for sample analysis.
  - (f) When calculating monthly averages, one-half of the minimum detection limit (MDL) should be used instead of a zero. Where all data are below the MDL, the "<MDL" shall be reported as indicated in item (C).
- 5. It is a violation of the Missouri Clean Water Law to fail to pay fees associated with this permit (644.055 RSMo).
- 6. Hazardous waste regulated under the Missouri Hazardous Waste Law and regulations shall not be land applied under this permit.
- 7. Release of a hazardous substance must be reported to the department in accordance with 10 CSR 24-3.010. A record of each reportable spill shall be retained with the permit and made available to the department upon request.
- 8. The facility's SIC code(s) or description is found in 40 CFR 122.26(b)(14) and/or 10 CSR 20-6.200(2) and hence shall implement a SWPPP which must be prepared and implemented within 90 days permit issuance. The SWPPP must be kept on-site and should not be sent to the Department unless specifically requested. The SWPPP must be reviewed and updated every five years or as site conditions change (see Part III: Antidegradation Analysis and SWPPP sections in the fact sheet). 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: *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (EPA 833-B-09-002) published by the EPA in February 2009 (www.epa.gov/npdes/pubs/industrial\_swppp\_guide.pdf). The SWPPP must include:
  - (a) A listing of specific contaminants and their control measures (or BMPs) and a narrative explaining how BMPs are implemented to control and minimize the amount of contaminants potentially entering stormwater.

#### C. SPECIAL CONDITIONS (CONTINUED)

- (b) The SWPPP must include a schedule for once per month site inspections and brief written reports. The inspection report must include precipitation information for the entire period since last inspection, as well as observations and evaluations of BMP effectiveness. Throughout coverage under this permit, the facility must perform ongoing SWPPP review and revision to incorporate any site condition changes.
  - (1) Operational deficiencies must be corrected within seven (7) calendar days.
  - (2) Minor structural deficiencies must be corrected within fourteen (14) calendar days.
  - (3) Major structural deficiencies must be reported to the regional office within seven (7) days of discovery. The initial report shall consist of the deficiency noted, the proposed remedies, the interim or temporary remedies (including the general timing of the placement of the interim measures), and an estimate of the timeframe needed to wholly complete the repairs or construction. The permittee will work with the regional office to determine the best course of action, including but not limited to temporary structures to control stormwater runoff. The facility shall correct the major structural deficiency as soon as reasonably achievable.
  - (4) All actions taken to correct the deficiencies shall be included with the written report, including photographs.
  - (5) Inspection reports must be kept on site with the SWPPP and maintained for a period of five (5) years. These must be made available to Department and EPA personnel upon request.
- (c) A provision for designating an individual to be responsible for environmental matters.
- (d) A provision for providing training to all personnel involved in material handling and storage, and housekeeping of maintenance and cleaning areas. Proof of training shall be submitted on request of the Department.
- 9. The purpose of the Best Management Practices 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.
- 10. Site-wide minimum Best Management Practices (BMPs). At a minimum, the permittee shall adhere to the following:
  - (a) Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, or warehouse activities and thereby prevent the contamination of storm water from these substances.
  - (b) Provide collection facilities and arrange for proper disposal of waste products including but not limited to petroleum waste products, and solvents.
  - (c) Store all paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) so that these materials are not exposed to storm water or provide other prescribed BMPs such as plastic lids and/or portable spill pans to prevent the commingling of storm water with container contents. Commingled water may not be discharged under this permit. Provide spill prevention control, and/or management sufficient to prevent any spills of these pollutants from entering waters of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater.
  - (d) Provide good housekeeping practices on the site to keep trash from entry into waters of the state.
  - (e) Provide sediment and erosion control sufficient to prevent or control sediment loss off of the property. This could include the use of straw bales, silt fences, or sediment basins, if needed, to comply with effluent limits.
- 11. Changes in Discharges of Toxic Pollutant

In addition to the reporting requirements under \$122.41(1), all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:

- (a) That an activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, 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  $\mu$ g/L);
  - (2) Two hundred micrograms per liter (200  $\mu$ g/L) for acrolein and acrylonitrile;
  - (3) Five hundred micrograms per liter (500  $\mu$ g/L) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol;
  - (4) One milligram per liter (1 mg/L) for antimony;
  - (5) Five (5) times the maximum concentration value reported for the pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
  - (6) The notification level established by the Department in accordance with 40 CFR 122.44(f).
- (b) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
  - (1) Five hundred micrograms per liter (500  $\mu$ g/l);
  - (2) One milligram per liter (1 mg/l) for antimony;
  - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with §122.21(g)(7).
  - (4) The level established by the Director in accordance with §122.44(f).

#### C. SPECIAL CONDITIONS (CONTINUED)

- 12. The full implementation of this operating permit, which includes implementation of any applicable schedules of compliance, shall constitute compliance with all applicable federal and state statutes and regulations in accordance with §644.051.16, RSMo, and the CWA section 402(k); however, this permit may be reopened and modified, or alternatively revoked and reissued to 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 contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or controls any pollutant not limited in the permit.
- 13. All permitted features, including emergency outfalls, must be clearly marked in the field. The permitted features and land application fields shall also be marked on the aerial or topographic site map included with the Operation and Maintenance manual.
- 14. The permittee shall develop, maintain and implement an Operation and Maintenance (O&M) Manual that includes all necessary items to ensure the operation and integrity of the waste handling and land application systems, including key operating procedures, an aerial or topographic site map with the permitted features, land application fields, and irrigation buffer zones marked, and a brief summary of the operation of the facility. The O & M manual shall be made available to the operator and available to the department upon request. The O&M Manual shall be reviewed and updated at least every five years.
- 15. An all-weather access road shall be provided to the treatment facility.
- 16. Groundwater monitoring wells that are no longer used must be maintained in good condition or properly plugged in accordance with Missouri Geological Survey regulations.

#### **D. LAND APPLICATION CONDITIONS**

These special conditions do not apply to fertilizer products that have a received a current exemption under the Missouri Clean Water Law and regulations in 10 CSR 20-6.015(3)(B)8., and are land applied in accordance with that exemption.

- 1. Storage Basin.
  - (a) The berms of the storage basin(s) shall be mowed and kept free of any deep-rooted vegetation, animal dens, or other potential sources of damage to the berms.
  - (b) The facility shall ensure that adequate provisions are provided to prevent surface water intrusion into the storage basin(s) and to divert stormwater runoff around the storage basin(s) and protect embankments from erosion.
  - (c) The minimum and maximum operating water levels for the storage basin(s) shall be clearly marked. Each storage basin shall be operated so that the maximum water elevation does not exceed upper operating level except due to exceedances of the 1-in-10 year or 25-year, 24-hour storm events. Storage basins shall be lowered to the minimum operating level prior to November 30 each year. Storage basins shall be inspected monthly for structural integrity and leaks.
  - (d) Maintain at least one gate, constructed of materials comparable to the fence, must be provided to access any storage basin and provide for maintenance and mowing. The gate shall remain locked except when opened by the permittee to perform maintenance or mowing.
  - (e) Maintain at least one sign shall appear on the fence on each side of each facility. Minimum wording shall be "SEWAGE TREATMENT FACILITY KEEP OUT", in letters at least 2 inches high.
  - (f) It is a violation of this permit to place material in the emergency spillway or otherwise cause it to cease to function properly, as this may result in a catastrophic failure of the storage basin.
- 2. Land Application Equipment.
  - (a) Spray application equipment shall minimize the formation of aerosols.
  - (b) Land application equipment shall be visually inspected daily during land application to check for equipment malfunctions and leaks. The application system shall be operated so as to provide uniform distribution of wastes over the entire land application site.
  - (c) Land application equipment shall be calibrated at least once annually.
- 3. Land Application Requirements.
  - (a) If land application sites listed in this permit are also included as land application sites in another permit, the wastewater and sludge applications from other sources shall be included in the application rates in the facility description. Records of the amount and application rate of wastewater or sludge from other sources must be kept.
  - (b) Public Access Restrictions. This permit does not authorize application of wastewater to public use areas.
  - (c) Grazing and harvesting deferment. Grazing of animals or harvesting of forage crops should be deferred for up to 30 days following wastewater irrigation depending upon ambient air temperature and sunlight conditions. The following deferments shall be considered:

#### D. LAND APPLICATION CONDITIONS (CONTINUED)

- (1) During the period from May 1 to October 30 of each year, the minimum deferment from grazing or forage harvesting shall be fourteen (14) days;
- (2) During the period from November 1 to April 30 of each year, the minimum deferment from grazing or forage harvesting shall be thirty (30) days;
- (d) No land application shall occur when the soil is frozen, snow covered, or saturated. There shall be no application during a precipitation event or if a precipitation event that is likely to create runoff is forecasted to occur within 24 hours of a planned application.
- (e) Land application shall occur only during daylight hours. If the facility determines that night time irrigation is needed, the facility shall submit a night time land application plan the Department's Water Protection Program for review and approval. Night time irrigation shall only occur when the Department has approved the night time land application plan.
- (f) Land application fields shall be checked at least once daily during land application for runoff and saturated soil conditions. If observed cease land application activities. Sites that utilize spray irrigation shall monitor for the drifting of spray across property lines.
- (g) Setback distances from sensitive features. There shall be no land application within:
  - (1) 300 feet from any sinkhole, losing stream, or any other physiographic structure with a conduit to groundwater;
  - (2) 300 feet of any potable water supply well not located on the property, adequate protections shall be implemented and maintained for any potable water supply well located within the application area;
  - (3) 150 feet of any dwelling, residence, public building, or public use area (excluding roadways);
  - (4) 100 feet of any classified or unclassified gaining perennial or intermittent stream, any wetland, or any public or privately owned pond or lake;
  - (5) 50 feet inside the property line;
  - (6) the 10 year floodplain;
- (h) Wastewater application on slopes exceeding 10%:
  - (1) Initial application rate on dry soils may briefly exceed on-half (1/2) the design sustained permeability rate;
  - (2) The hourly application rate shall not exceed one-half (1/2) the design sustained permeability;
- (i) Soil Monitoring.
  - (1) Composite soil samples shall be collected every five years from each field listed in this permit where land application has occurred in the last 12 months. No land application shall occur on fields listed in this permit if soil sample results are more the five (5) years old.
  - (2) Soil sampling shall be in accordance with University of Missouri (MU) Guides G9215, Soil Sampling Pastures or G9217, Soil Sampling Hayfields and Row Crops or other methods approved by the department. The recommendation of one composite sample per 20 acres in G9215 and G9217 is not required by this permit, however, this is a useful method to identify soil fertility fluctuations in large fields due to past management practices, soil type, and variability of crop yields. There shall be at least one composite sample per 80 acres.
  - (3) Testing shall conform to Recommended Chemical Soil Testing Procedures for North Central Region (North Central Regional Research Publication 221 Revised), or Soil Testing in Missouri (MU Extension Guide EC923), or other methods approved by the department.
- (j) Wastewater land applications shall not exceed agronomic rates to ensure agricultural use of nutrients and prevent contamination of surface and groundwater. The agronomic rate is the amount of wastewater applied to a field to meet the fertilizer recommendation.
- (k) Applications shall not exceed the daily and weekly design hydraulic loading rates listed in the facility description.
- 4. Annual Nutrient Loading Rate. Land applications shall use the following protocols to determine the amount of wastewater to be applied to supply the nutrients required to meet the fertilizer recommendation. The annual nutrient loading rate may exceed the fertilizer recommendation of the crop grown by ten (10) percent.
  - (a) The fertilizer recommendation shall be based on the following:
    - (1) Realistic yield goal for each crop. Yield goals should be based on actual crop yield records from multiple years for each field. Good judgment should be used to counteract unusually high or low yields. If a field's yield history is not available the USDA county wide average or other approved source may be used,
    - (2) The nutrient requirement (nitrogen or phosphorus) for each crop to produce the expected yield shall be determined by one of the following methods:
      - (i) Actual nutrient removal based on historical results of harvested plant analysis for nutrient content from previous crops or,
      - (ii) Estimates of nutrient requirements and removal rates can be found in University of Missouri Extension Guide EQ202 or from publications by other land grant universities in adjoining states and,
    - (3) The most recent soil test.
  - (b) Wastewater applications shall be conducted according to one the following nutrient based management practices.
    - (1) Plant Available Nitrogen (PAN) based application. The amount of wastewater to be applied shall be adjusted annually based on the PAN calculation using the current wastewater nutrient analysis and the following:

#### D. LAND APPLICATION CONDITIONS (CONTINUED)

- (i) For non-legume crops, the nitrogen fertilizer recommendation shall be adjusted to account for nitrogen credits from a preceding legume crop and residual nitrogen from the previous year's application.
- (ii) For legume crops, the nitrogen removal capacity of the legume crops should be based on the estimated nitrogen content of the harvested crop as defined in EQ202 and a realistic yield goal. The estimated nitrogen content of the crop must be adjusted using nitrogen credits for residual nitrogen fertilizer from the previous year's application.

PAN = [Ammonia Nitrogen x volatilization factor\*] + [Organic Nitrogen x 0.2] + [Nitrate Nitrogen] \*Volatilization factor is 0.7 for surface application and 1 for subsurface application.

- (2) Phosphorus based application. This method must be used when soil test phosphorus (P) levels are above 120 pounds per acre using Bray P-1 test method, or if the P-index rating is high. The amount phosphorous supplied by the wastewater shall be limited according to the following methods;
  - (i) The annual amount of phosphorus applied shall not exceed the actual nutrient removal based on plant analysis results from previous crops or the planned crop's phosphorus removal estimate from EQ202, or from publications by other land grant universities in adjoining states or,
  - (ii) If the previous year's amount of phosphorous applied exceeded the crops actual phosphorus removal, subsequent years (up to 4 years) phosphorous applications shall be reduced until the excess amount is removed by crops.

#### 5. Record Keeping

- (a) A daily land application log shall be prepared and kept on file at the permittee office location for each application site showing dates of application, weather condition (sunny, overcast, raining, below freezing etc...), soil moisture condition, application method.
- (b) A record of monthly visual storage structure inspections.
- (c) A record of land application equipment inspections and calibrations.
- (d) A record of land application field inspections.
- (e) A record of all nutrient and PAN calculations.
- (f) All records and monitoring results shall be maintained for at least five years and shall be made available to the department upon request.
- 6. Annual Report on Land Application. An annual report is required in addition to other reporting requirements under Section A of this permit. The annual report shall be submitted by January 28 of each year. The report shall include, but is not limited to, a summary of the following:
  - (a) Record of maintenance and repairs during the year, average number of times per month the facility is checked to see if it is operating properly, and description of any unusual operating conditions encountered during the year;
  - (b) A summary of land application showing the crops grown and yield, number of acres used, number of days application occurred, and amount of wastewater applied to each field, and total amount of wastewater applied;
  - (c) Narrative summary of any problems or deficiencies identified, corrective action taken and improvements planned;
  - (d) A summary of the number of days the storage structure(s) discharged during the year, the discharge flow, reason the discharge occurred, and effluent analysis performed including analytical result laboratory pages;
  - (e) For fields where total nitrogen application exceeded 150 pounds per acre, submit PAN calculations to document the applied nitrogen was be utilized.

# MISSOURI DEPARTMENT OF NATURAL RESOURCES FACT SHEET FOR THE PURPOSE OF RENEWAL OF MO-0106618 GEORGE'S, INC.

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

As per [40 CFR Part 124.8(a)] and [10 CSR 20-6.020(1)(A)2.] a factsheet shall be prepared to give pertinent information regarding the applicable regulations, rationale for the development of effluent limitations and conditions, and the public participation process for the Missouri State Operating Permit (MSOP or operating permit) listed below. A factsheet is not an enforceable part of an operating permit.

# PART I. FACILITY INFORMATION

Facility Type:	Industrial >1 MGD
Facility SIC Code(s):	#2015 (poultry slaughtering and processing)
Application Date:	09/12/2017
Expiration Date:	03/31/2018
Last Inspection:	11/29/2012 in compliance

#### FACILITY DESCRIPTION:

This facility is a poultry processing facility. Major operations consist of a hatchery, slaughtering, processing, and a feedmill. The processing plant includes evisceration, chilling/grading, sanitation and second processing. Wastewater is generated during source water softening. Domestic wastewater is generated at the processing plant, hatchery, and feedmill.

The process wastewater from the hatchery, slaughtering, processing and feedmill operations and wastewater from water softening of source water are treated by pretreatment screening, chlorination, and dissolved air flotation, followed by storage in aerated basins, nonaerated basins and land application/irrigation. Domestic wastewater from the processing plant is sent to a septic tank before entering the storage basin and land application/irrigation system. Domestic wastewater from the hatchery and feedmill is treated by septic tanks and tile fields. Some of the secondary processing wastewater is transported to an offsite disposal facility.

The charter number for the continuing authority for this facility is F00301213; this number was verified by the permit writer to be associated with the facility and precisely matches the continuing authority reported by the facility.

In accordance with 40 CFR 122.21(f)(6), the Department evaluated other permits currently held by this facility. This facility holds no other permits.

OUTFALL	Average Flow (MGD/cfs)	DESIGN FLOW (MGD/CFS)	TREATMENT LEVEL	EFFLUENT TYPE
#001, #01A	2.0	2.8	Preliminary, Primary, Secondary, Irrigation	Process Wastewater
#009	dependent upon precipitation	n/a	Best Management Practices	Stormwater
#010	dependent upon precipitation	n/a	Best Management Practices	Stormwater
#011	dependent upon precipitation	n/a	Best Management Practices	Stormwater

#### **PERMITTED FEATURES TABLE:**

#### FACILITY PERFORMANCE HISTORY & COMMENTS:

The facility was found to be in compliance during the time of the site inspection that occurred on November 29, 2012. Since then, the permittee received two Letters of Warning, on July 28, 2014 and August 28, 2014. These were to address failure to meet pH ranges in the permit. The permittee took corrective actions and the cases were closed on the same dates.

#### FACILITY MAP:



# PART II. RECEIVING WATERBODY INFORMATION

#### **RECEIVING WATERBODY'S WATER QUALITY:**

EPA has approved the Department's new stream classifications since the previous permit was issued. The segments of Pogue Creek and Woodward Creek that cross the facility property are now classified as (C) (3960) streams.

#### **303(D)** LIST:

Section 303(d) of the federal Clean Water Act requires each state identify waters 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 impaired waters not addressed by normal water pollution control programs. <u>http://dnr.mo.gov/env/wpp/waterquality/303d/303d.htm</u>

 $\checkmark$  Not applicable; this facility does not discharge to an impaired segment of a 303(d) listed stream.

#### TOTAL MAXIMUM DAILY LOAD (TMDL):

A TMDL is a calculation of the maximum amount of a given pollutant a water body can absorb before its water quality is affected; hence, the purpose of a TMDL is to determine the pollutant loading a specific waterbody can assimilate without exceeding water quality standards. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan or TMDL may be developed. The TMDL shall include the WLA calculation. http://dnr.mo.gov/env/wpp/tmdl/

- ✓ Applicable; Pogue Creek is associated with the 2007 EPA approved TMDL for fecal coliform.
- This facility is considered to be a source of or has the potential to contribute to the above listed pollutant(s). A wasteload allocation of 0 CFU/day was established in the TMDL. This WLA considered that the permittee operates a no-discharge irrigation system to treat and dispose of process wastewater. The permittee will be required to ensure discharges of process wastewater do not occur from the processing facility and irrigation fields.

#### **UPSTREAM OR DOWNSTREAM IMPAIRMENTS:**

The permit writer has reviewed upstream and downstream stream segments of this facility for impairments.

- ✓ This facility is located at the top of the watershed therefore no upstream is present at this location/outfalls.
- ✓ The permit writer has noted downstream of the facility the stream is on the 303(d) list/has a TMDL for fecal coliform. Per 10 CSR 20-7.031(4)(E), this no-discharge facility is not a source of the above listed pollutant.

#### **APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:**

Per Missouri's Effluent Regulations [10 CSR 20-7.015(1)(B)], waters of the state are divided into seven categories. This facility is subject to effluent limitations derived on a site specific basis which are presented in each outfall's effluent limitation table and further discussed in Part IV: Effluents Limits Determinations

- ✓ Losing
- ✓ All Other Waters

#### **RECEIVING WATERBODY TABLE:**

WATERBODY NAME	CLASS	WBID	DESIGNATED USES*	12-digit HUC	EDU
Pogue Creek (8-20-13 MUDD V1.0)	С	3960	GEN, HHP, IRR, LWW, SCR, WBC-B, WWH (AQL), Losing	Spring	Ozark/
Woodward Creek (8-20-13 MUDD V1.0)	С	3960	GEN, HHP, IRR, LWW, SCR, WBC-B, WWH (AQL), Losing	0702	Neosho

#### n/a not applicable

- Classes are hydrologic classes as defined in 10 CSR 20-7.031(1)(F). L1: Lakes with drinking water supply wastewater discharges are not permitted to occur to L1 watersheds per 10 CSR 20-7.015(3)(C); L2: major reservoirs; L3: all other public and private lakes; P: permanent streams; C: streams which may cease flow in dry periods but maintain pools supporting aquatic life; E: streams which do not maintain surface flow; and W: wetland. Losing streams are defined in 10 CSR 20-7.031(1)(O) and are designated on the Losing Stream dataset or determined by the Department to lose 30% or more of flow to the subsurface.
- WBID = Waterbody Identification: Missouri Use Designation Dataset per 10 CSR 20-7.031(1)(Q) and (S) as 8-20-13 MUDD V1.0 or newer; data can be found as an ArcGIS shapefile on MSDIS at <u>ftp://msdis.missouri.edu/pub/Inland\_Water\_Resources/MO\_2014\_WQS\_Stream\_Classifications\_and\_Use\_shp.zip;</u> New C streams described on the dataset per 10 CSR 20-7.031(2)(A)3. as 100K Extent Remaining Streams.
- Per 10 CSR 20-7.031, the Department defines the Clean Water Commission's water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and 1<sup>st</sup> classified receiving stream's beneficial water uses are to be maintained in the receiving streams in accordance with [10 CSR 20-7.031(1)(C)]. Uses which may be found in the receiving streams table, above:
- 10 CSR 20-7.031(1)(C)1.: **ALP** = Aquatic Life Protection (formerly AQL; current uses are defined to ensure the protection and propagation of fish shellfish and wildlife, further subcategorized as: WWH = Warm Water Habitat; CLH = Cool Water Habitat; CDH = Cold Water Habitat; EAH = Ephemeral Aquatic Habitat; MAH = Modified Aquatic Habitat; LAH = Limited Aquatic Habitat. This permit uses ALP effluent limitations in 10 CSR 20-7.031 Table A1-A2 for all habitat designations unless otherwise specified.
- 10 CSR 20-7.031(1)(C)2 .: Recreation in and on the water
  - WBC = Whole Body Contact recreation where the entire body is capable of being submerged;
    - WBC-A = whole body contact recreation supporting swimming uses and has public access;
    - **WBC-B** = whole body contact recreation not supported in WBC-A;
  - **SCR** = Secondary Contact Recreation (like fishing, wading, and boating)

#### 10 CSR 20-7.031(1)(C)3. to 7.:

**HHP** (formerly HHF) = Human Health Protection as it relates to the consumption of fish and drinking of water;

**IRR** = irrigation for use on crops utilized for human or livestock consumption

LWW = Livestock and Wildlife Watering (current narrative use is defined as LWP = Livestock and Wildlife Protection);

 $\boldsymbol{DWS} = Drinking Water Supply$ 

**IND** = industrial water supply

- 10 CSR 20-7.031(1)(C)8-11.: Wetlands (10 CSR 20-7.031 Tables A1-B3 currently does not have corresponding habitat use criteria for these defined uses): WSA = storm- and flood-water storage and attenuation; WHP = habitat for resident and migratory wildlife species; WRC = recreational, cultural, educational, scientific, and natural aesthetic values and uses; WHC = hydrologic cycle maintenance.
  10 CSR 20-7.031(1)(C)8-11.: Wetlands (10 CSR 20-7.031 Tables A1-B3 currently does not have corresponding habitat use criteria for these defined uses): WSA = storm- and flood-water storage and attenuation; WHP = habitat for resident and migratory wildlife species; WRC = recreational, cultural, educational, scientific, and natural aesthetic values and uses; WHC = hydrologic cycle maintenance.
- 10 CSR 20-7.031(6): **GRW** = Groundwater

#### **RECEIVING WATERBODY MONITORING REQUIREMENTS:**

This facility current conducts in stream monitoring.

# PART III. RATIONALE AND DERIVATION OF 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.

 $\checkmark$  Not applicable; the facility is an existing facility.

#### **ANTIBACKSLIDING:**

Federal Regulations [CWA §303(d)(4); CWA §402(c); 40 CFR Part 122.44(l)] require a reissued permit to be as stringent as the previous permit with some exceptions. Backsliding (a less stringent permit limitation) is only allowed under certain conditions.

- Limitations in this operating permit for the reissuance conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Act, and 40 CFR Part 122.44.
  - The Department determined technical mistakes or mistaken interpretations of law were made in issuing the permit under section 402(a)(1)(b).
    - Previous permits contained monitoring requirements for Nitrate plus Nitrites as N and Total Nitrogen for irrigated wastewater. These parameters are not required for the PAN calculation and were removed from the permit.
    - Previous permits contained monitoring requirement for Total Nitrogen for soil. The PAN calculation factors in residual nitrogen from the previous year's application.
    - Previous permit contained limits on the parameter for pH of the irrigated wastewater. These limits are intended for discharges to waters of the state. Because the wastewater is land applied and does not discharge those limits do not apply. The parameter pH of the irrigated wastewater will be retained as a monitoring only requirement. There is also a requirement in the permit that the soil pH must be maintained in a range for optimal plant growth.
    - Previous permit contained surface water monitoring requirements at Dillbeck and New Hope Springs. These springs are located more than a mile downstream of the facility and land application sites. The permit contains monitoring requirements for groundwater monitoring wells around the facility and land application sites. This provides a more accurate representation of the potential impact the activities at the facility may have on groundwater. Therefore, Permitted Features #SM1 and #SM2 and the associated monitoring requirements have been removed.
    - The previous permit contained a Special Condition that required the facility to conduct a study to determine appropriate methods to reduce the imbalance in the phosphorus being land applied and the amount removed by crops. The facility submitted the report in September 2015. This requirement was removed from the permit. The facility has implemented measures to reduce the phosphorous content of the irrigated wastewater and additional permit requirement have been added to address the imbalance.
    - The DMR data and location of the 23 current groundwater monitoring wells was reviewed and showed no exceedances of Water Quality Standards during the previous permit cycle. Based on this review and the permit writes best professional judgement, Groundwater monitoring well Permitted Features #021, #024, #030, #037, #041, #044, and #047 and the associated monitoring have been removed from the permit. The reaming 16 monitoring well around the perimeter of the facility and land application fields provide an adequate up-gradient and down-gradient representation of groundwater movement.
    - This permit establishes land application no-discharge practices and agronomic land application rates. As these fields are
      agricultural fields, and so long as the land application occurs as required by these permit conditions, no industrial
      wastewater runoff should occur. The agricultural stormwater is exempt from monitoring, in accordance with 644.059
      RSMo.; as such, field runoff stormwater monitoring was removed. This permit establishes land application practices to
      prevent industrial wastewater runoff, over-application of materials, and nutrient and pollutant loading.
    - The previous permit special conditions contained a specific set of prohibitions related to general criteria (GC) found in 10 CSR 20-7.031(4); however, there was no determination as to whether the discharges have reasonable potential to cause or contribute to excursion of those general water quality criteria in the previous permit. This permit assesses each general criteria as listed in the previous permit's special conditions. Federal regulations 40 CFR 122.44(d)(1)(iii) requires instances where reasonable potential (RP) to cause or contribute to an exceedance of a water quality standard

exists, a numeric limitation must be included in the permit. Rather than conducting the appropriate RP determination, the previous permit simply placed the prohibitions in the permit. These conditions were removed from the permit. Appropriate reasonable potential determinations were conducted for each general criterion listed in 10 CSR 20-7.031(4)(A) through (I) and effluent limitations were placed in the permit for those general criteria where it was determined the discharge had reasonable potential to cause or contribute to excursions of the general criteria. Specific effluent limitations were not included for those general criteria where it was determined the discharges will not cause or contribute to excursions of general criteria. Removal of the prohibitions does not reduce the protections of the permit or allow for impairment of the receiving stream. The permit maintains sufficient effluent limitations, monitoring requirements and best management practices to protect water quality while maintaining permit conditions applicable to permittee disclosures and in accordance with 10 CSR 20-7.031(4) where no water contaminant by itself or in combination with other substances shall prevent the water of the state from meeting the following conditions:

- (A) 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.
  - For all outfalls, there is no RP for putrescent bottom deposits preventing full maintenance of beneficial uses because nothing disclosed by the permittee indicates putrescent wastewater would be discharged from the facility.
  - For all outfalls, there is no RP for unsightly or harmful bottom deposits preventing full maintenance of beneficial uses because nothing disclosed by the permittee indicates unsightly or harmful bottom deposits would be discharged from the facility.
- (B) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses.
  - For all outfalls, there is no RP for oil in sufficient amounts to be unsightly preventing full maintenance of beneficial uses because nothing disclosed by the permittee indicates oil will be present in sufficient amounts to impair beneficial uses.
  - For all outfalls, there is no RP for scum and floating debris in sufficient amounts to be unsightly preventing full maintenance of beneficial uses because nothing disclosed by the permittee indicates scum and floating debris will be present in sufficient amounts to impair beneficial uses.
- (C) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses.
  - For all outfalls, there is no RP for unsightly color or turbidity in sufficient amounts preventing full maintenance of beneficial uses because nothing disclosed by the permittee indicates unsightly color or turbidity will be present in sufficient amounts to impair beneficial uses.
  - For all outfalls, there is no RP for offensive odor in sufficient amounts preventing full maintenance of beneficial uses because nothing disclosed by the permittee indicates offensive odor will be present in sufficient amounts to impair beneficial uses.
- (D) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life.
  - The permit writer considered specific toxic pollutants when writing this permit. Numeric effluent limitations are included for those pollutants could be discharged in toxic amounts. These effluent limitations are protective of human health, animals, and aquatic life.
- (E) There shall be no significant human health hazard from incidental contact with the water.
  - This criterion is very similar to (D) above. See Part IV, Effluent Limits Derivation below.
- (F) There shall be no acute toxicity to livestock or wildlife watering.
  - This criterion is very similar to (D) above. See Part IV, Effluent Limits Derivation below.
- (G) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community.
  - For all outfalls, there is no RP for physical or chemical changes impairing the natural biological community because nothing disclosed by the permittee indicates this is occurring.
  - For all outfalls, there is no RP for hydrologic changes impairing the natural biological community because nothing disclosed by the permittee indicates this is occurring.
- (H) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
  - There are no solid waste disposal activities or any operation which has reasonable potential to cause or contribute to the materials listed above being discharged through any outfall.

#### **ANTIDEGRADATION REVIEW:**

Process water discharges with new, altered, or expanding flows, the Department is to document, by means of antidegradation review, if the use of a water body's available assimilative capacity is justified. In accordance with Missouri's water quality regulations for antidegradation [10 CSR 20-7.031(3)], degradation may be justified by documenting the socio-economic importance of a discharge

after determining the necessity of the discharge. Facilities must submit the antidegradation review request to the Department prior to establishing, altering, or expanding discharges. See <u>http://dnr.mo.gov/env/wpp/permits/antideg-implementation.htm</u>

✓ Not applicable; the facility has not submitted information proposing expanded or altered process water discharge; no further degradation proposed therefore no further review necessary.

This permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) which must include an alternative analysis (AA) of the BMPs. The SWPPP must be developed, implemented, updated, and maintained at the facility. Failure to implement and maintain the chosen alternative, is a permit violation. The AA is a structured evaluation of BMPs to determine which are reasonable and cost effective. Analysis should include practices designed to be 1) non-degrading, 2) less degrading, or 3) degrading water quality. The chosen BMP will be the most reasonable and cost effective while ensuring the highest statutory and regulatory requirements are achieved and the highest quality water attainable for the facility is discharged. The analysis must demonstrate why "no discharge" or "no exposure" are not feasible alternatives at the facility. Existing facilities with established SWPPPs and BMPs need not conduct an additional alternatives analysis unless new BMPs are established to address BMP failures or benchmark exceedances. This structured analysis of BMPs serves as the antidegradation review, fulfilling the requirements of 10 CSR 20-7.015(9)(A)5 and 7.031(3). For stormwater discharges with new, altered, or expanding discharges, the stormwater BMP chosen for the facility, through the AA performed by the facility, must be implemented and maintained at the facility. Failure to implement and maintain the chosen BMP alternative is a permit violation; see SWPPP.

✓ Applicable; the facility must review and maintain stormwater BMPs as appropriate.

#### **BEST MANAGEMENT PRACTICES:**

Minimum site-wide best management practices are established in this permit to assure all permittees are managing their sites equally to protect waters of the state from certain activities which could cause negative effects in receiving water bodies. While not all sites require a SWPPP because the SIC codes are specifically exempted in 40 CFR 122.26(b)(14), these best management practices are not specifically included for stormwater purposes. These practices are minimum requirements for all industrial sites to protect waters of the state. If the minimum best management practices are not followed, the facility may violate general criteria [10 CSR 20-7.031(4)]. Statutes are applicable to all permitted facilities in the state, therefore pollutants cannot be released unless in accordance with RSMo 644.011 and 644.016 (17).

#### CHANGES IN DISCHARGES OF TOXIC POLLUTANT:

This special condition reiterates the federal rules found in 40 CFR 122.44(f) and 122.42(a)(1). In these rules, the facility is required to report changes in amounts of toxic substances discharged. Toxic substances are defined in 40 CFR 122.2 as "...any pollutant listed as toxic under section 307(a)(1) or, in the case of "sludge use or disposal practices," any pollutant identified in regulations implementing section 405(d) of the CWA." Section 307 of the clean water act then refers to those parameters found in 40 CFR 401.15. The permittee should also consider any other toxic pollutant in the discharge as reportable under this condition.

#### **COMPLIANCE AND ENFORCEMENT:**

Enforcement is the action taken by the Water Protection Program (WPP) to bring an entity into compliance with the Missouri Clean Water Law, its implementing regulations, and/or any terms and conditions of an operating permit. The primary purpose of the enforcement activity in the WPP is to resolve violations and return the entity to compliance.

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

#### DOMESTIC WASTEWATER, SLUDGE, AND BIOSOLIDS:

Domestic wastewater is defined as wastewater (i.e., human sewage) originating primarily from the sanitary conveyances of bathrooms and kitchens. Domestic wastewater excludes stormwater, animal waste, process waste, and other similar waste.

✓ Applicable; this facility uses a lagoon system which the Department of Natural Resources has authorized in accordance with 19 CSR 20-3.060(6)(D) as Department of Health and Senior Services rules only provide for the use of a lagoon for single residences.

Sewage sludge is solid, semi-solid, 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 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. Biosolids are solid materials resulting from domestic wastewater treatment meeting federal and state criteria for productive use (i.e. fertilizer) and after having pathogens removed.

Additional information: http://extension.missouri.edu/main/DisplayCategory.aspx?C=74 (WQ422 through WQ449).

✓ Not applicable; the facility does not manage domestic sludge on-site.

#### **EFFLUENT LIMITATION GUIDELINE:**

Effluent Limitation Guidelines, or ELGs, are found at 40 CFR 400-499. These are limitations established by the EPA based on the SIC code and the type of work a facility is conducting. Most ELGs are for process wastewater and some address stormwater. All are technology based limitations which must be met by the applicable facility at all times.

✓ The facility has an associated ELG (40 CFR 432) but does not discharge wastewater to waters of the state; stormwater discharges are not addressed by the ELG.

#### ELECTRONIC DISCHARGE MONITORING REPORT (EDMR) SUBMISSION SYSTEM:

The U.S. Environmental Protection Agency (EPA) promulgated a final rule on October 22, 2015, to modernize Clean Water Act reporting for municipalities, industries, and other facilities by converting to an electronic data reporting system. The final rule requires regulated entities and state and federal regulators to use information technology to electronically report data required by the National Pollutant Discharge Elimination System (NPDES) permit program instead of filing paper reports. To comply with the federal rule, the Department is requiring all permittees to begin submitting discharge monitoring data and reports online.

Per 40 CFR 127.15 and 127.24, permitted facilities may request a temporary waiver for up to 5 years or a permanent waiver from electronic reporting from the Department. To obtain an electronic reporting waiver, a permittee must first submit an eDMR Waiver Request Form: <u>http://dnr.mo.gov/forms/780-2692-f.pdf</u>. A request must be made for each facility. If more than one facility is owned or operated by a single entity, then the entity must submit a separate request for each facility based on its specific circumstances. An approved waiver is not transferable.

The Department must review and notify the facility within 120 calendar days of receipt if the waiver request has been approved or rejected [40 CFR 124.27(a)]. During the Department review period as well as after a waiver is granted, the facility must continue submitting a hard-copy of any reports required by their permit. The Department will enter data submitted in hard-copy from those facilities allowed to do so and electronically submit the data to the EPA on behalf of the facility.

To assist the facility in entering data into the eDMR system, the permit describes limit sets in each table in Part A of the permit. The data entry personnel should use these identifiers to assure data entry is being completed appropriately.

 $\checkmark$  The permittee/facility is currently using the eDMR data reporting system.

#### **GENERAL CRITERIA CONSIDERATIONS:**

In accordance with 40 CFR 122.44(d)(1), effluent limitations shall be placed into permits for pollutants determined to cause, have reasonable potential to cause, or to contribute to, an excursion above any water quality standard, including narrative water quality criteria. In order to comply with this regulation, the permit writer has completed a reasonable potential determination on whether discharges have reasonable potential to cause, or contribute to an excursion of the general criteria listed in 10 CSR 20-7.031(4). In instances where reasonable potential exists, the permit includes limitations within the permit to address the reasonable potential. In discharges where reasonable potential does not exist, the permit may include monitoring to later determine the discharge's potential to impact the narrative criteria. Additionally, §644.076.1, RSMo as well as Section D – Administrative Requirements of Standard Conditions Part I of this permit state it shall be unlawful for any person to cause or allow any discharge of water contaminants from any water contaminant or point source located in Missouri in violation of sections 644.006 to 644.141 of the Missouri Clean Water Law or any standard, rule, or regulation promulgated by the commission.

✓ Applicable; this permit contains effluent limitations to protect for toxicity in accordance with 10 CSR 20-7.031(4)(D) and (G); see Part IV for specific pollutant discussion.

#### **GROUNDWATER MONITORING:**

Groundwater is a water of the state according to 10 CSR 20-2.010(82), and is subject to regulations at 10 CSR 20-7.015(7) and 10 CSR 20-7.031(6) and must be protected accordingly.

 $\checkmark$  This facility is monitoring the groundwater at the site.

#### **NO-DISCHARGE LAND APPLICATION:**

Land application of wastewater or sludge shall comply with the all applicable no-discharge requirements listed in 10 CSR 20-6.015 and all facility operations and maintenance requirements listed in 10 CSR 20-8.020(15). These requirements ensure appropriate operation of the no-discharge land application systems and prevent unauthorized and illicit discharges to waters of the state. Land applications by a contract hauler on fields that the permittee has a spreading agreement on are not required to be in this permit. A spreading agreement does not constitute the field being rented or leased by the permittee as they do not have any control over management of the field.

✓ Applicable; this permit authorizes operation of a no-discharge land application system to treat wastewater or sludge.

#### LAND APPLICATION RATES:

In accordance with 10 CSR 20-8.020(15), wastewater and sludge must be land applied at either hydraulic loading rates, nitrogen loading rates, or trace elements loading rates.

Conversion Factors for laboratory testing results: [mg/L or mg/kg or ppm] x [conversion factor] = [pounds per Unit Volume] Unit Volume Conversion Factors

Conversion I
0.226
0.0083
0.0062
0.002

- ✓ Applicable; Nutrient Loading Rates this considers overall nutrient management of the land application system. The fertilizer recommendation is the amount of nutrients required for a crop to produce the expected yield. The agronomic rate is the amount of wastewater applied to a field to supply the amount of nutrients to meet the fertilizer recommendation. For more information on nutrient management, PAN calculations, and land application best management practices, consult the following University of Missouri Extension Guides:
  - EQ202 Land Application Considerations for Animal Manure WQ421 State and EPA Regulations for Domestic Wastewater Sludge and Biosolids WQ422 Land Application of Septage WQ423 Monitoring Requirements for Biosolids Land Application WQ424 Biosolids Standards for Pathogens and Vectors WO425 Biosolids Standards for Metals and Other Trace Substances WQ426 Best Management Practices for Biosolids Land Application WQ427 Benefits and Risks of Biosolids WQ428 Activity and Movement of Plant Nutrients and Other Trace Substances WQ429 Interpretation of Laboratory Analysis of Biosolids Samples WQ430 Crop/Nutrient Considerations of Biosolids WQ431 Collection and Storage of Biosolids WQ432 Equipment for Off-site Application of Biosolids WQ433 Equipment for On-site Land Application of Biosolids WQ434 Operating Considerations for Biosolids Equipment WQ449 Biosolids Glossary of Terms

Nitrogen based applications are when the amount of wastewater applied is based on the nitrogen fertilizer recommendation for the planned crop. Phosphorous based applications are when the amount of wastewater applied is based on the phosphorous fertilizer recommendation for the planned crop.

Fertilizer recommendations can also be obtained by using one of the following tools: The University of Missouri Extension online fertilizer recommendation calculator at http://soilplantlab.missouri.edu/soil/scripts/manualentry.aspx.

The Missouri P-Index is a tool to evaluate the potential for phosphorus loss from land application fields. It uses information such as soil test phosphorus result, cropping practices, RUSLE, land cover, and distance to water to calculate a rating for the risk phosphorus transport from the field. The P-index is available at <a href="http://nmplanner.missouri.edu/tools/pindex.asp0">http://nmplanner.missouri.edu/tools/pindex.asp0</a>.

The Missouri Soil Testing Association provides a list of accredited labs at http://soilplantlab.missouri.edu/soil/msta.aspx.

#### MAJOR WATER USER:

Any surface or groundwater user with a water source and the equipment necessary to withdraw or divert 100,000 gallons (or 70 gallons per minute) or more per day combined from all sources from any stream, river, lake, well, spring, or other water source is considered a major water user in Missouri. All major water users are required by law to register water use annually (Missouri Revised Statues Chapter 256.400 Geology, Water Resources and Geodetic Survey Section). <u>https://dnr.mo.gov/pubs/pub2337.htm</u> ✓ Applicable; this facility is a major water user and is registered with the state.

#### **OIL/WATER SEPARATORS:**

Oil water separator (OWS) tank systems are frequently found at industrial sites where process water and stormwater may contain oils and greases, oily wastewaters, or other immiscible liquids requiring separation. Food industry discharges typically require pretreatment prior to discharge to municipally owned treatment works. Per 10 CSR 26-2.010(2)(B), all oil water separator tanks must be operated according to manufacturer's specifications and authorized in NPDES permits or may be regulated as a petroleum tank.

✓ Not applicable; the permittee has not disclosed the use of any oil water separators at this permitted facility and therefore oil water separator tanks are not authorized by this permit.

#### **REASONABLE POTENTIAL (RP):**

Federal regulation [40 CFR Part 122.44(d)(1)(i)] requires effluent limitations for all pollutants which are (or may be) discharged at a level causing or have the reasonable potential to cause (or contribute to) an in-stream excursion above narrative or numeric water quality standards. Per 10 CSR 20-7.031(4), general criteria shall be applicable to all waters of the state at all times; however, acute toxicity criteria may be exceeded by permit in zones of initial dilution, and chronic toxicity criteria may be exceeded by permit in mixing zones. If the permit writer determines any given pollutant has the reasonable potential to cause or contribute to an in-stream excursion above the WQS, the permit must contain effluent limits for the pollutant per 40 CFR Part 122.44(d)(1)(iii) and the most stringent limits per 10 CSR 20-7.031(9)(A). Permit writers may use mathematical reasonable potential analysis (RPA) using the Technical Support Document for Water Quality Based Toxics Control (TSD) methods (EPA/505/2-90-001) as found in Section 3.3.2, or may also use reasonable potential determinations (RPD) as provided in Sections 3.1.2, 3.1.3, and 3.2 of the TSD.

Not applicable; a mathematical RPA was not conducted for this facility. This permit establishes permit limits and benchmarks for stormwater. The Department has determined stormwater is not a continuous discharge and is therefore not necessarily dependent on mathematical RPAs. However, the permit writer completed an RPD, a reasonable potential determination, using best professional judgment for all of the appropriate parameters in this permit. An RPD consists of reviewing application data and/or discharge monitoring data for the last five years and comparing those data to narrative or numeric water quality criteria.

#### SAMPLING FREQUENCY JUSTIFICATION:

Sampling and reporting frequency was generally retained from previous permit. 40 CFR 122.45(d)(1) indicates all continuous discharges shall be permitted with daily maximum and monthly average limits. Minimum sampling frequency for all parameters is annually per 40 CFR 122.44(i)(2).

Sampling frequency for stormwater-only outfalls is typically quarterly even though BMP inspection occurs monthly. The facility may sample more frequently if additional data is required to determine if best management operations and technology are performing as expected.

#### SAMPLING TYPE JUSTIFICATION:

Sampling type was continued from the previous permit. The sampling types are representative of the discharges, and are protective of water quality. Discharges with altering effluent should have composite sampling; discharges with uniform effluent can have grab samples. Grab samples are usually appropriate for stormwater. Parameters which must have grab sampling are: pH, ammonia, *E. coli*, total residual chlorine, free available chlorine, hexavalent chromium, dissolved oxygen, total phosphorus, volatile organic compounds, and others.

#### SCHEDULE OF COMPLIANCE (SOC):

A schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements (actions, effluent limits, 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. SOCs are allowed under 40 CFR 122.47 providing certain conditions are met. A SOC is not allowed:

- For effluent limitations based on technology-based standards established in accordance with federal requirements, if the deadline for compliance established in federal regulations has passed. 40 CFR § 125.3.
- For a newly constructed facility in most cases. Newly constructed facilities must meet applicable effluent limitations when discharge begins, because the facility has installed the appropriate control technology as specified in a permit or antidegradation review. A SOC is allowed for a new water quality based effluent limit not included in a previously public noticed permit or antidegradation review, which may occur if a regulation changes during construction.
- To develop a TMDL, UAA, or other study associated with development of a site specific criterion. A facility is not prohibited from conducting these activities, but a SOC may not be granted for conducting these activities.

In order to provide guidance in developing SOCs, and to attain a greater level of consistency, the Department issued a policy on development of SOCs on October 25, 2012. The policy provides guidance to permit writers on standard time frames for schedules for common activities, and guidance on factors to modify the length of the schedule.

 $\checkmark$  Not applicable; this permit does not contain a SOC.

#### SPILLS, OVERFLOWS, AND OTHER UNAUTHORIZED DISCHARGE REPORTING:

Per 260.505 RSMo, any emergency involving a hazardous substance must be reported to the Department's 24 hour Environmental Emergency Response hotline at (573) 634-2436 at the earliest practicable moment after discovery. The Department may require the submittal of a written report detailing measures taken to clean up a spill. These reporting requirements apply whether or not the spill results in chemicals or materials leaving the permitted property or reaching waters of the state. This requirement is in addition to the noncompliance reporting requirement found in Standard Conditions Part I. <u>http://dnr.mo.gov/env/esp/spillbill.htm</u>

Any other spills, overflows, or unauthorized discharges reaching waters of the state must be reported to the regional office during normal business hours, or after normal business hours, to the Department's 24 hour Environmental Emergency Response spill line at 573-634-2436.

#### SLUDGE – INDUSTRIAL:

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

✓ Not applicable; industrial sludge is removed by a contract hauler.

#### **STANDARD CONDITIONS:**

The standard conditions Part I attached to this permit incorporate all sections of 40 CFR 122.41(a) through (n) by reference as required by law. These conditions, in addition to the conditions enumerated within the standard conditions should be reviewed by the permittee to ascertain compliance with this permit, state regulations, state statues, federal regulations, and the Clean Water Act. Standard Conditions Part III, if attached to this permit, incorporate all requirements dealing with domestic sludges.

#### STORMWATER PERMITTING: LIMITATIONS AND BENCHMARKS:

Because of the fleeting nature of stormwater discharges, the Department, under the direction of EPA guidance, has determined monthly averages are capricious measures of stormwater discharges. The *Technical Support Document for Water Quality Based Toxics Control* (EPA/505/2-90-001; 1991) Section 3.1 indicates most procedures within the document apply only to water quality based approaches, not end-of-pipe technology-based controls. Hence, stormwater-only outfalls will generally only contain a maximum daily limit (MDL), benchmark, or monitoring requirement as dictated by site specific conditions, the BMPs in place, past performance of the facility, and the receiving water's current quality.

Sufficient rainfall to cause a discharge for one hour or more from a facility would not necessarily cause significant flow in a receiving stream. Acute Water Quality Standards (WQSs) are based on one hour of exposure, and must be protected at all times. Therefore, industrial stormwater facilities with toxic contaminants present in the stormwater may have the potential to cause a violation of acute WQSs if toxic contaminants occur in sufficient amounts. In this instance, the permit writer may apply daily maximum limitations.

Conversely, it is unlikely for rainfall to cause a discharge for four continuous days from a facility; if this does occur however, the receiving stream will also likely sustain a significant amount of flow providing dilution. Most chronic WQSs are based on a four-day exposure with some exceptions. Under this scenario, most industrial stormwater facilities have limited potential to cause a violation of chronic water quality standards in the receiving stream.

A standard mass-balance equation cannot be calculated for stormwater because stormwater flow and flow in the receiving stream cannot be determined for conditions on any given day or storm event. The amount of stormwater discharged from the facility will vary based on current and previous rainfall, soil saturation, humidity, detention time, BMPs, surface permeability, etc. Flow in the receiving stream will vary based on climatic conditions, size of watershed, area of surfaces with reduced permeability (houses, parking lots, and the like) in the watershed, hydrogeology, topography, etc. Decreased permeability may increase the stream flow dramatically over a short period of time (flash).

Numeric benchmark values are based on site specific requirements taking in to account a number of factors but cannot be applied to any process water discharges. First, the technology in place at the site to control pollutant discharges in stormwater is evaluated. The permit writer also evaluates other similar permits for similar activities. A review of the guidance forming the basis of Environmental Protection Agency's (EPA's) *Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity* (MSGP) may also occur. Because precipitation events are sudden and momentary, benchmarks based on state or federal standards or recommendations use the Criteria Maximum Concentration (CMC) value, or acute standard may also be used. The CMC is the estimate of the highest concentration of a material in surface water to which an aquatic community can be exposed briefly without resulting in an unacceptable effect. The CMC for aquatic life is intended to be protective of the vast majority of the aquatic communities in the United States. If a facility has not disclosed BMPs applicable to the pollutants for the site, the permittee may not be eligible for benchmarks.

40 CFR 122.44(b)(1) requires the permit implement the most stringent limitations for each discharge, including industrially exposed stormwater; and 40 CFR 122.44(d)(1)(i) and (iii) requires the permit to include water-quality based effluent limitations where reasonable potential has been found. However, because of the non-continuous nature of stormwater discharges, staff are unable to perform statistical Reasonable Potential Analysis (RPA) under most stormwater discharge scenarios. Reasonable potential determinations (RPDs; see REASONABLE POTENTIAL above) using best professional judgment are performed.

Benchmarks require the facility to monitor, and if necessary, replace and update stormwater control measures. Benchmark concentrations are not effluent limitations. A benchmark exceedance, therefore, is not a permit violation; however, failure to take corrective action is a violation of the permit. Benchmark monitoring data is used to determine the overall effectiveness of control measures and to assist the permittee in knowing when additional corrective actions may be necessary to comply with the conditions of the permit.

BMP inspections typically occur more frequently than sampling. Sampling frequencies are based on the facility's ability to comply with the benchmarks and the requirements of the permit. Inspections should occur after large rain events and any other time an issue is noted; sampling after a benchmark exceedance may need to occur to show the corrective active taken was meaningful.

When a permitted feature or outfall consists of only stormwater, a benchmark may be implemented at the discretion of the permit writer, if there is no RP for water quality excursions.

✓ Not Applicable, this facility has no stormwater outfalls or monitoring requirements.

#### STORMWATER POLLUTION PREVENTION PLAN (SWPPP):

In accordance with 40 CFR 122.44(k), Best Management Practices (BMPs) must be used to control or abate the discharge of pollutants when: 1) Authorized under section 304(e) of the Clean Water Act (CWA) for the control of toxic pollutants and hazardous substances from ancillary industrial activities; 2) Authorized under section 402(p) of the CWA for the control of stormwater discharges; 3) Numeric effluent limitations are infeasible; or 4) the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA. In accordance with the EPA's *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (EPA 833-B-09-002) published by the EPA in 2015 <a href="https://www.epa.gov/sites/production/files/2015-11/documents/swppp\_guide\_industrial\_2015.pdf">https://www.epa.gov/sites/production/files/2015-11/documents/swppp\_guide\_industrial\_2015.pdf</a>, BMPs are measures or practices used to reduce the amount of pollution entering waters of the state from a permitted facility. BMPs may take the form of a process, activity, or physical structure. Additionally in accordance with the Stormwater Management, a SWPPP is a series of steps and activities to 1) identify sources of pollution or contamination, and 2) select and carry out actions which prevent or control the pollution of storm water discharges. Additional information can be found in *Stormwater Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices* (EPA 832-R-92-006; September 1992).

A SWPPP must be prepared by the permittee if the SIC code is found in 40 CFR 122.26(b)(14) and/or 10 CSR 20-6.200(2). A SWPPP may be required of other facilities where stormwater has been identified as necessitating better management. The purpose of a SWPPP is to comply with all applicable stormwater regulations by creating an adaptive management plan to control and mitigate stream pollution from stormwater runoff. Developing a SWPPP provides opportunities to employ appropriate BMPs to minimize the risk of pollutants being discharged during storm events. The following paragraph outlines the general steps the permittee should take to determine which BMPs will work to achieve the benchmark values or limits in the permit. This section is not intended to be all encompassing or restrict the use of any physical BMP or operational and maintenance procedure assisting in pollution control. Additional steps or revisions to the SWPPP may be required to meet the requirements of the permit.

Areas which should be included in the SWPPP are identified in 40 CFR 122.26(b)(14). Once the potential sources of stormwater pollution have been identified, a plan should be formulated to best control the amount of pollutant being released and discharged by each activity or source. This should include, but is not limited to, minimizing exposure to stormwater, good housekeeping measures, proper facility and equipment maintenance, spill prevention and response, vehicle traffic control, and proper materials handling. Once a plan has been developed the facility will employ the control measures determined to be adequate to achieve the benchmark values discussed above. The facility will conduct monitoring and inspections of the BMPs to ensure they are working properly and re-evaluate any BMP not achieving compliance with permitting requirements. For example, if sample results from an outfall show values of TSS above the benchmark value, the BMP being employed is deficient in controlling stormwater pollution. Corrective action should be taken to repair, improve, or replace the failing BMP. This internal evaluation is required at least once per month but should be continued more frequently if BMPs continue to fail. If failures do occur, continue this trial and error process until appropriate BMPs have been established.

For new, altered, or expanded stormwater discharges, the SWPPP shall identify reasonable and effective BMPs while accounting for environmental impacts of varying control methods. The antidegradation analysis must document why no discharge or no exposure options are not feasible. The selection and documentation of appropriate control measures shall serve as an alternative analysis of technology and fulfill the requirements of antidegradation [10 CSR 20-7.031(3)]. For further guidance, consult the antidegradation implementation procedure (<u>http://dnr.mo.gov/env/wpp/docs/AIP050212.pdf</u>).

Alternative Analysis (AA) evaluation of the BMPs is a structured evaluation of BMPs which are reasonable and cost effective. The AA evaluation should include practices designed to be: 1) non-degrading; 2) less degrading; or 3) degrading water quality. The glossary of AIP defines these three terms. The chosen BMP will be the most reasonable and effective management strategy while ensuring the highest statutory and regulatory requirements are achieved and the highest quality water attainable for the facility is discharged. The AA evaluation must demonstrate why "no discharge" or "no exposure" is not a feasible alternative at the facility. This structured analysis of BMPs serves as the antidegradation review, fulfilling the requirements of 10 CSR 20-7.031(3) Water Quality Standards and *Antidegradation Implementation Procedure* (AIP), Section II.B.

If parameter-specific numeric benchmark exceedances continue to occur and the permittee feels there are no practicable or costeffective BMPs which will sufficiently reduce a pollutant concentration in the discharge to the benchmark values established in the permit, the permittee can submit a request to re-evaluate the benchmark values. This request needs to include 1) a detailed explanation of why the facility is unable to comply with the permit conditions and unable to establish BMPs to achieve the benchmark values; 2) financial data of the company and documentation of cost associated with BMPs for review and 3) the SWPPP, which should contain adequate documentation of BMPs employed, failed BMPs, corrective actions, and all other required information. This will allow the Department to conduct a cost analysis on control measures and actions taken by the facility to determine cost-effectiveness of BMPs. The request shall be submitted in the form of an operating permit modification, which includes an appropriate fee; the application is found at: <a href="https://dnr.mo.gov/forms/#WaterPollution">https://dnr.mo.gov/forms/#WaterPollution</a>

✓ Applicable; a SWPPP shall be developed and implemented for this facility.

#### SUFFICIENTLY SENSITIVE ANALYTICAL METHODS:

Please review Standard Conditions Part 1, section A, number 4. The analytical and sampling methods used shall conform to the reference methods listed in 10 CSR 20-7.015 and/or 40 CFR 136 unless alternates are approved by the Department. The facility shall use sufficiently sensitive analytical methods for detecting, identifying, and measuring the concentrations of pollutants. The facility shall ensure the selected methods are able to quantify the presence of pollutants in a given discharge at concentrations low enough to determine compliance with Water Quality Standards in 10 CSR 20-7.031 or effluent limitations unless provisions in the permit allow for other alternatives. A method is "sufficiently sensitive" when; 1) the method quantifies the pollutant below the level of the applicable water quality criterion or; 2) the method minimum level is above the applicable water quality criterion, but the amount of pollutant in a facility's discharge is high enough the method sapproved under 10 CSR 20-7.015 and or 40 CFR 136. These methods are also required for parameters listed as monitoring only, as the data collected may be used to determine if numeric limitations need to be established. A permittee is responsible for working with their contractors to ensure the analysis performed is sufficiently sensitive. 40 CFR 136 lists the approved methods accepted by the Department. Tables A1-B3 at 10 CSR 20-7.031 shows water quality standards.

#### **UNDERGROUND INJECTION CONTROL (UIC):**

The UIC program for all classes of wells in the State of Missouri is administered by the Missouri Department of Natural Resources and approved by EPA pursuant to section 1422 and 1425 of the Safe Drinking Water Act (SDWA) and 40 CFR 147 Subpart AA. Injection wells are classified based on the liquids which are being injected. Class I wells are hazardous waste wells which are banned by RSMo 577.155; Class II wells are established for oil and natural gas production; Class III wells are used to inject fluids to extract minerals; Class IV wells are also banned by Missouri in RSMo 577.155; Class V wells are shallow injection wells; some examples are heat pump wells and groundwater remediation wells. Domestic wastewater being disposed of sub-surface is also considered a Class V well. In accordance with 40 CFR 144.82, construction, operation, maintenance, conversion, plugging, or closure of injection wells shall not cause movement of fluids containing any contaminant into Underground Sources of Drinking Water (USDW) if the presence of any contaminant may cause a violation of drinking water standards or groundwater standards under 10 CSR 20-7.031, or other health based standards, or may otherwise adversely affect human health. If the director finds the injection activity may endanger USDWs, the Department may require closure of the injection wells, or other actions listed in 40 CFR 144.26, the permittee shall submit a Class V Well Inventory Form for each active or new underground injection well drilled, or when the status of a well changes, to the Missouri Department of Natural Resources, Geological Survey Program or can be found at the following web address: <u>http://dnr.mo.gov/forms/780-1774-f.pdf</u>

✓ Not applicable; the permittee has not submitted materials indicating the facility will be performing UI at this site.

#### VARIANCE:

Per the Missouri Clean Water Law §644.061.4, variances shall be granted for such period of time and under such terms and conditions as shall be specified by the commission in its order. The variance may be extended by affirmative action of the commission. In no event shall the variance be granted for a period of time greater than is reasonably necessary for complying with the Missouri Clean Water Law §§644.006 to 644.141 or any standard, rule or regulation promulgated pursuant to Missouri Clean Water Law §§644.006 to 644.141.

✓ Not applicable; this permit is not drafted under premise of a petition for variance.

#### WASTELOAD ALLOCATIONS (WLA) FOR LIMITS:

As per [10 CSR 20-2.010(78)], the WLA is the amount of pollutant each discharger is allowed to discharge into the receiving stream without endangering water quality. Two general types of effluent limitations, technology-based effluent limits (TBELs) and water quality based effluent limits (WQBELs) are reviewed. If one limit does not provide adequate protection for the receiving water, then the other must be used per 10 CSR 20-7.015(9)(A).

✓ Applicable; wasteload allocations for toxic parameters were calculated using water quality criteria or water quality model results and by applying the dilution equation below; WLAs are calculated using the *Technical Support Document For Water Quality-Based Toxics Control* or TSD EPA/505/2-90-001; 3/1991.

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$$C = \frac{(Cs \times Qs) + (Ce \times Qe)}{(Qe + Qs)}$$

(EPA/505/2-90-001, Section 4.5.5)

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

✓ Not applicable; wasteload allocations were not calculated.

#### WASTELOAD ALLOCATION (WLA) MODELING:

Permittees may submit site specific studies to better determine the site specific wasteload allocations applied in permits.

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

#### WATER QUALITY STANDARD REVISION:

In accordance with section 644.058, RSMo, the Department is required to utilize an evaluation of the environmental and economic impacts of modifications to water quality standards of twenty-five percent or more when making individual site-specific permit decisions.

This operating permit does not contain requirements for a permit limit based on a water quality standard which has changed twenty-five percent or more since the previous operating permit.

#### Part IV PERMIT LIMITS & MONITORING DETERMINATION

Effluent limitations derived and established for this permit are based on current operations of the facility. Effluent means both process water and stormwater. Any flow through the outfall is considered a discharge and must be sampled and reported as provided below. Future permit action due to facility modification may contain new operating permit terms and conditions that supersede the terms and conditions, including effluent limitations, of this operating permit.

#### PERMITTED FEATURE #001 -Lagoons

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

PARAMETERS	Unit	DAILY MAX	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING Frequency	Minimum Reporting Frequency	SAMPLE TYPE	
STORAGE BASIN							
Freeboard	Feet	*	same	once/month	once/month	measured	
PRECIPITATION	Inches	*	new	once/month	once/month	total	
WASTEWATER							
PH	SU	*	new	once/month	once/month	grab	
NITRATE NITROGEN AS N	mg/L	*	new	once/month	once/month	grab	
Ammonia Nitrogen as N	mg/L	*	new	once/month	once/month	grab	
NITROGEN, TOTAL KJELDAHL	mg/L	*	new	once/month	once/month	grab	
PHOSPHOROUS, TOTAL	mg/L	*	new	once/month	once/month	grab	
OIL & GREASE	mg/L	*	new	once/month	once/month	grab	
NITRATE PLUS NITRITE AS N	mg/L	removed					
NITROGEN, TOTAL	mg/L	removed					

#### STORAGE BASIN LIMITATIONS TABLE:

\* - Monitoring requirement only

NEW - Parameter not previously established in previous state operating permit.

#### PERMITTED FEATURE #001 – DERIVATION AND DISCUSSION OF LIMITS:

#### STORAGE BASIN:

#### Freeboard

Monitoring requirement to verify adequate freeboard is maintained, so as to avoid an overflow of the storage basin.

#### **Precipitation**

Monitoring requirement to verify adequate freeboard is maintained, so as to avoid an overflow of the storage basin. Additionally, precipitation monitoring allows the permittee to operate the land application activity to prevent over application during saturated conditions that may result in a discharge.

#### WASTEWATER:

#### pН

Monitoring requirement only. In accordance with 10 CSR 20-20-6.015(4)(C)1 monitoring for pH is included to ensure that soil pH is in the optimal range for plant growth and nutrient utilization.

#### Nitrate Nitrogen as N

Monitoring requirement only. Monitoring the area will allow the permittee to ensure compliance with 10 CSR 20-6.015(4)(A)1., and ensure appropriate nutrient utilization.

#### Ammonia Nitrogen as N

Monitoring requirement only. Monitoring the area will allow the permittee to ensure compliance with 10 CSR 20-6.015(4)(A)1., and ensure appropriate nutrient utilization.

#### Nitrogen, Total Kjeldahl

Monitoring requirement only. Monitoring the area will allow the permittee to ensure compliance with 10 CSR 20-6.015(4)(A)1., and ensure appropriate nutrient utilization.

#### **Phosphorous**, Total

Monitoring requirement only. Monitoring the area will allow the permittee to ensure compliance with 10 CSR 20-6.015(4)(A)1., and ensure appropriate nutrient utilization.

#### Oil & Grease

Monitoring requirement only. Monitoring the area will allow the permittee to ensure compliance with 10 CSR 20-6.015(4)(A)1., and ensure appropriate nutrient utilization.

#### PERMITTED FEATURE #008, #009, #010, AND #011 - STORMWATER RUNON/RUNOFF FROM IRRIGATION FIELDS

These permitted features and the associated monitoring requirements were removed from the permits See PART III. RATIONAL AND DERIVATION OF PERMIT LIMITS ANITIBACKSLIDING.

# <u>Permitted Features #013, #014, #015, #020, #025, #031 through #036, #042, #043, #045, #046, #048</u> – Groundwater Monitoring Wells

#### **EFFLUENT LIMITATIONS TABLE:**

PARAMETERS	Unit	Daily Max	Monthly Avg	PREVIOUS PERMIT LIMITS	Minimum Sampling Frequency	Minimum Reporting Frequency	Sample Type
GROUNDWATER DEPTH	FEET	*	*	same	once/quarter	once/quarter	measured
ΡН	SU	*	*	same	once/quarter	once/quarter	grab
NITRATE NITROGEN AS N	MG/L	*	10	same	once/quarter	once/quarter	grab

\* Monitoring requirement only

<sup>‡</sup> The facility will report the minimum and maximum pH values; pH is not to be averaged.

#### **DERIVATION AND DISCUSSION OF LIMITS:**

#### **GROUNDWATER WELL MONITORING:**

The previous permit noted that the facility is located within a karst area containing losing streams. Groundwater monitoring wells were established to determine if the activity and irrigation being conducted on site are compromising the quality of the groundwater. The parameters established in previous permits are indicators of pollutants entering the groundwater. These parameters were reevaluated and considered representative of the nature of the wastewater being handled and irrigated at this facility. Therefore, monitoring will remain in the permit.

#### **Groundwater Depth**

Monitoring requirement continued. This will help evaluate levels of groundwater and increased potential for transmission of surface water to groundwater based on vertical separation.

#### <u>рН</u>

Monitoring requirement continued. Groundwater pH should be fairly neutral. Addition of pollutants like nutrients can alter the pH levels. This can indicate groundwater contamination.

#### Nitrate Nitrogen as N

Monthly average of 10 mg/L retained. This is a pollutant directly related to the wastewater generated from poultry processing. DMR data from the past five years shows the presence of this pollutant in the groundwater. Since there are drinking water wells around the site, the limit will remain in order to protect groundwater and potential drinking water use.

#### PERMITTED FEATURES #049 - #081 - LAND APPLICATION FIELDS

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

#### LAND APPLICATIONS LIMITATIONS TABLE:

PARAMETERS	Unit	Daily Max	PREVIOUS PERMIT LIMITS	Minimum Sampling Frequency	Minimum Reporting Frequency	Sample Type
WASTEWATER APPLICATION						
APPLICATION AREA	Acres	*	same	daily	once/month	total
APPLICATION RATE	Inches/Acre	*	same	daily	once/month	total
IRRIGATION PERIOD	Hours	*	same	daily	once/month	total
VOLUME IRRIGATED	Gallons	*	same	daily	once/month	total
SOIL MONITORING						
PH	SU	*	same	once/permit	once/permit	composite
PHOSPHOROUS (BRAY P1)	ppm	*	same	once/permit	once/permit	composite

\* - Monitoring requirement only

#### PERMITTED FEATURE <u>#049 - #081</u> – DERIVATION AND DISCUSSION OF LIMITS:

#### WASTEWATER APPLICATION:

#### **Application Area**

Monitoring requirement only. Monitoring the area will allow the permittee to ensure compliance with 10 CSR 20-6.015(4)(A)1., and prevent unauthorized discharges.

#### **Application Rate**

Monitoring requirement only. Monitoring the area will allow the permittee to ensure compliance with 10 CSR 20-6.015(4)(A)1., and prevent unauthorized discharges.

#### **Irrigation Period**

Monitoring requirement only. Monitoring the area will allow the permittee to ensure compliance with 10 CSR 20-6.015(4)(A)1., and prevent unauthorized discharges.

#### **Volume Irrigated**

Monitoring requirement only. Monitoring the area will allow the permittee to ensure compliance with 10 CSR 20-6.015(4)(A)1., and prevent unauthorized discharges.

#### SOIL MONITORING:

#### pН

Monitoring requirement only. In accordance with 10 CSR 20-20-6.015(4)(C)1 monitoring for pH is included to ensure that soil pH is in the optimal range for plant growth and nutrient utilization.

#### **Phosphorous Bray P1**

Monitoring requirement only. Wastewater and sludge contain variable concentrations of nutrients. In accordance with 10 CSR 20-20-6.015(4)(A)1 monitoring for phosphorous will ensure that the nutrients applied are being properly utilized.

#### PERMITTED FEATURES #001 - #01A – EMERGENCY DISCHARGE

Discharge from these outfalls is only authorized when a wet weather event causes an overflow of manure, litter, or process wastewater AND the lagoons have been properly designed, constructed, operated and maintained, in accordance with Special Conditions D. 2.e.

PARAMETERS	Unit	DAILY MAX	PREVIOUS PERMIT LIMITS	Minimum Sampling Frequency
PHYSICAL				
Flow	MGD	*	once/event <sup>‡</sup>	event total
Duration	days	*	once/event <sup>‡</sup>	event total
CONVENTIONAL				
Biological Oxygen Demand, 5 Day	mg/L	*	once/event <sup>‡</sup>	grab
Dissolved Oxygen (Minimum <sup>6</sup> )	mg/L	*	once/event <sup>‡</sup>	grab
pH <sup>†</sup>	SU	*	once/event <sup>‡</sup>	grab
Total Suspended Solids	mg/L	*	once/event <sup>‡</sup>	grab
Oil & Grease	mg/L	*	once/event <sup>‡</sup>	grab
E. Coli	#/100mL	*	once/event <sup>‡</sup>	grab
NUTRIENTS				
Ammonia as N	mg/L	*	once/event <sup>‡</sup>	grab
Nitrogen, Total	mg/L	*	once/event <sup>‡</sup>	grab
Phosphorous total	mg/L	*	once/event <sup>‡</sup>	grab
MONITORING REPORTS SHALL BE S	ubmitted <u>By</u>	THE $28^{\text{TH}}$ Day of the N	IONTH FOLLOWING DISCHA	ARGE CESSATION.

\* Monitoring and reporting requirement only.

♦ The facility shall report the minimum value obtained if more than one sample was taken.

† The facility shall report the range (minimum to maximum values) if more than one sample is obtained.

<sup>‡</sup> Once per event means the facility must take a sample at least once per discharge event. If there was no discharge, a report is not necessary; if a discharge occurred, the facility must report all results of sampling into the eDMR system by the 28<sup>th</sup> day of the month following the completion of the discharge.

#### PERMITTED FEATURES #001 - #01A - DERIVATION AND DISCUSSION OF LIMITS:

#### Flow

Monitoring requirement only.

#### **Duration**

Monitoring requirement only.

#### **Biochemical Oxygen Demand - 5 Day (BOD5)**

Monitoring requirement only.

#### Oxygen, Dissolved

Monitoring requirement only.

#### **Total Suspended Solids**

Monitoring requirement only.

#### **<u>pH</u>** Monitoring requirement only.

<u>Oil & Grease</u> Monitoring requirement only.

**<u>E. coli</u>** Monitoring requirement only. <u>Ammonia as N</u> Monitoring requirement only.

<u>Nitrogen, Total</u> Monitoring requirement only.

<u>Phosphorous, Total</u> Monitoring requirement only.

#### PERMITTED FEATURE #SM1 - #SM2 – Spring Monitoring.

Spring monitoring was removed from the permit. See **Part III. RATIONALE AND DERIVATION OF PERMIT CONDITIONS,** Antibacksliding.

# PART IV. ADMINISTRATIVE REQUIREMENTS

On the basis of preliminary staff review and the application of applicable standards and regulations, the Department, as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions contained herein and within the operating permit. The proposed determinations are tentative pending public comment.

#### **PERMIT SYNCHRONIZATION:**

The Department of Natural Resources is currently undergoing a synchronization process for operating permits. Permits are normally issued on a five-year term, but to achieve synchronization many permits will need to be issued for less than the full five years allowed by regulation. The intent is all permits within a watershed will move through the Watershed Based Management (WBM) cycle together will all expire in the same fiscal year. <u>http://dnr.mo.gov/env/wpp/cpp/docs/watershed-based-management.pdf</u>. This will allow further streamlining by placing multiple permits within a smaller geographic area on public notice simultaneously, thereby reducing repeated administrative efforts. This will also allow the Department to explore a watershed based permitting effort at some point in the future. Renewal applications must continue to be submitted within 180 days of expiration, however, in instances where effluent data from the previous renewal is less than two years old, such data may be re-submitted to meet the requirements of the renewal application. If the permit provides a schedule of compliance for meeting new water quality based effluent limits beyond the expiration date of the permit, the time remaining in the schedule of compliance will be allotted in the renewed permit.

 $\checkmark$  This permit will maintain synchronization by expiring the end of the first quarter, 2023.

#### **PUBLIC NOTICE:**

The Department shall give public notice a draft permit has been prepared and its issuance is pending.

<u>http://dnr.mo.gov/env/wpp/permits/pn/index.html</u> Additionally, public notice will be issued if a public hearing is to be held because of a significant degree of interest in or with water quality concerns related to a draft permit. No public notice is required when a request for a permit modification or termination is denied; however, the requester and permittee must be notified of the denial in writing.

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

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

✓ The Public Notice period for this operating permit was from November 22, 2019 to December 23, 2019. No comment were received.

DATE OF FACT SHEET: JANUARY 2, 2020 COMPLETED BY: GREG CALDWELL, ENVIRONMENTAL SCIENTIST MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM OPERATING PERMITS SECTION - INDUSTRIAL UNIT (573) 526-1426 greg.caldwell@dnr.mo.gov



These Standard Conditions incorporate permit conditions as required by 40 CFR 122.41 or other applicable state statutes or regulations. These minimum conditions apply unless superseded by requirements specified in the permit.

# Part I – General Conditions

# Section A - Sampling, Monitoring, and Recording

#### 1. Sampling Requirements.

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- b. All samples shall be taken at the outfall(s) or Missouri Department of Natural Resources (Department) approved sampling location(s), and unless specified, before the effluent joins or is diluted by any other body of water or substance.

#### 2. Monitoring Requirements.

a.

- Records of monitoring information shall include:
- i. The date, exact place, and time of sampling or measurements;
- ii. The individual(s) who performed the sampling or measurements;
- iii. The date(s) analyses were performed;
- iv. The individual(s) who performed the analyses;
- v. The analytical techniques or methods used; and
- vi. The results of such analyses.
- b. If the permittee monitors any pollutant more frequently than required by the permit at the location specified in the permit using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring shall be included in the calculation and reported to the Department with the discharge monitoring report data (DMR) submitted to the Department pursuant to Section B, paragraph 7.
- 3. **Sample and Monitoring Calculations.** Calculations for all sample and monitoring results which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in the permit.
- Test Procedures. The analytical and sampling methods used shall conform 4. to the reference methods listed in 10 CSR 20-7.015 unless alternates are approved by the Department. The facility shall use sufficiently sensitive analytical methods for detecting, identifying, and measuring the concentrations of pollutants. The facility shall ensure that the selected methods are able to quantify the presence of pollutants in a given discharge at concentrations that are low enough to determine compliance with Water Quality Standards in 10 CSR 20-7.031 or effluent limitations unless provisions in the permit allow for other alternatives. A method is "sufficiently sensitive" when; 1) the method minimum level is at or below the level of the applicable water quality criterion for the pollutant or, 2) the method minimum level is above the applicable water quality criterion, but the amount of pollutant in a facility's discharge is high enough that the method detects and quantifies the level of pollutant in the discharge, or 3) the method has the lowest minimum level of the analytical methods approved under 10 CSR 20-7.015. These methods are also required for parameters that are listed as monitoring only, as the data collected may be used to determine if limitations need to be established. A permittee is responsible for working with their contractors to ensure that the analysis performed is sufficiently sensitive.
- 5. Record Retention. Except for records of monitoring information required by the permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five (5) years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

#### 6. Illegal Activities.

- a. The Federal Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under the permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than two (2) years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than (4) years, or both.
- b. The Missouri Clean Water Law provides that any person or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained pursuant to sections 644.006 to 644.141 shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than six (6) months, or by both. Second and successive convictions for violation under this paragraph by any person shall be punished by a fine of not more than \$50,000 per day of violation, or by imprisonment for not more than two (2) years, or both.

## Section B - Reporting Requirements

#### 1. Planned Changes.

- The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility when:
  - i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
  - ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42;
  - iii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;
  - iv. Any facility expansions, production increases, or process modifications which will result in a new or substantially different discharge or sludge characteristics must be reported to the Department 60 days before the facility or process modification begins. Notification may be accomplished by application for a new permit. If the discharge does not violate effluent limitations specified in the permit, the facility is to submit a notice to the Department of the changed discharge at least 30 days before such changes. The Department may require a construction permit and/or permit modification as a result of the proposed changes at the facility.

#### 2. Non-compliance Reporting.

a. The permittee shall report any noncompliance which may endanger health or the environment. Relevant information shall be provided orally or via the current electronic method approved by the Department, within 24 hours from the time the permittee becomes aware of the circumstances, and shall be reported to the appropriate Regional Office during normal business hours or the Environmental Emergency Response hotline at 573-634-2436 outside of normal business hours. A written submission shall also be provided within five (5) business days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.



- b. The following shall be included as information which must be reported within 24 hours under this paragraph.
  - i. Any unanticipated bypass which exceeds any effluent limitation in the permit.
  - ii. Any upset which exceeds any effluent limitation in the permit.
  - Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit required to be reported within 24 hours.
- c. The Department may waive the written report on a case-by-case basis for reports under paragraph 2. b. of this section if the oral report has been received within 24 hours.
- 3. Anticipated Noncompliance. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The notice shall be submitted to the Department 60 days prior to such changes or activity.
- 4. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date. The report shall provide an explanation for the instance of noncompliance and a proposed schedule or anticipated date, for achieving compliance with the compliance schedule requirement.
- 5. **Other Noncompliance.** The permittee shall report all instances of noncompliance not reported under paragraphs 2, 3, and 6 of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph 2. a. of this section.
- 6. **Other Information**. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

#### 7. Discharge Monitoring Reports.

- a. Monitoring results shall be reported at the intervals specified in the permit.
- b. Monitoring results must be reported to the Department via the current method approved by the Department, unless the permittee has been granted a waiver from using the method. If the permittee has been granted a waiver, the permittee must use forms provided by the Department.
- c. Monitoring results shall be reported to the Department no later than the  $28^{th}$  day of the month following the end of the reporting period.

# Section C - Bypass/Upset Requirements

#### 1. Definitions.

- a. *Bypass*: the intentional diversion of waste streams from any portion of a treatment facility, except in the case of blending.
- b. Severe Property Damage: substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- c. *Upset:* an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

#### 2. Bypass Requirements.

a. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2. b. and 2. c. of this section.

- b. Notice.
  - i. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.
  - ii. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Section B – Reporting Requirements, paragraph 5 (24-hour notice).
- c. Prohibition of bypass.
  - i. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:
    - 1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
    - 2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
    - 3. The permittee submitted notices as required under paragraph 2. b. of this section.
  - ii. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three (3) conditions listed above in paragraph 2. c. i. of this section.

#### 3. Upset Requirements.

- a. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph 3. b. of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- b. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - i. An upset occurred and that the permittee can identify the cause(s) of the upset;
  - ii. The permitted facility was at the time being properly operated; and
  - iii. The permittee submitted notice of the upset as required in Section B

     Reporting Requirements, paragraph 2. b. ii. (24-hour notice).
     iv. The permittee complied with any remedial measures required under
  - iv. The permittee complied with any remedial measures required under Section D – Administrative Requirements, paragraph 4.
- c. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

# Section D - Administrative Requirements

- 1. **Duty to Comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Missouri Clean Water Law and Federal Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.
  - a. The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
  - b. The Federal Clean Water Act provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The Federal Clean Water Act provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement



imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.

- c. Any person may be assessed an administrative penalty by the EPA Director for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000.
- It is unlawful for any person to cause or permit any discharge of water d. contaminants from any water contaminant or point source located in Missouri in violation of sections 644.006 to 644.141 of the Missouri Clean Water Law, or any standard, rule or regulation promulgated by the commission. In the event the commission or the director determines that any provision of sections 644.006 to 644.141 of the Missouri Clean Water Law or standard, rules, limitations or regulations promulgated pursuant thereto, or permits issued by, or any final abatement order, other order, or determination made by the commission or the director, or any filing requirement pursuant to sections 644.006 to 644.141 of the Missouri Clean Water Law or any other provision which this state is required to enforce pursuant to any federal water pollution control act, is being, was, or is in imminent danger of being violated, the commission or director may cause to have instituted a civil action in any court of competent jurisdiction for the injunctive relief to prevent any such violation or further violation or for the assessment of a penalty not to exceed \$10,000 per day for each day, or part thereof, the violation occurred and continues to occur, or both, as the court deems proper. Any person who willfully or negligently commits any violation in this paragraph shall, upon conviction, be punished by a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than one year, or both. Second and successive convictions for violation of the same provision of this paragraph by any person shall be punished by a fine of not more than \$50,000 per day of violation, or by imprisonment for not more than two (2) years, or both.

#### 2. Duty to Reapply.

- a. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.
- b. A permittee with a currently effective site-specific permit shall submit an application for renewal at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Department. (The Department shall not grant permission

for applications to be submitted later than the expiration date of the existing permit.)

- c. A permittees with currently effective general permit shall submit an application for renewal at least 30 days before the existing permit expires, unless the permittee has been notified by the Department that an earlier application must be made. The Department may grant permission for a later submission date. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)
- 3. **Need to Halt or Reduce Activity Not a Defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- 4. **Duty to Mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- 5. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

#### 6. Permit Actions.

- a. Subject to compliance with statutory requirements of the Law and Regulations and applicable Court Order, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:
  - i. Violations of any terms or conditions of this permit or the law;ii. Having obtained this permit by misrepresentation or failure to
  - disclose fully any relevant facts; iii. A change in any circumstances or conditions that requires either a
  - temporary or permanent reduction or elimination of the authorized discharge; or
  - iv. Any reason set forth in the Law or Regulations.
- b. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

#### 7. Permit Transfer.

- a. Subject to 10 CSR 20-6.010, an operating permit may be transferred upon submission to the Department of an application to transfer signed by the existing owner and the new owner, unless prohibited by the terms of the permit. Until such time the permit is officially transferred, the original permittee remains responsible for complying with the terms and conditions of the existing permit.
- b. The Department may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Missouri Clean Water Law or the Federal Clean Water Act.
- c. The Department, within 30 days of receipt of the application, shall notify the new permittee of its intent to revoke or reissue or transfer the permit.
- 8. **Toxic Pollutants.** The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Federal Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
- 9. **Property Rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.



- 10. **Duty to Provide Information.** The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.
- 11. **Inspection and Entry.** The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the Department), upon presentation of credentials and other documents as may be required by law, to:
  - Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
  - d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Federal Clean Water Act or Missouri Clean Water Law, any substances or parameters at any location.

#### 12. Closure of Treatment Facilities.

- a. Persons who cease operation or plan to cease operation of waste, wastewater, and sludge handling and treatment facilities shall close the facilities in accordance with a closure plan approved by the Department.
- b. Operating Permits under 10 CSR 20-6.010 or under 10 CSR 20-6.015 are required until all waste, wastewater, and sludges have been disposed of in accordance with the closure plan approved by the Department and any disturbed areas have been properly stabilized. Disturbed areas will be considered stabilized when perennial vegetation, pavement, or structures using permanent materials cover all areas that have been disturbed. Vegetative cover, if used, shall be at least 70% plant density over 100% of the disturbed area.

#### 13. Signatory Requirement.

- a. All permit applications, reports required by the permit, or information requested by the Department shall be signed and certified. (See 40 CFR 122.22 and 10 CSR 20-6.010)
- b. The Federal Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six (6) months per violation, or by both.
- c. The Missouri Clean Water Law provides that any person who knowingly makes any false statement, representation or certification in any application, record, report, plan, or other document filed or required to be maintained pursuant to sections 644.006 to 644.141 shall, upon conviction, be punished by a fine of not more than ten thousand dollars, or by imprisonment for not more than six months, or by both.
- 14. **Severability.** The provisions of the permit are severable, and if any provision of the permit, or the application of any provision of the permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of the permit, shall not be affected thereby.

«	RECEIVED						
28104	SEP 12 2017						
MISSOURI DEPARTMENT OF NATURA	MISSOURI DEPARTMENT OF NATURAL RESOURCE Protection Program FOR AGENCY USE ONLY CHECK NUMBER						
FORM A – APPLICATION FOR NONDO	FORM A – APPLICATION FOR NONDOMESTIC PERMIT UNDER MISSOURI						
Note   PLEASE READ THE ACCOMPANYI	NG INSTRUCTIONS BEFORE COMPLET	ING THIS FORM.					
<ol> <li>This application is for:         <ul> <li>An operating permit for a new or u Please indicate the original Constru-</li> <li>An operating permit renewal: Please indicate the permit # MO</li> <li>An operating permit modification: Please indicate the permit # MO</li> </ul> </li> </ol>	npermitted facility: uction Permit # 0108618 Expiration Date _Ma	arch 31, 2018					
1.1 Is the appropriate fee included with the appli	ication? (See instructions for appropriate for	ee) 🗌 YES	NO NO				
2. FACILITY NAME George's Inc., Cassville Processing Plant		TELEPHONE NI (417) 442-3 FAX (417) 442-3	JMBER WITH AREA CODE 500 910				
ADDRESS (PHYSICAL)	CITY	STATE	ZIP CODE				
3. OWNER	Cassville		05625-2030				
NAME	EMAIL ADDRESS	TELEPHONE NU	JMBER WITH AREA CODE				
George's Inc.	carl.george@georgesinc.com	(479) 027-7 FAX (479) 927-7	200				
ADDRESS (MAILING)	CITY	STATE	ZIP CODE				
P.O. BoxG	Springdale	AR	72765				
3.1 Request review of draft permit prior to pe		10					
NAME Same as Owner	EMAIL ADDRESS	TELEPHONE NU	JMBER WITH AREA CODE				
ADDRESS (MAILING)	CITY	STATE	ZIP CODE				
5. OPERATOR							
NAME	CERTIFICATE NUMBER	TELEPHONE NL	MBER WITH AREA CODE				
Randy McFarland	NA	(417) 442-0242 FAX					
	CITY	(417) 442-3	910				
9066 State Hwy W	Cassville	MO	55625				
6. FACILITY CONTACT							
NAME Troy Green	TITLE Plant Manager E-MAIL ADDRESS	TELEPHONE NU (417) 442-35 FAX	MBER WITH AREA CODE 500				
7 ADDITIONAL FACILITY INFORMATION	troy.green@georgesinc.com	(417) 442-3	910				
7. ADDITIONAL FACILITY INFORMATION							
<ul> <li>7.1 Legal Description of Outfalls. (Attach add 001¼¼ UTM Coordinates Easting (X): 1/4 UTM Coordinates Easting (X):</li></ul>	Sec         T         R           Northing (Y):         R         R           //, Zone 15 North referenced to North American         R         R           Sec         T         R         R	ttached	_ County 3) _ County _ County _ County				
7.2         Primary Standard Industrial Classification (SIC 001 – SIC 2015 and NAICS 3116 003 – SIC and NAICS	C) and Facility North American Industrial C           15         002 – SIC           004 – SIC	assification System _ and NAICS _ and NAICS	n (NAICS) Codes.				

Attachment to Form A, Section 7.1; and Form C, Sections 2.10 and 2.20 Legal Descriptions of Permitted Features

Permitted Feature #001 - Poultry Processing Plant land application system, including storage basins and irrigation sites.

Emergency Discharge from East Storage Basin -

NW1/4, SE1/4, Sec. 35, T24N, R28W, Barry County Receiving Stream – Unnamed Tributary to Pogue Creek.

Irrigation Site North of Hwy. W -

E1/2, E1/2, Sec. 34, T24N, R28W, Barry County; All of Sec. 35, T24N, R28W, Barry County Receiving Stream – Unnamed Tributary to Pogue Creek

Irrigation Site South of Hwy. W and North of Farm Road 2140 -

SE1/4, NW1/4, Sec. 01, T23N, R28W, Barry County W1/2, SW1/4, Sec.01, T23N, R28W, Barry County N1/2, SW1/4, Sec. 02, T23N, R28W, Barry County E1/2, SE1/4, Sec. 02, T23N, R28W, Barry County E1/2, NE1/4, Sec. 03, T23N, R28W, Barry County NE1/4, SE1/4, Sec. 03, T23N, R28W, Barry County Receiving Stream – Unnamed Tributary to Pogue Creek

Irrigation Site South of Farm Road 2140 -

E1/2, NE1/4, Sec. 10, T23N, R28W, Barry County NW1/4, Sec. 11, T23N, R28W, Barry County W1/2, NW1/4, NE1/4, Sec. 11, T23N, R28W, Barry County SW1/4, NE1/4, Sec. 11, T23N, R28W, Barry County NW1/4, SE1/4, Sec. 11, T23N, R28W, Barry County NE1/4, SW1/4, Sec. 11, T23N, R28W, Barry County NE1/4, SW1/4, Sec. 11, T23N, R28W, Barry County Receiving Stream – Unnamed Tributary to Woodward Creek

Permitted Feature #008 – Upstream stormwater monitoring of tributary to Pogue Creek as water enters George's Inc. property.

NE1/4, SW1/4, Sec. 02, T23N, R28W, Barry County Receiving Stream – Unnamed Tributary to Pogue Creek Permitted Feature #009 – Stormwater runoff monitoring as stormwater leaves George's Inc. property north of Hwy. W.

SE1/4, SE1/4, Sec. 34, T24N, R28W, Barry County Receiving Stream – Unnamed Tributary to Pogue Creek

Permitted Feature #010 – Stormwater runoff monitoring as stormwater leaves George's Inc. property south of Farm Road 2140.

NE1/4, NE1/4, Sec. 10, T23N, R28W, Barry County Receiving Stream – Unnamed Tributary to Woodward Creek

Permitted Feature #011 – Stormwater runoff monitoring as stormwater leaves George's Inc. property generally south of Hwy. W and north of Farm Road 2140.

NE1/4, NE1/4, Sec. 03, T23N, R28W, Barry County Receiving Stream – Unnamed Tributary to Pogue Creek

Permitted Features #013, 014, 015, 020, 021, 024, 025, 030, 031, 032, 033, 034, 035, 036, 037, 041, 042, 043, 044, 045, 046, 047, and 048 are monitoring wells located throughout the land-application areas.

<ul> <li>A. Is your facility a manufacturing, commercial, mining or silviculture waste treatment facility? If yes, complete Form C or 2F. (2F is the U.S. EPA's Application for Storm Water Discharges Associate with Industrial Activity.)</li> <li>B. Is application for storm water discharges only? If yes, complete Form C or 2F.</li> <li>C. Is your facility considered a "Primary Industry" under EPA guidelines: If yes, complete Forms C or 2F and D.</li> <li>D. Is wastewater land applied? If yes, complete Form 1.</li> <li>E. Is sludge, biosolids, ash or residuals generated, treated, stored or land applied? If yes, complete Form R.</li> <li>F. If you are a Class IA CAFO, please disregard part D and E of this section. However, please attach a Nutrient Management Plan.</li> <li>F. Attach a map showing all outfalls and the receiving stream at 1" = 2,000' scale.</li> </ul>	YES  YES  YES  YES  YES  Any revision	
<ul> <li>B. Is application for storm water discharges only? If yes, complete Form C or 2F.</li> <li>C. Is your facility considered a "Primary Industry" under EPA guidelines: If yes, complete Forms C or 2F and D.</li> <li>D. Is wastewater land applied? If yes, complete Form 1.</li> <li>E. Is sludge, biosolids, ash or residuals generated, treated, stored or land applied? If yes, complete Form R.</li> <li>F. If you are a Class IA CAFO, please disregard part D and E of this section. However, please attach a Nutrient Management Plan.</li> <li>F. Attach a map showing all outfalls and the receiving stream at 1" = 2,000' scale.</li> </ul>	YES  YES  YES  YES  any revisio	NO I
<ul> <li>C. Is your facility considered a "Primary Industry" under EPA guidelines: If yes, complete Forms C or 2F and D.</li> <li>D. Is wastewater land applied? If yes, complete Form I.</li> <li>E. Is sludge, biosolids, ash or residuals generated, treated, stored or land applied? If yes, complete Form R.</li> <li>F. If you are a Class IA CAFO, please disregard part D and E of this section. However, please attach a Nutrient Management Plan.</li> <li>F. Attach a map showing all outfalls and the receiving stream at 1" = 2,000' scale.</li> </ul>	YES  YES  YES  any revisio	NO 🖸 NO 🗋 NO 🗹 m to your
<ul> <li>D. Is wastewater land applied? If yes, complete Form I.</li> <li>E. Is sludge, biosolids, ash or residuals generated, treated, stored or land applied? If yes, complete Form R.</li> <li>F. If you are a Class IA CAFO, please disregard part D and E of this section. However, please attach a Nutrient Management Plan.</li> <li>F. Attach a map showing all outfalls and the receiving stream at 1" = 2,000' scale.</li> </ul>	YES	NO 🖸 NO 🗹
<ul> <li>E. Is sludge, biosolids, ash or residuals generated, treated, stored or land applied? If yes, complete Form R.</li> <li>F. If you are a Class IA CAFO, please disregard part D and E of this section. However, please attach a Nutrient Management Plan.</li> <li>F. Attach a map showing all outfalls and the receiving stream at 1" = 2,000' scale.</li> </ul>	YES	NO 🗹
<ul> <li>F. If you are a Class IA CAFO, please disregard part D and E of this section. However, please attach a Nutrient Management Plan.</li> <li>F. Attach a map showing all outfalls and the receiving stream at 1" = 2,000' scale.</li> </ul>	any revisic	on to your
F. Attach a map showing all outfalls and the receiving stream at 1" = 2,000' scale.		
9. ELECTRONIC DISCHARGE MONITORING REPORT (eDMR) SUBMISSION SYSTEM		
<ul> <li>Consistent set of data. One of the following must be checked in order for this application to be consider visit <a href="http://dnr.mo.gov/env/wpp/edmr.htm">http://dnr.mo.gov/env/wpp/edmr.htm</a> to access the Facility Participation Package.</li> <li>You have completed and submitted with this permit application the required documentation to participate</li> <li>You have previously submitted the required documentation to participate in the eDMR system and/or you eDMR system.</li> <li>You have submitted a written request for a waiver from electronic reporting. See instructions for further i waivers.</li> </ul>	e in the eDl au are curre informatior	MR system. antly using the n regarding
<ol> <li>DOWNSTREAM LANDOWNER(S) Attach additional sheets as necessary. See Instructions. (PLEASE SHOW LOCATION ON MAP. SEE 8.D ABOVE).</li> </ol>		
<ul> <li>NAME</li> <li>1) Ann M. Taggart (Pogue Creek Drainageway);</li> <li>2) Carl C. and Eunice Sapp (Woodward Creek Drainageway);</li> </ul>	/ay)	
ADDRESS 1) 7152 State Hwy W; 2) 6289 F.R. 2142 1) Cassville 65625; 2) Exeter 65647	STATE ZI MO	IP CODE
11. I certify that I am familiar with the information contained in the application, that to the best of my know information is true, complete and accurate, and if granted this permit, I agree to abide by the Missour all rules, regulations, orders and decisions, subject to any legitimate appeal available to applicant un Water Law to the Missouri Clean Water Commission.	wiedge an uri Clean W nder the Mi	d belief such /ater Law and issouri Clean
NAME AND OFFICIAL TITLE (TYPE OR PRINT)	UMBER WIT HA	AR=A CODE
Troy Green, Plant Manager (417) 442-33	3500	
SIGNATURE DATE SIGNED	17	
MO 780 1479 (09-16) 9121	11	

# BEFORE MAILING, PLEASE ENSURE ALL SECTIONS ARE COMPLETED AND ADDITIONAL FORMS, IF APPLICABLE, ARE INCLUDED. Submittal of an incomplete application may result in the application being returned.

HAVE YOU INCLUDED:

	Appropriate Fees?
~	Map at 1" = 2000' scale?
2	Signature?
7	Form C or 2F, if applicable?
٦	Form D, if applicable?

2	F
	F
	F

Form I (Irrigation), if applicable? Form R (Sludge), if applicable? Revised Nutrient Management Plan, if applicable?

# RECEIVED

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# SEP 12 2017

MISSOURI DEP	ARTMENT OF NATURA	RESOURCES Protection Process	FOR AGENCY	USE ONLY
WATER PROTEC	CTION PROGRAM, WAT	ISCHARGE PERMIT -	CHECK NO.	
	JRING, COMMERCIA	AL, MINING, PROCESS AND STORMWATER	DATE RECEIVED	FEE SUBMITTED
OTE: DO NOT ATTEMPT	TO COMPLETE THIS E	THE ACCOMP		CTIONS
DO NAME OF FACILITY	TO COMPLETE THIS PC	KIN BEFORE READING THE ACCOUNT		onono
George's Inc., Cassville Proc	cessing Facility			
10 THIS FACILITY IS NOW IN OPERATIO	ON UNDER MISSOURI OPERATING	PERMIT NUMBER		
20 THIS IS A NEW FACILITY AND WAS ( ERMIT).	CONSTRUCTED UNDER MISSOURI	CONSTRUCTION PERMIT NUMBER (COMPLETE ONLY IF T	HIS FACILITY DOES NO	T HAVE AN OPERATING
NA .				
00 LIST THE STANDARD INDUSTRIAL C	CLASSIFICATION (SIC) CODES APPL	LICABLE TO YOUR FACILITY (FOUR DIGIT CODE)		
A. FIRST		B. SECOND		
C. THIRD				
0 FOR EACH OUTFALL GIVE THE LEG/	AL DESCRIPTION.			
OUTFALL NUMBER (L	_IST)1/41/	/4 SEC T R		COUNT
See attached for storm	nwater, irrigation site, and la	goon emergency outfalls		
OFOR EACH OUTPALL LIST THE NAME	E OF THE RECEIVING WATER			
OUTFALL NUMBER (L	LIST)	RECEIVING WATER		
See allached.				
30 BRIEFLY DESCRIBE THE NATURE OF	F YOUR BUSINESS			
hicken Slaughtering and Pro	ocessing Plant, Chicken	Hatchery, and Feedmill.		
	1			

Attachment to Form A, Section 7.1; and Form C, Sections 2.10 and 2.20 Legal Descriptions of Permitted Features

Permitted Feature #001 - Poultry Processing Plant land application system, including storage basins and irrigation sites.

Emergency Discharge from East Storage Basin -

NW1/4, SE1/4, Sec. 35, T24N, R28W, Barry County Receiving Stream – Unnamed Tributary to Pogue Creek.

#### Irrigation Site North of Hwy. W -

E1/2, E1/2, Sec. 34, T24N, R28W, Barry County; All of Sec. 35, T24N, R28W, Barry County Receiving Stream – Unnamed Tributary to Pogue Creek

#### Irrigation Site South of Hwy. W and North of Farm Road 2140 -

SE1/4, NW1/4, Sec. 01, T23N, R28W, Barry County W1/2, SW1/4, Sec.01, T23N, R28W, Barry County N1/2, SW1/4, Sec. 02, T23N, R28W, Barry County E1/2, SE1/4, Sec. 02, T23N, R28W, Barry County E1/2, NE1/4, Sec. 03, T23N, R28W, Barry County NE1/4, SE1/4, Sec. 03, T23N, R28W, Barry County Receiving Stream – Unnamed Tributary to Pogue Creek

Irrigation Site South of Farm Road 2140 -

E1/2, NE1/4, Sec. 10, T23N, R28W, Barry County NW1/4, Sec. 11, T23N, R28W, Barry County W1/2, NW1/4, NE1/4, Sec. 11, T23N, R28W, Barry County SW1/4, NE1/4, Sec. 11, T23N, R28W, Barry County NW1/4, SE1/4, Sec. 11, T23N, R28W, Barry County NE1/4, SW1/4, Sec. 11, T23N, R28W, Barry County NE1/4, SW1/4, Sec. 11, T23N, R28W, Barry County Receiving Stream – Unnamed Tributary to Woodward Creek

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Permitted Features #013, 014, 015, 020, 021, 024, 025, 030, 031, 032, 033, 034, 035, 036, 037, 041, 042, 043, 044, 045, 046, 047, and 048 are monitoring wells located throughout the land-application areas.

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent and treatment units labeled to correspond to the more detailed descriptions in item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, public sewers and outfalls. If a water balance cannot by determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures. See attached Water Balance Schematic

B. For each outfall, provide a description of 1. All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water and storm water runoff. 2. The average flow contributed by each operation. 3. The treatment received by the wastewater. Continue on additional sheets if necessary.

No Outfall - This is a no-discharge system. All wastewater is land-applied as irrigation water. (Sanitary wastewater at hatchery and feedmill are treated with on-site leach fields).

1. OUTFALL NO.	2. OPERATION(S	5) CONTRIBUTING FLOW	3. TREA	TMENT
(LIST)	A. OPERATION (LIST)	B. AVERAGE FLOW (INCLUDE UNITS) (MAXIMUM FLOW)	A. DESCRIPTION	B. LIST CODES FROM TABLE A
Permitted Features				
#001	Poultry Processing Plant	2.8 mgd (2.8 mgd)	*	1T, 1H, 2D,
				3B, 3F
#008	Upstream Stormwater	None	NA	
#s 009,010,011	Stormwater Runoff	None	NA	
#s 013 thru 048	23 Monitoring Wells	None	NA	
Treatment facilities prior solids are captured; float ng from lagoons to land a	to land application include screenin material is sent to off-site for render application sites.	ng to remove feathers and offal; gravity flow ing; gravity flow to aerated storage lagoons	to dissolved air flotation (2) and unaerated storag	(DAF) unit where le lagoons (2); pump-

MO 780-1514 (06-13)

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EXCEPT FOR	STORM RUNOFF, LEAKS OR S	SPILLS, ARE ANY OF THE D	ISCHARGES DESC	RIBED IN ITEMS	A OR B INTERMIT	TENT OR SEASO	JNAL?		
	YES (COMPLETE THE FO.	LLOWING TABLE)	NO (GO	TO SECTION 2	2.50)				
						4. 1	LOW		
OUTFALL			3. FRE	QUENCY	A. FLOW RA	ATE (in mgd)	B. TOTAL VOLU	UME (specify wind its)	th
NUMBER (list)	2. OPERATION(S) CON	ITRIBUTING FLOW (list)	A. DAYS PER WEEK (specify average)	B. MONTHS PER YEAR (specify average)	1. LONG TERM AVERAGE	2. Maximum Daily	4. LONG TERM DAILY	3. MAXIMUM AVERAGE	C. DURATIC (in days)
50 MAXIMUM P	RODUCTION						II		
A. DOES AN	NEFFLUENT GUIDELINE LIMITA S (COMPLETE B.)	ATION PROMULGATED BY E	EPA UNDER SECTION	ON 304 OF THE	CLEAN WATER AC	T APPLY TO YO	UR FACILITY?		
B. ARE THE	LIMITATIONS IN THE APPLICA	BLE EFFLUENT GUIDELINE	S EXPRESSED IN	TERMS OF PRO	DUCTION (OF OTH	FR MEASURE O	E ODERATIONI2		
	a line and share an annual st				boonion (or on		or Electrony!		
YE	S (COMPLETE c.)	NO (GO TO SECTION 2.	60)				or Electrolay!		
C. IF YOU A	S (COMPLETE C.)	HE QUANTITY THAT REPRE	60) SENTS AN ACTUA DICATE THE AFFE	L MEASUREMEN	T OF YOUR MAXII	MUM LEVEL OF	PRODUCTION, EXP	PRESSED IN TI	HE TERMS
C. IF YOU A AND UNITS U	S (COMPLETE C.)	NO (GO TO SECTION 2.4 HE QUANTITY THAT REPRE	60) SENTS AN ACTUAI DICATE THE AFFE	L MEASUREMEN	IT OF YOUR MAXII	MUM LEVEL OF 1	PRODUCTION, EXP	PRESSED IN TH	HE TERMS
C. IF YOU A AND UNITS U	S (COMPLETE C.) NGWERED YES" TO B. LIST TH USED IN THE APPLICABLE EFF	NO (GO TO SECTION 2.0 HE QUANTITY THAT REPRE FLUENT GUIDELINE AND INI 1. MA	SENTS AN ACTUA DICATE THE AFFEC	L MEASUREMEN	T OF YOUR MAXII		PRODUCTION, EXP	PRESSED IN TI	HE TERMS
C. IF YOU A AND UNITS ( QUANTITY PE	S (COMPLETE c.)	NO (GO TO SECTION 2.0 HE QUANTITY THAT REPRE FLUENT GUIDELINE AND INI 1. MA	SENTS AN ACTUA DICATE THE AFFE XIMUM QUANTITY C. OP	L MEASUREMEN CTED OUTFALLS	NT OF YOUR MAXII S. DUCT, MATERIAL, ecify)		PRODUCTION, EXP	PRESSED IN TI	HE TERMS
QUANTITY PE	S (COMPLETE C.)	NO (GO TO SECTION 2.0 HE QUANTITY THAT REPRE FLUENT GUIDELINE AND INI 1. MA SURE	SENTS AN ACTUA DICATE THE AFFEC XIMUM QUANTITY C. OP	L MEASUREMEN CTED OUTFALLS	IT OF YOUR MAXII	MUM LEVEL OF 1	PRODUCTION, EX	2. Al OU (list out)	HE TERMS
	S (COMPLETE c.)	NO (GO TO SECTION 2.0 HE QUANTITY THAT REPRE FLUENT GUIDELINE AND INI 1. MA SURE	SENTS AN ACTUA DICATE THE AFFEC XIMUM QUANTITY C. OP	L MEASUREMEN CTED OUTFALLS	T OF YOUR MAXII	MUM LEVEL OF 1	PRODUCTION, EX	2. Ai OU (list out)	HE TERMS
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C. IF YOU A AND UNITS U QUANTITY PE A QUANTITY PE A. ARE YOU OPERATION APPLICATIO STIPULATION STIPULATION	S (COMPLETE C.)	VI (GO TO SECTION 2.0 HE QUANTITY THAT REPRE FLUENT GUIDELINE AND INI 1. MA SURE DERAL, STATE OR LOCAL AL TT EQUIPMENT OR PRACTI TT OR LOAN CONDITIONS BLE) VI NO ( 2. AFFECTED O	JTHORITY TO MEE CES OR ANY OTHE MINIMUM QUANTITY C. OP	T, ANY IMPLEM	T OF YOUR MAXIN S. DUCT, MATERIAL, ecity)	ULE FOR THE C THAT MAY AFFE DERS, ENFORC	ONSTRUCTION, LA	PRESSED IN TH 2. AI OU (list out) (list out)	HE TERMS
C. IF YOU A AND UNITS ( QUANTITY PE 30 IMPROVEMEN A. ARE YOU OPERATION APPLICATION STIPULATION STIPULATION ( YES (CC) 1. IDENTIC	S (COMPLETE c.)	VERAL, STATE OR LOCAL AL SURE VERAL, STATE OR LOCAL AL TT EQUIPMENT OR PRACTIN DT LIMITED TO, PERMIT CO NNT OR LOAN CONDITIONS: BLE) 2 AFFECTED O	JTHORITY TO MEE CES OR ANY OTHE NDITIONS, ADMINI (GO TO 3.00)	T, ANY IMPLEMI RENVIRONMEN STRATIVE OR EI	TT OF YOUR MAXIN S. DUCT, MATERIAL, ecify) ENTATION SCHED TAL PROGRAMS NFORCEMENT OF BRIEF DESCRIPTI	ULE FOR THE C THAT MAY AFFE DERS, ENFORC	ONSTRUCTION, EXP	PRESSED IN TH 2. AI OU (fist outh (fist outh (fist outh solution) (fist outh (fist outh (fist outh (fist outh) (fist outh) (fi	HE TERMS

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

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

•••

2. USE THE SPACE BELOW TO LIST ANY OF THE POLLUTANTS LISTED IN PART B OF THE INSTRUCTIONS, WHICH YOU KNOW OR HAVE REASON TO BELIEVE IS DISCHARGED FROM ANY OUTFALL. FOR EVERY POLLUTANT YOU LIST, BRIEFLY DESCRIBE THE REASONS YOU BELIEVE IT TO BE PRESENT AND REPORT AN INALYTICAL DATA IN YOUR POSSESSION.								
1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE					
None								
	, , , , , , , , , , , , , , , , , , , ,							

••,

YES (IDENTIFY THE TEST(S) AND D	ESCRIBE THEIR PURPOSES BELOW.)	NO (GO TO 3.20)		
20 CONTRACT ANALYSIS INFORMATION				
WERE ANY OF THE ANALYSES REPORT	ED PERFORMED BY A CONTRACT LABOR	ATORY OR CONSULTING FIRM?		
YES (LIST THE NAME, ADDRESS AND	D TELEPHONE NUMBER OF AND POLLUTA	NTS ANALYZED BY EACH SUCH LABO	RATORY OR FIR	M BELOW.)
A. NAME	B. ADDRESS	C. TELEPHONE (area cod	le and number)	D. POLLUTANTS ANALYZED (III
nvironmental Testing Group, ic.	Bentonville, AR 72712-5524	4/9-2/1-/996		Also all analyses required b this Form C.
) CERTIFICATION				
ERTIFY UNDER PENALTY OF LA IS APPLICATION AND ALL ATTA R OBTAINING THE INFORMATIC E SIGNIFICANT PENALTIES FOF	W THAT I HAVE PERSONALLY E CHMENTS AND THAT, BASED O NN, I BELIEVE THAT THE INFORM & SUBMITTING FALSE INFORMA	XAMINED AND AM FAMILIAF N MY INQUIRY OF THOSE IN IATION IS TRUE, ACCURATE TION, INCLUDING THE POSS	WITH THE I DIVIDUALS II AND COMPI IBILITY OF F	NFORMATION SUBMITTED IN MMEDIATELY RESPONSIBLE LETE. I AM AWARE THAT THE INE AND IMPRISONMENT.
			TELEPHONE N	UMBER WITH AREA CODE
A AND OFFICIAL TITLE (TYPE OR PRINT)			1	
ME AND OFFICIAL TITLE (TYPE OR PRINT) oy Green, Plant Manager			(417) 442-	-3500
ME AND OFFICIAL TITLE (TYPE OR PRINT) TOY Green, Plant Manager INATURE (SEE INSTRUCTIONS)			(417) 442- DATE SIGNED	-3500

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#### INTAKE AND EFFLUENT CHARACTERISTICS

PARTA - You must provide the	results of a	at least o	ne analysis	for every pollute	int in this table.	Complete o	ne table f	for each outfall. S	ee instruc	tions for a	dditio	nal details.					
					2. EFFLU	ENT						3. UNITS (spe	cify if blank)		4. INT	AKE (optional)	
1. POLLUTANT	A. MAXIN	NUM DAIL	Y VALUE	B. MAXIMUI (if a	1 30 DAY VALUE vailable)	C. L	ONG TER (if av	M AVRG. VALUE vailable)	D. I	NO. OF	A	CONCEN-		A. L(	ONG TERM AV	RG. VALUE	B NO OF
	(1) CONCENT	RATION	(2) MASS	(1) CONCENTRATI	ON (2) MASS	CONCE	(1) NTRATIO	N (2) MASS	ANA	LYSES	Т	RATION	B. MASS	CONC	(1) CENTRATION	(2) MASS	ANALYSES
A. Biochemical Oxygen Demand (BOD)	1,89	90	46,342	915	17,857		453	8,614		25		mg/l	lbs.				
B. Chemical Oxygen Demand (COD)	138	3	3,384							1		mg/l	lbs.				
C. Total organic Carbon (TOC)	9.0	6	222							1		mg/l	lbs.				
D. Total Suspended Solids (TSS)	2,97	70	72,823	1,450	28,298		626	11,904		25		mg/l	lbs.				
E. Ammonia (as N)	48.	2	1,182	45.7	892	:	23.1	439		25		mg/l	lbs.				
F. Flow	VALUE 2.94			VALUE 2.34		VALUE 2.28						mgd		VALU	E		
G. Temperature (winter)	VALUE			VALUE		VALUE	VALUE						AV O		VALUE		
H. Temperature (summer)	ner) VALUE VALUE			VALUE						°(	;	VALU	E				
l. pH	MINIMUM 7.0	M	AXIMUM	MINIMUM	MAXIMUM	No.			-		1	STANDAR	DUNITS		Rost 1	2: 3	6
PART B – Mark "X" in column 2A for pollutant. Complete one table for ea	each polluta ch outfall. Se	nt you kno ee the inst	w or have rea	ison to believe is p dditional details an	resent. Mark "X" ir 1 requirements.	n column 2B fo	r each pol	lutant you believe to	be absent.	lf you mark	colum	in 2A for any po	bilutant, you m	nust provide	the results for a	at least one ana	ysis for that
· · · · · · · · · · · · · · · · · · ·	2. MAF	RK "X"				3. EFFL	UENT						4. UNITS		5.	INTAKE (option	al)
1. POLLUTANT AND CAS NUMBER	A. BELIEVED	B. BELIEVED	A. MAXIM	IUM DAILYVALIJ	B. MAXIMU	M 30 DAY VA available)	LUE	C. LONG TERM AV (if availabl	RG. VALUE 0)	D. NO	OF	A. CONCE	N	MASS	A. LONG TER	WAVRG. VALU	E B. NO. OF
(11 878118016)	PRESENT	ABSENT	(1) CONCENT	RATION (2) MA	S CONCENTRA	TION (2) M	ASS C	(1) CONCENTRATION	(2) MASS	ANALY	SES	TRATION	B. 1	WASS	(1) CONCENTRAT	10N (2) MAS	ANALYSES
CONVENTIONAL AND NONC	ONVENTIC	NAL PO	LLUTANTS	3													
A. Bromide (24959-67-9)		x	<0.5	500						1	1	mg/l					
B. Chlorine, Total Residual		x	N	C						1		mg/l					
C. Color	x		65.	.0						1							
D. Fecal Coliform	x		35	9						1		#/100n	nl				
E. Fluoride (16984-48-8)		x	<0.5	500						1		mg/l				-	
E Nitrata Nitrata (20 M)			24	8 605	17.5	3	12	77	146	21	-			ha			

OUTFALL NO.

	2. MA	RK "X"			3.	EFFLUENT				4. UN	ITS	5. INTA	KE (optional)	
1. POLLUTANT AND CAS NUMBER (if available)	A.	B.	A. MAXIMUM DAI	LY VALUE	B. MAXIMUM 30 I (if availab	DAY VALUE	C. LONG TERM AV (if availab	/RG. VALUE	D. NO. OF	A. CONCEN-		A. LONG TERM AV	RG. VALUE	B. NO. OF
(in a canadray	PRESENT	ABSENT	(1) CONCENTRATION	(2) MAS:3	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	TRATION	B. MASS	(1) CONCENTRATION	(2) MASS	ANALYSES
G. Nitrogen, Total Organic (as N)	x		201	4,928	99.3	1,938	43.3	823	25	mg/l	lbs.			
H. Oil and Grease	x		90.8	2,226	29.2	570	17.3	329	25	mg/l	lbs.			
I. Phosphorus (as P), Total (7723-14-0)	x		81.5	1,998	45.1	880	23.9	454	25	mg/l	lbs.			
J. Sulfate (as SO <sup>4</sup> ) (14808-79-8)	x		14.6						1	mg/l				
K. Sulfide (as S)	x		<0.1						1	mg/l				
L. Sulfite (as SO <sup>3</sup> ) (14265-45-3)	x		4.4						1	mg/l		1		
M. Surfactants		x	<0.1						1	mg/l				
N. Aluminum, Total (7429-90-5)	x		0.12						1	mg/l				
O. Barium, Total (7440-39-3)	×		0.009						1	mg/l				
P. Boron, Total (7440-42-8)	x		0.053						1	mg/l				
Q. Cobalt, Total (7440-48-4)		x	ND						1	mg/l				
R. Iron, Total (7439-89-6)	x		6.64						1	mg/l				
S. Magnesium, Totał (7439-95-4)	x		17.3						1	mg/l				
T. Molybdenum, Total (7439-98-7)		x	0.005						1	mg/l				
U. Manganese, Total (7439-96-5)	x		0.23						1	mg/l				
V. Tin, Total (7440-31-5)		x	ND						1	mg/i				
VV. Titanium, Total (7440-32-6)		x	0.005						1	mg/l				

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	2. MA	RK "X"			3. 1	EFFLUENT				4. UN	ITS	5. INTA	KE (optional)	
1. POLLUTANT AND CAS NUMBER (If available)	A. RELIEVED	B.	A. MAXIMUM DAIL	Y VALUE	B. MAXIMUM 30 D (if availab	AY VALUE	C. LONG TERM AV (if availab	RG. VALUE	D. NO. OF	A. CONCEN-	B MASS	A. LONG TERM AV	RG. VALUE	B. NO. OF
(* • • • • • • • • • • • • • • • • • • •	PRESENT	ABSENT	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	ANALYSES	TRATION	0. 1100	(1) CONCENTRATION	(2) MASS	ANALYSES
METALS, AND TOTAL PHEN	OLS													
1M. Antimony, Total (7440-36-9)		x	ND						1	mg/l				
2M. Arsenic, Total (7440-38-2)		x	ND						1	mg/l				
3M. Beryllium, Total (7440-41-7)		x	ND						1	mg/l				
4M. Cadmium, Total (7440-43-9)		x	ND						1	mg/l				
5M. Chromium III (16065-83-1)	x		0.0025						1	mg/l				
6M. Chromium Vi (18540-29-9)			<0.010						1	mg/l				
7M. Copper, Total (7440-50-8)	x		0.052						1	mg/l				
8M. Lead, Total (7439-92-1)		x	ND						1	mg/l				
9M. Mercury, Total (7439-97-6)		x	ND						1	mg/l				
10M. Nickel, Total (7440-02-0)	x		0.006						1 -	mg/l				
11M. Selenium, Total (7782-49-2)		x	ND						1	mg/l				
12M. Silver, Total (7440-22-4)		x	ND						1	mg/l				
13M. Thallium, Total (7440-28-0)		x	ND						1	mg/l				
14M. Zinc, Total (7440-66-6)		x	ND						1	mg/l				
15M. Cyanide, Amenable to Chlorination		x	<0.100						1	mg/l				
16M. Phenois, Totai	x		0.010						1	mg/l				
RADIOACTIVITY														
(1) Alpha Tota	x		3.8 +/- 2.33						1	pCi/l				
(2) Beta Total	x		32.5 +/- 2.52						1	pCi/l				
(3) Radium Total	x		0.525 +/-0.531						1	pCi/l				
(4) Radium 226 Total	x		0.407 +/- 0.379						1	pCi/l				

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G=== 4 (1)	MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM FORM I – PERMIT APPLICATION FOR OPERATION OF WASTEWATER IRRIGATION SYSTEMS	FOR AGENCY USE ONLY PERMIT NUMBER MO - DATE RECEIVED
INSTRUCTIO	INS: The following forms must be submitted with Form I: FORM B or B2 for dom FORM A for industrial v	nestic wastewater. wastewater.

		FO	RM A for industr	ial wastewater.		
1. F	ACILITY INFORMATION				un partici	
1.1	Facility Name	1.2 Perm	nit Number			
Geol	rge's Processing, Cassville Processing Plant	MO	- 0108618			
1.3	Type of wastewater to be irrigated:	Municipal	State/Natio	nal Park 🛛 S	easonal b	usiness
	Municipal with Pretreatment Program or Significant Indus	strial Users	Other (expl	ain) Poultry Proce	ssing	
	SIC Codes (list all that apply, in order of importance) 2015					
1.4	Months when the business or enterprise will operate or gene	erate wastewa	ter:			
	☑ 12 months per year □ Part of year (list Months):					
1.5	This system is designed for:					
	No-discharge Partial irrigation when feasible and	discharge rest	t of time.			
	Irrigation during recreation season (April – October) and ( Other (explain))	discharge duri	ng November – I	Varch.		
4.0	List the Feelling with the which will be explicitly to the lefect	an antana				
1.0	Outfall Numbers Non-Discharging System	on system.				
		Martine MAR	ana sheka shekara	den se de la composition de la composit	A and a start	enter terre
2.51	ORAGE BASINS					
2.1	Number of storage basins: 4					
	Type of basin: Steel Concrete	Fiberglas	is 🗌	Earthen		
	Earthen with membrane liner					
3. L.A	ND APPLICATION SYSTEM					
3.1	Number of Irrigation sites 33 Total Acres	1270				
	Location:14,14,14, Sec *T 23N R 2	28W Barry		County	767	Acres
	Location:14,14,14, Sec ** T 24N R	28W Barry		County	503	Acres
	Attach pages as needed.* 1,2,3,10,11 ** 34,35 See A	ttached Map	_			
3.2	Attach a site map showing topography, storage basins, Irrigat other pertinent features. Attached	ion sites, prop	perty boundary, s	treams, wells, roa	ids, dwellii	ngs, and
3.3	Type of vegetation: 🗹 Grass hay 🗌 Pasture 🔲	Timber	Row crops	Other (desc	ribe)	
3,4	Wastewater flow (dry weather) gallons/day:					
	Average annual: 730 mg Seasonal NA	Off-sea	ison NA			
1	Months of seasonal flow: NA					
80-1686	5 (08-14)					

3.5	Land Application rate per acre (design flow including 1 in 10 year	stormwater flows)		
	Design: 22 inches/year .133 inches/hour	04 inches/da	y 0-3.0	Inches/week
	Actual: 15 inches/year .133 inches/hour	04 inches/da	y 0-3.0	inches/week
	Total Irrigation per year (gallons): 730 mg Design	500 mg Actua	al	
	Actual months used for Irrigation (check all that apply):			
	🗹 Jan 😥 Feb 🗹 Mar 🖾 Apr 🖉 May 😥 Jun 🗹 Jul 🖟	Aug 🖌 Sep 🖡	Oct 🗹 Nov	Dec Dec
3.6	Land Application Rate is based on:          Image: Nutrient Management Plan (N&P)         Image: Hydraulic Loading         Image: Other (describe)         Plant Available Nitrogen			
3.7	Equipment type:  Sprinklers  Gated pipe  Center pl Equipment Flow Capacity: <u>600,000</u> Gallons per hour <u>1900</u>	ivot 🗹 Traveling Total hours of op	gun 🗌 Other eration per year	(describe)
3.8	Public Use Areas.       Public access shall not be allowed to public us of Public Access Restriction:         Site is Fenced       Image: Wastewater disinfection prior to in the public us of the public us of the public Access Restriction:         Other (describe):       Warning signs posted.	rrigation	tes when applicate is not for public	c use
3.9	Separation distance (in feet) from the outside edge of the wetted irr 7.5k Permanent flowing stream 300 Losing Stream NA 50	igation area to ne Intermittent (wet	arby down gradie weather) stream	NA_Lake or pond
	Property boundary 130 Dwellings 500 Water supply	well <u>NA</u> Othe	(describe)	
.10	The facility must develop and retain an Operation and Maintenance	(O&M) Plan for the	ne irrigation syste	em.
.10	The facility must develop and retain an Operation and Maintenance Date of O&M Plan: 09/14/2014	well <u>NA</u> Othe (O&M) Plan for th	ne irrigation syste	em.
3.10 1. CE	The facility must develop and retain an Operation and Maintenance Date of O&M Plan: 09/14/2014	well <u>NA</u> Othe (O&M) Plan for ti	e irrigation syste	em.
. CE certi ttach he in	The facility must develop and retain an Operation and Maintenance Date of O&M Plan: 09/14/2014 ERTIFICATION tify under penalty of law that I have personally examined and am fam chments and that based on my inquiry of those individuals immediated information is true, accurate and complete. I am aware that there are ding the possibility of fine or imprisonment.	well <u>NA</u> Other (O&M) Plan for the other (Illar with the information of the other ot	ne irrigation system nation submitted potaining this infrees for submitting	em. In this application and all ormation, I believe that false information
. CE certi ttach ne in ocluc	The facility must develop and retain an Operation and Maintenance Date of O&M Plan; 09/14/2014 ERTIFICATION tify under penalty of law that I have personally examined and am fam shments and that based on my inquiry of those individuals immediated information is true, accurate and complete. I am aware that there are ding the possibility of fine or Imprisonment. R OR AUTHORIZED REPRESENTATIVE	Well <u>NA</u> Other (O&M) Plan for the other illiar with the informing responsible for significant penalther OFFICIAL TITLE	ne irrigation system nation submitted obtaining this infe es for submitting	em. In this application and all ormation, I believe that false information
3.10 certil ttach he in cuc	The facility must develop and retain an Operation and Maintenance Date of O&M Plan: 09/14/2014 ERTIFICATION tify under penalty of law that I have personally examined and am fam shments and that based on my inquiry of those individuals immediated information is true, accurate and complete. I am aware that there are ding the possibility of fine or Imprisonment. R OR AUTHORIZED REPRESENTATIVE TROY ORGEN	Well <u>NA</u> Other (O&M) Plan for the illiar with the inform by responsible for significant penaltic OFFICIAL TITLE <b>OFFICIAL TITLE</b> <b>OFFICIAL TITLE</b> <b>OFFICIAL TITLE</b> <b>OFFICIAL TITLE</b> <b>OFFICIAL TITLE</b> <b>OFFICIAL TITLE</b> <b>OFFICIAL TITLE</b>	nation submitted obtaining this infe es for submitting	em. In this application and all prmation, I believe that false information

# ATTACHMENT TO FORM I, SECTION 3.2 WASTEWATER TREATMENT FACILITIES





	ALLOFIED MARTIN and ASSOCIATES INC	THIS DRAWING IS A DOCUMENT OF SERVICE AND IS THE PROPERTY OF ALLGEBER, MARTIN	DATE	REVISION	DWN. BY: MHJ	ATTACHMENT TO FORM I; SECTION 3.1
213	ALLGEIER, MARTIN and ASSOCIATES, INC	AND ASSOCIATES, INC. THIS DOCUMENT SINC. NOT BE USED ON THIS DR OTHER PROJECTS WITHOUT THE WRITTEN CONSENT OF			CKD. BY: DAW	LAND APPLICATION SYSTEM STO
	CONSULTING ENGINEERS and SURVEYORS	CERTIFICATE OF AUTHORITY			APPD, BY: DAW	CEORGE'S PROCESSING
	7231 EAST 24th STREET JOPLIN, MISSOURI 64804 (417) 680 - 7200	MISSOURI NO. 000427	-		DATE: JULY 2017	GEORGESTRODECOMIC