STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION

MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No.	MO-0113204
Owner:	SDNG, L.L.C.
Address:	5305 Highway H, Pleasant Hope, MO 65725
Continuing Authority:	Same as above
Address:	Same as above
Facility Name:	Missouri Prime Beef Packers
Facility Address:	5305 Highway H, Pleasant Hope, MO 65725
Legal Description:	See Page 2
UTM Coordinates:	See Page 2
Receiving Stream:	See Page 2
First Classified Stream and ID:	See Page 2
USGS Basin & Sub-watershed No.:	See Page 2

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

FACILITY DESCRIPTION

Industrial Facility – SIC #2011. Beef processing facility. This facility does not require a certified wastewater operator. Domestic wastewater is managed by sending to existing lagoon system. Sludge will be disposed of by a licensed hauler.

See page 2.

This permit authorizes land application of wastewater and stormwater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas.

December 1, 2020
Effective Date

Edward B. Galbraith, Director, Division of Environmental Quality

November 30, 2021
Expiration Date

Chris Wieberg, Director, Water Protection Program

FACILITY DESCRIPTION (CONTINUED)

OUTFALL #001 – No Discharge Storage Lagoons
Industrial and domestic wastewater- SIC 2011, including impacted stormwater from animal holding and loading areas. Design capacity processing 2,500 cows per week. Two cell earthen basin system with wastewater irrigation and sludge/solids land application. This is a no discharge outfall.

Legal Description:	Sec. 20, T32N, R21W, Polk County
UTM Coordinates:	X = 476096 Y = 4147935
Receiving Stream:	Tributary to Pomme de Terre River
First Classified Stream and ID:	100K Extent- Remaining Streams (C) (3960)
USGS Basin & Sub-watershed No.:	Pomme de Terre (10290107-0104)
Design population equivalent:	9,076
Design dry weather flows:	106,077 gpd
Design sludge production:	136 dry tons per year
Freeboard for basin	1.0 foot

Cell #001
Design Storage structure size (at the overflow level) -
Surface Area (sq. ft.): 166,144
Total Depth (ft.): 11.2
Total Storage Capacity (gal.): 8,216,572
Storage structure operating levels (measured in feet below emergency spillway) -
Upper operating level (ft): 1.0
Lower operating level (ft): 9.2
Cell #002
Design Storage structure size (at the overflow level) -
Surface Area (sq. ft.): 113,524
Total Depth (ft.): 14.3
Total Storage Capacity (gal.): 6,376,535
Storage structure operating levels (measured in feet below emergency spillway) -
Upper operating level (ft): 1.0
Lower operating level (ft): 12.3
Total Days of Storage Capacity (days): 90

PERMITTED FEATURE #002 – Historically removed from permit. (combined in Permitted Feature #001)

PERMITTED FEATURE #003 – Paunch manure. No discharge. Hauled off-site for use or disposal.

Legal Description:	Sec. 29, T32N, R21W, Polk County
UTM Coordinates:	X = 476215 Y = 4147836
Receiving Stream:	Tributary to Pomme de Terre River
First Classified Stream and ID:	100K Extent-Remaining Streams/Lakes; (C) WBID# 3960
USGS Basin & Sub-watershed No.:	Pomme de Terre (10290107-0104)

PERMITTED FEATURE #004- #006 – Historically removed from permit.

PERMITTED FEATURE #007 – Groundwater Monitoring Well #1

Legal Description:	Sec. 29, T32N, R21W, Polk County
UTM Coordinates:	X = 475983 Y = 4147753

PERMITTED FEATURE #008 – Groundwater Monitoring Well #2

Legal Description:	Sec. 19, T32N, R21W, Polk County
UTM Coordinates:	X = 475768 Y = 4147929

PERMITTED FEATURE #009 – Groundwater Monitoring Well #3

Legal Description:	Sec. 19, T32N, R21W, Polk County
UTM Coordinates:	X = 475787 Y = 4148363

PERMITTED FEATURE #010 – Groundwater Monitoring Well #4

Legal Description:	Sec. 20, T32N, R21W, Polk County
UTM Coordinates:	X = 476171 Y = 4148645

PERMITTED FEATURE #011 – Land Application field #1- 68 acres.
Industrial Wastewater – SIC #2011

Legal Description:	Sec. 20, T32N, R21W, Polk County
UTM Coordinates:	X = 476235, Y = 4148604
USGS Basin & Sub-watershed No.:	Pomme de Terre (10290107-0104)

PERMITTED FEATURE #012 – Land Application field #2- 38 acres.
Industrial Wastewater – SIC #2011

Legal Description:	Sec. 20, T32N, R21W, Polk County
UTM Coordinates:	X = 476141, Y = 4148209
USGS Basin & Sub-watershed No.:	Pomme de Terre (10290107-0104)

PERMITTED FEATURE #013 – Land Application field #3- 16 acres.
Industrial Wastewater – SIC #2011

Legal Description:	Sec. 19, T32N, R21W, Polk County
UTM Coordinates:	X = 475882, Y = 4148235
USGS Basin & Sub-watershed No.:	Pomme de Terre (10290107-0104)

PERMITTED FEATURE #014 – Land Application field #4- 18 acres.
Industrial Wastewater – SIC #2011

Legal Description:	Sec. 19, T32N, R21W, Polk County
UTM Coordinates:	X = 475885, Y = 4148062
USGS Basin & Sub-watershed No.:	Pomme de Terre (10290107-0104)

Wastewater Land Application for Permitted Features #011-#014:

Irrigation Volume/year:	42,968,259 gallons at design loading (including 1-in-10 year flows)
Irrigation areas:	140 acres at design loading
Design application rates:	1.33 inch/day; 4.0 inches/week; 32 inches/year
Field slopes:	less than 20 percent
Equipment type:	traveling gun
Vegetation:	grassland

Application rate is based on: hydraulic loading rate.

OUTFALL #015 – Stormwater/ ELG wastewater
Stormwater from around dock area. The animal waste impacted stormwater is subject to the federal effluent limit guidelines in 40 CFR 432, is collected by berms and drains, and routed to the wastewater basins (Outfall #001).

Legal Description:	Sec.29, T32N, R21W, Polk County
UTM Coordinates:	X = 476105, Y = 4147869
Receiving Waterbody:	Tributary to Pomme de Terre
First Classified Waterbody and ID:	100K Extent-Remaining Streams/Lakes; (C) WBID# 3960
USGS Basin & Sub-watershed No.:	Pomme de Terre (10290107-0104)
Maximum Flow:	0.1 MGD

OUTFALL #016 – Stormwater/ ELG wastewater
Stormwater from the southwest portion of the facility. The animal waste impacted stormwater is subject to the federal effluent limit guidelines in 40 CFR 432, is collected by berms and drains, and routed to the wastewater basins (Outfall #001).

Legal Description:	Sec.29, T32N, R21W, Polk County
UTM Coordinates:	X = 476107, Y = 4147814
Receiving Waterbody:	Tributary to Pomme de Terre
First Classified Waterbody and ID:	100K Extent-Remaining Streams/Lakes; (C) WBID# 3960
USGS Basin & Sub-watershed No.:	Pomme de Terre (10290107-0104)
Maximum Flow:	0.07 MGD

OUTFALL #017 – Stormwater
Stormwater from the southeast portion of the facility

Legal Description:	Sec.29, T32N, R21W, Polk County
UTM Coordinates:	X = 476199, Y = 4147786
Receiving Waterbody:	Tributary to Pomme de Terre
First Classified Waterbody and ID:	100K Extent-Remaining Streams/Lakes; (C) WBID# 3960
USGS Basin & Sub-watershed No.:	Pomme de Terre (10290107-0104)
Maximum Flow:	0.03 MGD

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PERMITTED FEATURE #001 *main outfall*	TABLE A-1 STORAGE BASIN LIMITATIONS AND MONITORING REQUIREMENTS

The permittee is authorized to conduct irrigation of wastewater and sludge as specified in the application for this permit. The final limitations shall become effective on **December 1, 2020** and remain in effect until expiration of the permit. The irrigation of wastewater shall be controlled, limited and monitored by the permittee as specified below:

EFFLUENT PARAMETERS	UNITS	FINAL EFFLUENT LIMITATIONS		MONITORING REQUIREMENTS	
		DAILY MAXIMUM	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
STORAGE BASINS **SB**					
Freeboard †	Feet	*		once/month	measured
Precipitation	Inches	*		daily	measured

MONITORING REPORTS SHALL BE SUBMITTED MONTHLY; THE FIRST REPORT IS DUE JANUARY 28, 2021.
THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

The permittee is authorized to discharge from these permitted features only under the Wet Weather Conditions listed in Special Conditions E.1. Emergency discharges shall be controlled, limited, and monitored as specified below:

STORAGE BASIN-EMERGENCY DISCHARGE **U**					
Effluent Flow	MGD	*		once/event	measured
Biochemical Oxygen Demand$_5$	mg/L	*		once/event	grab
Total Suspended Solids	mg/L	*		once/event	grab
Ammonia as N	mg/L	*		once/event	grab
pH ¥	SU	*		once/event	grab
Oil & Grease	mg/L	*		once/event	grab
E. coli ǂ	#/100mL	*		once/event	grab

MONITORING REPORTS SHALL BE SUBMITTED BY THE 28TH DAY OF THE MONTH FOLLOWING DISCHARGE CESSATION.
THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

WASTEWATER LAND APPLIED (††) **LW**					
Ammonia as N	mg/L	*		once/quarter ◊	grab
Nitrate as N	mg/L	*		once/quarter ◊	grab
Total Kjeldahl Nitrogen	mg/L	*		once/quarter ◊	grab
Total Phosphorus	mg/L	*		once/quarter ◊	grab
Potassium	mg/L	*		once/quarter ◊	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE APRIL 28, 2021.
THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

INDUSTRIAL SLUDGE APPLICATION ‡ **LA**					
Ammonia as N	mg/kg-dry	*		once/application ∞	Composite Φ
Nitrate as N	mg/kg-dry	*		once/application ∞	Composite Φ
Total Kjeldahl Nitrogen	mg/kg-dry	*		once/application ∞	Composite Φ
Total Phosphorus	mg/kg-dry	*		once/application ∞	Composite Φ
Potassium	mg/kg-dry	*		once/application ∞	Composite Φ
Solids	%	*		once/application ∞	Composite Φ

MONITORING REPORTS SHALL BE SUBMITTED BY THE 28TH DAY OF THE MONTH FOLLOWING LAND APPLICATION.
THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE MOUNTS.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (CONTINUED)

PERMITTED FEATURES #007 - #010	**TABLE A-2 GROUNDWATER LIMITATIONS AND MONITORING REQUIREMENTS**

The permittee is authorized to conduct land application of wastewater and sludge as specified in the application for this permit. The final limitations shall become effective on **December 1, 2020** and remain in effect until expiration of the permit. The land application of wastewater and sludge shall be controlled, limited and monitored by the permittee as specified below:

GROUNDWATER MONITORING	UNITS	MONITORING REQUIREMENTS			
		DAILY MAXIMUM	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
GROUNDWATER MONITORING **MW**					
Depth to Groundwater	Feet	*		once/quarter ◊	measured
pH ¥	SU	*		once/quarter ◊	grab
E. Coli ǂ	#/100mL	*		once/quarter ◊	grab
Ammonia as N	mg/L	*		once/quarter ◊	grab
Nitrate as N	mg/L	*		once/quarter ◊	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY (REGARDLESS OF LAND APPLICATION ACTIVITIES);
THE FIRST REPORT IS DUE APRIL 28, 2021.
THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

PERMITTED FEATURES #011-014	**TABLE A-3 LAND APPLICATION FIELD LIMITATIONS AND MONITORING REQUIREMENTS**

The permittee is authorized to conduct land application of wastewater and sludge as specified in the application for this permit. The final limitations shall become effective on **December 1, 2020** and remain in effect until expiration of the permit. The land application of wastewater and sludge shall be controlled, limited and monitored by the permittee as specified below:

LAND APPLICATION MONITORING	UNITS	MONITORING REQUIREMENTS			
		DAILY MAXIMUM	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
WASTEWATER APPLICATION **LW**					
Application Area	Acres	*		once/day	measured
Application Rate	Inches/Acre	*		once/day	measured
Irrigation Period	Hours	*		once/day	measured
Volume Irrigated	Gallons	*		once/day	measured
MONITORING REPORTS SHALL BE SUBMITTED BY THE 28TH DAY OF THE MONTH FOLLOWING LAND APPLICATION. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.					
INDUSTRIAL SLUDGE APPLICATION **LA**					
Application Area	Acres	*		once/application ∞	measured
Application Rate	Inches/Acre	*		once/application ∞	measured
Irrigation Period	Hours	*		once/application ∞	measured
Volume Irrigated	Gallons	*		once/application ∞	measured
MONITORING REPORTS SHALL BE SUBMITTED BY THE 28TH DAY OF THE MONTH FOLLOWING LAND APPLICATION. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE MOUNTS.					

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (CONTINUED)

PERMITTED FEATURES #011-014	**TABLE A-4 LAND APPLICATION FIELD SOIL MONITORING REQUIREMENTS**

The permittee is authorized to conduct land application of wastewater and sludge as specified in the application for this permit. The final limitations shall become effective on **December 1, 2020** and remain in effect until expiration of the permit. The land application of wastewater and sludge shall be controlled, limited and monitored by the permittee as specified below:

LAND APPLICATION SOIL MONITORING	UNITS	FINAL EFFLUENT LIMITATIONS	MONITORING REQUIREMENTS	
		DAILY MAXIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
SOIL MONITORING **SO▼**				
pH (salt) Ξ	SU	*	once / every 5 years	Composite ⁜
Ammonia as N	mg/kg	*	once / every 5 years	Composite ⁜
Nitrate, Nitrogen as N	mg/kg	*	once / every 5 years	Composite ⁜
Phosphorus, Bray P1 method	ppm	*	once / every 5 years	Composite ⁜
Sodium Adsorption Ratio	ratio	*	once / every 5 years	Composite ⁜

MONITORING REPORTS SHALL BE SUBMITTED ONCE EVERY FIVE YEARS; THE REPORT IS DUE OCTOBER 28, 2024.
THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

OUTFALLS #015 & #016 *Impacted Stormwater Only*	**TABLE A-5 INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. In accordance with 10 CSR 20-7.031, the final effluent limitations outlined in Table A-6 must be achieved as soon as possible but no later than **December 1, 2023 years**. These interim effluent limitations are effective beginning **December 1, 2020** and remain in effect through **November 30, 2023** or as soon as possible. Such discharges shall be controlled, limited, and monitored by the permittee as specified below:

EFFLUENT PARAMETERS	UNITS	INTERIM LIMITATIONS		BENCH-MARKS	MONITORING REQUIREMENTS ⁂	
		DAILY MAXIMUM	MONTHLY AVERAGE		MEASUREMENT FREQUENCY	SAMPLE TYPE
LIMIT SET: Q						
PHYSICAL						
Flow	MGD	*	-	-	once/quarter ◊	24 hr. estimate
CONVENTIONAL						
Biological Oxygen Demand (BOD_5) Σ	g/kg LWK	0.24	0.12	-	once/quarter ◊	grab
Oil & Grease Σ	g/kg LWK	0.12	0.06	-	once/quarter ◊	grab
E. Coli ǂ	#/100mL	*	*	-	once/quarter ◊	grab
Fecal coliform	#/100mL	400		-	once/quarter ◊	grab
pH ¥	SU	*		-	once/quarter ◊	grab
Settleable Solids	mL/L/hr	*		-	once/quarter ◊	grab
Total Suspended Solids Σ	g/kg LWK	0.40	0.20	-	once/quarter ◊	grab
NUTRIENTS						
Ammonia as N	mg/L	*		-	once/quarter ◊	grab
Nitrate plus Nitrite Nitrogen	mg/L	*		-	once/quarter ◊	grab
Total Kjeldahl Nitrogen (TKN)	mg/L	*		-	once/quarter ◊	grab
Phosphorus, Total (TP)	mg/L	*		-	once/quarter ◊	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE APRIL 28, 2021.
THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

OUTFALL #0015 AND #016 *Impacted Stormwater Only*	**TABLE A-6** **FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on **December 1, 2023** and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

EFFLUENT PARAMETERS	UNITS	FINAL LIMITATIONS		BENCH-MARKS	MONITORING REQUIREMENTS ⁂	
		DAILY MAXIMUM	MONTHLY AVERAGE		MEASUREMENT FREQUENCY	SAMPLE TYPE
LIMIT SET: Q						
PHYSICAL						
Flow	MGD	*	-	-	once/quarter ◊	24 hr. estimate
CONVENTIONAL						
Biological Oxygen Demand (BOD_5) Σ	g/kg LWK	0.24	0.12	-	once/quarter ◊	grab
Oil & Grease Σ	g/kg LWK	0.12	0.06	-	once/quarter ◊	grab
E. Coli ǂ	#/100mL	630	126	-	once/quarter ◊	grab
Fecal coliform	#/100mL	400		-	once/quarter ◊	grab
pH ¥	SU	*		-	once/quarter ◊	grab
Settleable Solids	mL/L/hr	*		-	once/quarter ◊	grab
Total Suspended Solids Σ	g/kg LWK	0.40	0.20	-	once/quarter ◊	grab
NUTRIENTS						
Ammonia as N	mg/L	*		-	once/quarter ◊	grab
Nitrate plus Nitrite Nitrogen	mg/L	*		-	once/quarter ◊	grab
Total Kjeldahl Nitrogen (TKN)	mg/L	*		-	once/quarter ◊	grab
Phosphorus, Total (TP)	mg/L	*		-	once/quarter ◊	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE APRIL 28, 2024.
THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

OUTFALL #017 *Stormwater Only*	**TABLE A-7** **FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on **December 1, 2020** and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

EFFLUENT PARAMETERS	UNITS	FINAL LIMITATIONS		BENCH-MARKS	MONITORING REQUIREMENTS ⁂	
		DAILY MAXIMUM	MONTHLY AVERAGE		MEASUREMENT FREQUENCY	SAMPLE TYPE
LIMIT SET: Q						
PHYSICAL						
Flow	MGD	*		-	once/quarter ◊	24 hr. estimate
CONVENTIONAL						
Biological Oxygen Demand (BOD_5)	mg/L	*		-	once/quarter ◊	grab
Oil & Grease	mg/L	*		-	once/quarter ◊	grab
E. Coli ǂ	#/100mL	**		630	once/quarter ◊	grab
pH ¥	SU	*		-	once/quarter ◊	grab
Settleable Solids	mL/L/hr	*		-	once/quarter ◊	grab
Total Suspended Solids	mg/L	*		-	once/quarter ◊	grab
NUTRIENTS						
Ammonia as N	mg/L	*		-	once/quarter ◊	grab
Nitrate plus Nitrite Nitrogen	mg/L	*		-	once/quarter ◊	grab
Total Kjeldahl Nitrogen (TKN)	mg/L	*		-	once/quarter ◊	grab
Phosphorus, Total (TP)	mg/L	*		-	once/quarter ◊	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE APRIL 28, 2021.
THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

* Monitoring requirement only

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

† Storage Basin freeboard shall be reported as Storage Basin water level in feet below the overflow level (minimum reading of the two cells).

†† Wastewater that is land applied shall be sampled at the irrigation pump, wet well, or application equipment prior to land application. Sample must be representative of the effluent from both cells prior to land application.

ǂ *E. coli*: final limitations and monitoring requirements are applicable only during the recreational season from April 1 through October 31. The Monthly Average Limit for *E. coli* is expressed as a geometric mean.

¥ pH: the facility will report the minimum and maximum values; pH is not to be averaged.

⁂ Sludge that is land applied shall be sampled at the storage basin or application equipment prior to land application. Report as "Conditional Monitoring- Not required this Period" when land application of sludge does not occur during the report period.

Φ Sludge Composite Sampling: The facility shall obtain aliquots from the sludge in a manner which represents the characteristics of the sludge being land applied and have the analysis conducted as one sample. Sludge shall be sampled from each storage basin prior to land application. Sludge composite samples must consist of at least 7 grab samples at a one-foot depth. Collect the samples during the same week from different locations throughout the basin(s).

⌗ Soil Composite sampling: Shall be conducted in accordance with Missouri Extension guidance on "Soil Sampling Hayfields and Row Crops" G9217.

∞ Table A-3 reporting is only required for when sludge application occurred during the month. If no land application of sludge occurs at a permitted feature, no reporting is required. These are unscheduled parameters. Sludge sampling shall be a representative sample collected prior to application to the field.

▼ 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 System Condition #4(m) Soil Monitoring for additional guidance.

ɤ Use a factor of 0.5 to convert the pounds per acre of a nutrient or pollutant in its elemental form into ppm, if needed (e.g. 120 lbs/acre = 60ppm.)

Ξ Soil pH shall be maintained in a range that is optimal for plant growth.

⁂ Precipitation Event Monitoring Requirement: all samples shall be collected from a discharge resulting from a precipitation event greater than 0.1 inches in magnitude and occurring at least 72 hours from the previously measurable precipitation event. If a discharge does not occur within the reporting period, report as no discharge. The total amount of precipitation should be noted from the event from which the samples were collected.

Σ Federal effluent limitations for animal impacted stormwater are established based on the live weight killed processed per month. Live Weight Killed (LWK) means the total weight of animals slaughtered. Using the established calculations and based on the reported planned 2,500 cows per week and an average cow weight of 1,200 lbs, the following would be the daily limits:

Effluent Parameter	Units	Effluent Limitations		Sample Type
		Daily Maximum	Monthly Average	
Biological Oxygen Demand (BOD_5)	lbs/day	103	51	calculated
Oil & Grease	lbs/day	51	26	calculated
Total Suspended Solids	lbs/day	171	86	calculated

◊ See table below for quarterly sampling

MINIMUM QUARTERLY SAMPLING REQUIREMENTS			
QUARTER	**MONTHS**	**EFFLUENT PARAMETERS**	**REPORT IS DUE**
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 28th
Fourth	October, November, December	Sample at least once during any month of the quarter	January 28th

B. SCHEDULE OF COMPLIANCE

Schedules of compliance are allowed per 40 CFR 122.47 and 10 CSR 20-7.031(11). The facility shall attain compliance with final effluent limitations established in this permit as soon as reasonably achievable:

1. Within six months of the effective date of this permit, the permittee shall report progress made in attaining compliance with the final effluent limits.

2. The permittee shall submit interim progress reports detailing progress made in attaining compliance with the final effluent limits every 12 months from effective date. The first report is due November 28, 2021.

3. Within 3 years of the effective date of this permit, the permittee shall attain compliance with the final effluent limits at outfall #015, for *E. Coli.*

4. Annual reporting requirements are found in Part D, Land Application.

5. All permittees using the eDMR system must submit all reports via the electronic reporting system.

Missouri Department of Natural Resources:
Southwest Regional Office
2020 West Woodland
Springfield, MO 65807

C. STANDARD CONDITIONS

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

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. Requirements for land application of Sludge and Wastewater
   (a) Land application is for the agricultural application of materials.
   (b) Land application fields must be maintained in continued agricultural production, including cultivation and tillage of soil, production, growing, raising, and harvesting of agricultural commodities and livestock. Fields are not allowed to be left in a non-agricultural productive state, unless temporarily fallow under a field agricultural plan.
   (c) Application of materials that lead to phytotoxicity is prohibited.

2. 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 (for county information, please visit http://ag3.agebb.missouri.edu/design_storm/). 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) A 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) Earthen storage basins shall have an emergency spillway to protect the structural integrity of earthen structures during operation at near full water levels and in the event of overflow conditions. The spillway shall be at least one foot below top of berm. 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. Construction or modification of an earthen basin requires a construction permit. For more information, visit our construction permitting webpage: https://dnr.mo.gov/env/wpp/permits/ww-construction-permitting.htm

3. Land Application Equipment.
   (a) Spray application equipment shall minimize the formation of aerosols.
   (b) Provisions shall be made for draining pipes and other equipment to prevent freezing.
   (c) Portable pumping unit or permanent pumping installation.
      (1) A suitable structure shall be provided to house the pump.
      (2) The intake pumping system shall provide the capability for varying the withdrawal depth.
      (3) The intake elevation should be maintained 12-24 inches below the wastewater elevation.
      (4) The intake shall be screened so as to minimize clogging of the sprinkler nozzle or distribution system orifices.
      (5) For use of a potable pump, a stable platform and flexible intake line with flotation device to control depth of intake will be acceptable.
   (d) Thrust blocking of pressure pipes shall be provided.
   (e) 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 and shall be capable of applying the annual design flow during an application period of less than 100 days or 800 hours per year. Land application equipment shall be calibrated at least once annually.

4. Land Application Fields.
   (a) This special condition does not apply to fields were fertilizer products that are exempted under the Missouri Clean Water Law and regulations, 10 CSR 20-6.015(3)(B)8 are applied.
   (b) 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.
   (c) Public Access Restrictions. This permit does not authorize application of wastewater to public use areas.
   (d) 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;
(3) Grazing of sewage irrigated land is not recommended for lactating dairy animals unless there has been a much longer deferment period; and
(4) Deferment may not be required for irrigation water that has been disinfected so that the water contains less than four hundred (400) fecal coliform organisms per one hundred milliliters (100 ml).

(e) 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.
(f) Land application shall occur only during daylight hours.
(g) Land application fields shall be checked daily during land application for runoff. Sites that utilize spray irrigation shall monitor for the drifting of spray across property lines.
(h) 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 an occupied residence, public building, or public use area;
(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 of gaining perennial or intermittent stream, public or privately owned pond or lake;
(6) 50 feet of property line or public road;
(7) Within the 10 year floodplain.
(i) Wastewater application on slopes exceeding 10%, the hourly application rate shall not exceed one-half (1/2) the design sustained permeability and in no case shall exceed one-half (1/2) inch per hour.
(j) Sludge application slope limitations for application sites are as follows;
(1) Slopes of 6 percent or less there are no limitations.
(2) Slopes of 7 to 12 percent, wastewater when may be applied with no limitation when soil conservation practices are used to meet the minimum erosion levels.
(3) Slopes greater than 12 percent, apply wastewater only when grass is vegetated and maintained with at least 80 percent ground cover at a rate of two dry tons per acre per year or less
(k) Sludge shall not be applied to fields used to grow food crops for human consumption to be eaten raw, such as leafed vegetables or root crops.
(l) Soil Monitoring.
(1) Composite soil samples shall be collected in 2024 (4th year of permit) from each field listed in this permit where land application has occurred in the last 12 months.
(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.
(4) Upon renewal, soil sampling may be required for additional pollutants of concern if elevated concentrations of pollutants are present in any wastewater sampling results.
(n) Wastewater and sludge 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 and sludge applied to a field to meet the fertilizer recommendation.

5. Hydraulic Loading Rate. The application rate shall not exceed the design hydraulic loading rate listed in the facility description, which is based on site-specific soil evaluations.
(a) If hydraulic application rates exceed 24 inches per acre per year, the permittee shall calculate nitrogen loading rates and include results in the annual report. The calculation procedures are as follows: (Total N) x (0.226) x (inches per acre irrigated) = pounds total N per acre. Where Total N = [Total Kjeldahl Nitrogen (TKN) as N] + [Nitrate Nitrogen as N].

6. Nutrient Loading Rate. Land application to fields listed in this permit shall use the following protocols to determine the amount of wastewater and sludge to be applied.

D. LAND APPLICATION CONDITIONS (continued)

(a) The fertilizer recommendation shall be based on the following:
  (1) The nutrient recommendation (nitrogen or phosphorus) for each crop. Recommendations can be found in University of Missouri Extension Guide WQ430 Crop/Nutrient Considerations for Biosolids or from publications by other land grant universities in adjoining states,
  (2) 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, and
  (3) The most recent soil test.

(b) Wastewater and Sludge applications shall be conducted according to one the following nutrient based management practices.
  (1) Plant Available Nitrogen (PAN) based application. This method can be used when soil test phosphorus (P) levels are 120 pounds or less per acre using Bray P-1 test method, or if the field has been assessed by Missouri Phosphorus Index (P-index) with a low or medium rating. The amount of wastewater and sludge to be applied shall be adjusted annually based on the PAN calculation using the current wastewater and sludge nutrient analysis and the following:
    (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. Nitrogen removal rates can be found in WQ430.
    (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 WQ430 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 of wastewater and sludge to be applied shall be adjusted annually based the phosphorus content of the current wastewater and sludge nutrient analysis and may be done applied according to one of the following methods;
    (i) The annual amount of phosphorus applied shall not exceed the planned crop's phosphorus removal estimate from WQ430, or from publications by other land grant universities in adjoining states or,
    (ii) Multi-year phosphorus applications. Wastewater and sludge applications can exceed the annual planned phosphate removal estimate for the crop when a multi-year phosphorus application is utilized. The multi-year application must comply with the following conditions:
      (a) The amount of wastewater and sludge applied shall not exceed the nitrogen fertilizer recommendation or the estimated nitrogen removal capacity of the planned crop during the year of the application;
      (b) The amount of phosphorus banked shall not exceed four years of the estimated crop removal rate for the planned crop rotation;
      (c) The actual application rate shall not exceed the multi-year application rate; and
      (d) No additional sludge applications shall occur until the applied phosphorus has been removed from the field by crop removal or harvest.
  (3) No land application shall occur if the P-index rating for a field is very high.

7. Record Keeping
  (a) A daily land application log shall be prepared and kept on file 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 shall be maintained.
  (c) A record of land application equipment inspections and calibrations as well as land application field inspections shall be maintained.
  (d) All records and monitoring results shall be maintained for at least five years, onsite or electronically, be readily accessible and shall be made available to the department upon request.

8. 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) The number of days the storage structure discharged during the year, the discharge flow, reason the discharge occurred and effluent analysis performed.
  (c) A summary for each field used for land application showing number of acres used number of days application occurred, crop grown and yield, and total amount of wastewater and/or sludge applied (gal. or tons/acre).
  (d) For fields where the total nitrogen application exceeds 150 lbs./acre, submit PAN calculations to document that the applied nitrogen will be utilized.

(e) Narrative summary of any problems or deficiencies identified during the monitoring period, corrective action taken and improvements planned.

E. SPECIAL CONDITIONS

1. This permit does not authorize the discharge of wastewater or sludge from the basins, except during emergency discharge conditions during a 1-in-10 year or 25-year, 24-hour storm events (for county information, please visit http://ag3.agebb.missouri.edu/design_storm/). A chronic wet weather event is a series of wet weather events and conditions that can delay planting, harvesting, and prevent land application and dewatering practices at wastewater storage structures. When wastewater storage structures are in danger of an overflow due to a chronic weather event, owners shall take reasonable steps to lower the liquid level in the structure through land application, or other suitable means, to prevent overflow from or damage to the storage structure. The chronic weather determination will be based upon an evaluation of the 1 in 10 year return rainfall frequency over a 10-day, 90-day, 180-day, and 365-day operating period. 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. Stormwater impacted by animal holding, transportation, and offloading is regulated as wastewater under the federal Effluent Limit Guidelines in 40 CFR 432. Discharge of this impacted stormwater is authorized through outfall #015 and #016 in accordance with the limits in Tables A-5 and A-6.

3. Unauthorized Discharges.
   (a) Discharges, spills, or overflows for any reason not authorized in special condition #1above shall constitute a permit violation and shall be reported in accordance with Standard Conditions Part 1 Section B.2. Unauthorized discharges are to be reported to the Southeast Regional Office during normal business hours or the Environmental Emergency Response spill-line at 573-634-2436 outside of normal business hours within 24 hours of becoming aware of the discharge.
   (b) 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 28th day of the month after the discharge ceases. Permittee shall monitor for the following constituents:

Constituent	Units
Effluent Flow	MGD
Biochemical Oxygen Demand$_5$	mg/L
Total Suspended Solids	mg/L
Ammonia as N	mg/L
pH – Units	SU
Oil & Grease	mg/L
E. coli*	#/100mL

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

4. Electronic Discharge Monitoring Report (eDMR) Submission System.
   Per 40 CFR Part 127 National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule, reporting of effluent monitoring data and any report required by the permit (unless specifically directed otherwise by the permit), shall be submitted via an electronic system to ensure timely, complete, accurate, and nationally consistent set of data about the NPDES program.
   (a) eDMR Registration Requirements. The facility must register with the Department's eDMR system through the Missouri Gateway for Environmental Management (MoGEM) before the first report is due. Registration and other information regarding MoGEM can be found at https://dnr.mo.gov/mogem. Information about the eDMR system can be found at https://dnr.mo.gov/env/wpp/edmr.htm.The first user shall register as an Organization Official and the association to the facility must be approved by the Department. Regarding Standard Conditions Part I, §B, #7, the eDMR system is currently the only Department approved reporting method for this permit unless a waiver is granted by the Department.
   (b) Electronic Submissions. To access the eDMR system, use the following link in your web browser: https://apps5.mo.gov/mogems/welcome.action If you experience difficulties with using the eDMR system you may contact edmr@dnr.mo.gov or call 855-789-3889 or 573-526-2082 for assistance.
   (c) Waivers from Electronic Reporting. The facility must electronically submit compliance monitoring data and reports unless a waiver is granted by the Department in compliance with 40 CFR Part 127. Only facilities with an approved waiver request may submit monitoring data and reports on paper to the Department for the period the approved electronic reporting waiver is effective. Facilities may obtain an electronic reporting waiver by first submitting an eDMR Waiver Request Form:

E. SPECIAL CONDITIONS (CONTINUED)

http://dnr.mo.gov/forms/780-2692-f.pdf. The department will either approve or deny this electronic reporting waiver request within 120 calendar days.

5. Stormwater Pollution Prevention Plan (SWPPP).
The facility's SIC code or description is found in 40 CFR 122.26(b)(14) and/or 10 CSR 20-6.200(2) and hence shall implement a Stormwater Pollution Prevention Plan (SWPPP) which must be prepared and implemented upon permit effective date. 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 annually or if site conditions affecting stormwater change. The permittee shall select, install, use, operate, and maintain the Best Management Practices prescribed in the SWPPP in accordance with the concepts and methods described in: *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (EPA 833-B-09-002) published by the EPA in 2015 https://www.epa.gov/sites/production/files/2015-11/documents/swppp_guide_industrial_2015.pdf The purpose of the SWPPP and the Best Management Practices (BMPs) listed herein is the prevention of pollution of waters of the state. A deficiency of a BMP means it was not effective at preventing pollution [644.016(17)] to waters of the state. Corrective action describes the steps the facility took to eliminate the deficiency.

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.
(b) A map with all outfalls and structural BMPs marked.
(c) A schedule for at least 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 (deficiencies projected to take longer than 14 days to correct) must be reported as an uploaded attachment through the eDMR system with the DMRs. The initial report shall consist of the deficiency noted, the proposed remedies, the interim or temporary remedies (including proposed timing of the placement of the interim measures), and an estimate of the timeframe needed to wholly complete the repairs or construction. If required by the Department, the permittee shall work with the regional office to determine the best course of action. The permittee should consider 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, and kept with the SWPPP. Additionally, corrective action of major structural deficiencies shall be reported as an uploaded attachment through the eDMR system with the DMRs.
    (5) BMP failure causing discharge through an unregistered outfall is considered an illicit discharge and must be reported in accordance with Standard Conditions Part I.
    (6) Inspection reports must be kept on site with the SWPPP and maintained for a period of five (5) years. These must be made available to Department personnel upon request. Electronic versions of the documents and photographs are acceptable.
(d) A provision for designating an individual to be responsible for environmental matters and a provision for providing training to all personnel involved in housekeeping, material handling (including but not limited to loading and unloading), storage, and staging of all operational, maintenance, storage, and cleaning areas. Proof of training shall be submitted upon request by the Department.
(e) The facility plans include upgrades to the stormwater management system, including installation of a collection system intended to capture all impacted stormwater and direct it to the wastewater treatment system. Upon installation of this system, the permittee may request a permit modification and re-evaluation of the stormwater limits, benchmarks, best management practices and permit conditions.

6. 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, warehouse activities, and other areas, and thereby prevent the contamination of stormwater from these substances.
(b) Ensure adequate provisions are provided to prevent surface water intrusion into the wastewater storage basin, to divert stormwater runoff around the wastewater storage basin, and to protect embankments from erosion.
(c) Provide collection facilities and arrange for proper disposal of waste products including but not limited to petroleum waste products, and solvents.
(d) Store all paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) so these materials are not exposed to stormwater or provide other prescribed BMPs such as plastic lids and/or portable spill pans to prevent the commingling of stormwater with container contents. Commingled water may not be

E. SPECIAL CONDITIONS (CONTINUED)

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. Spill records should be retained on-site.

(e) Provide good housekeeping practices on the site to keep trash and manure from entry into waters of the state.

(f) Provide sediment and erosion control sufficient to prevent or control sediment loss off of the property.

7. Stormwater Benchmarks. This permit stipulates pollutant benchmarks applicable to your stormwater discharges.
   (a) The benchmarks do not constitute direct numeric effluent limitations; therefore, a benchmark exceedance alone is not a permit violation. Benchmark monitoring and visual inspections shall be used to determine the overall effectiveness of the SWPPP and to assist you in knowing when additional corrective action may be necessary to protect water quality. If a sample exceeds a benchmark concentration you must review your SWPPP and your BMPs to determine what improvements or additional controls are needed to reduce the pollutant in your stormwater discharge(s).
   (b) Any time a benchmark exceedance occurs, a Corrective Action Report (CAR) must be completed. A CAR is a document recording the efforts undertaken by the facility to improve BMPs to meet benchmarks in future samples. CARs must be retained with the SWPPP and be available to the Department upon request. If the efforts taken by the facility are not sufficient and subsequent exceedances of a benchmark occur, the facility must contact the Department if a benchmark value cannot be achieved. Failure to take corrective action to address a benchmark exceedance and failure to make measureable progress towards achieving the benchmarks is a permit violation.

8. Reporting of Non-Detects:
   (a) Compliance analysis conducted by the permittee or any contracted laboratory shall be conducted in such a way the precision and accuracy of the analyzed result can be enumerated. See sufficiently sensitive test method requirements in Standard Conditions Part I, Section A, #4 regarding proper testing and detection limits used for sample analysis. For the purposes of this permit, the definitions in 40 CFR 136 apply; method detection limit (MDL) and laboratory established reporting limit (RL) are used interchangeably in this permit.
   (b) The permittee shall not report a sample result as "non-detect" without also reporting the MDL. Reporting "non-detect" without also including the MDL will be considered failure to report, which is a violation of this permit.
   (c) For the daily maximum, the permittee shall report the highest value; if the highest value was a non-detect, use the less than "<" symbol and the laboratory's highest method detection limit (MDL) or the highest reporting limit (RL); whichever is higher (e.g. <6).
   (d) When calculating monthly averages, zero shall be used in place of any value(s) not detected. Where all data used in the average are below the MDL or RL, the highest MDL or RL shall be reported as "<#" for the average as indicated in item (c).

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

10. Hazardous waste regulated under the Missouri Hazardous Waste Law and regulations shall not be land applied under this permit.

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 µg/L);
      (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile;
      (3) Five hundred micrograms per liter (500 µg/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 µg/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).

E. 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 RSMo 644.051.16, 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 Clean Water Act Sections 301(b)(2)(C) and (D), §304(b)(2), and §307(a) (2), 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. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, termination, notice of planned changes, or anticipated non-compliance does not stay any permit condition.

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. Upgrade, Maintenance, and Monitoring of Earthen Basin
    (a) The facility intends to open and upgrade this facility in stages. As such, this permit authorizes storage of wastewater, including impacted stormwater, in the earthen basins for only one year without the planned system evaluations and upgrades. This is authorized so that the facility may open and satisfy multiple grant requirements for improvements to this facility.
    (b) The existing basins must be evaluated by a professional engineer (P.E.) and be upgraded in accordance with the P.E.'s design within 12 months for continued operation, if warranted.
    (c) A construction permit is required for new earthen basins or for the upgrade and expansion of the existing earthen basins.
    (d) A status update must be provided to the Southwest Regional Office at least every 3 months, with the first report due March 1, 2021 and the subsequent reports due every three months thereafter for the duration of this permit.
    (e) Groundwater monitoring is continued in this permit to monitor for subsurface leaks from the earthen basins.
    (f) The perimeter of the earthen basins must be inspected at least every 30 days, to monitor for signs of leakage, drainage, or failures of the basin structure. The inspections must be logged and provided upon request by Department staff.

        Missouri Department of Natural Resources:
        Southeast Regional Office
        2155 North Westwood Blvd.
        Poplar Bluff, MO 63901

16. Renewal Application Requirements.
    (a) This facility shall submit an appropriate and complete application to the Department no less than 180 days from the expiration date listed on page 1 of the permit.
    (b) Application materials shall include complete Form A, and Form C, and Form I. If the form names have changed, then the facility should ensure they are submitting the correct forms as required by regulation. This facility must submit form R for the application of sludge or wastewater.
    (c) The facility must sample the stormwater outfalls and provide analysis for every parameter contained in the permit at any outfall for at the site in accordance with 10 CSR 20-6.200(2)(C)1.E(I) and (II)
    (d) The facility may use an electronic submission system to submit the application to the Program, if available.
    (e) This facility must submit all corrective action reports completed for the last permit term if a benchmark exceedance occurred.
    (f) This facility must submit all soil testing done at the site in the last permit term with the application for permit renewal.
    (g) This facility must have completed an engineering assessment of the wastewater treatment system and upgraded the system in accordance with the professional engineer's designs and recommendations prior to the issuance of the next permit.

F. NOTICE OF RIGHT TO APPEAL

If you were adversely affected by this decision, you may be entitled to pursue an appeal before the administrative hearing commission (AHC) pursuant to §§621.250 and 644.051.6 RSMo. To appeal, you must file a petition with the AHC within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC. Any appeal should be directed to:

Administrative Hearing Commission
U.S. Post Office Building, Third Floor
131 West High Street, P.O. Box 1557
Jefferson City, MO 65102-1557
Phone: 573-751-2422
Fax: 573-751-5018
Website: https://ahc.mo.gov

MISSOURI DEPARTMENT OF NATURAL RESOURCES
FACT SHEET
FOR THE PURPOSE OF RENEWAL
OF
MO-0113204
MISSOURI PRIME BEEF PACKERS

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

This Factsheet is for Industrial Land Application, Wastewater Storage, and Stormwater.

Part I FACILITY INFORMATION

Facility Type: Industrial; Categorical <1MGD
Facility SIC Code(s): 2011
Application Date: June 21, 2019
Expiration Date: December 31, 2019

FACILITY DESCRIPTION:
Facility is a beef processing operation, with a no-discharge earthen basin system. The facility is authorized to land apply wastewater (including impacted stormwater), sludge, and solids from the earthen basins. The treatment system includes a two-cell basin system, with a design flow of 106,077 gallons per day. The facility processes up to 500 cows per day. Paunch manure is removed from the site. Stormwater monitoring was added to the permit in 2020, in accordance with 10 CSR 20-6.300. The stormwater impacted with animal holding trucks, including parking, loading and unloading areas, is regulated under the federal effluent limit guidelines in 49 CF 432. The facility is capturing this impacted stormwater and routing it through the wastewater treatment system. The facility's land application rates are based on a site-specific soil evaluation. This facility's wastewater, which will be land-applied, is primarily wastewater from the holding area. Facility intends to minimize live animal impacts in transportation, but also intends to capture stormwater from those areas in system upgrades.

This permit includes a change in ownership for this facility. The charter number for the continuing authority for this facility is FL1433370; 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 permittee reported this facility holds no other permits.

PERMITTED FEATURE(S) TABLE:

PERMITTED FEATURE	STORAGE CAPACITY / DESIGN FLOW	TREATMENT LEVEL	EFFLUENT TYPE
#001	14,593,107 G/ 106,077 GPD	2 Cell Storage Basin	Industrial and Domestic wastewater/sludge
#003	-	Hauled off-site	Industrial wastewater/sludge
#007-#010	Groundwater Monitoring Well	N/A	Groundwater Monitoring Well
#011-#014	Land Application Field	Land Application	Industrial and Domestic wastewater/sludge
#015	Animal Impacted Stormwater	None	Impacted Stormwater /Wastewater under ELG
#016-#017	Stormwater	None	Stormwater

*gpd = gallons per day

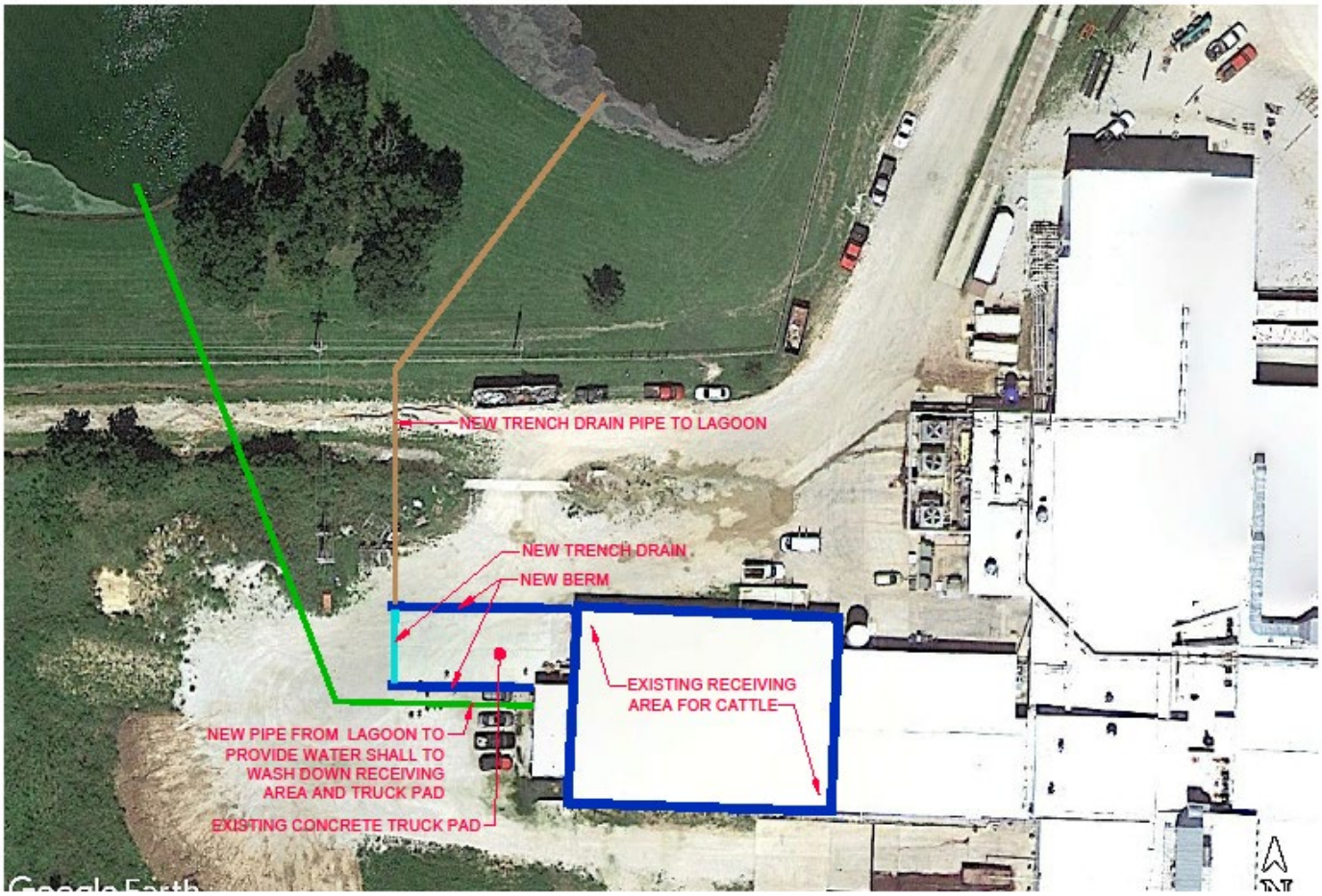
FACILITY PERFORMANCE HISTORY & COMMENTS:
The electronic discharge monitoring reports were reviewed for the last five years. Most data provided indicated that no land application occurred and, as such, did not include data. Groundwater monitoring was also not conducted unless land application activities occurred. Available data did not include any elevated pollutant concentrations which would be concerning for land application.

The regional office staff cited violations of reporting requirements, specifically failure to provide routine reports. An engineering evaluation is needed to verify the integrity of the earthen basin and treatment systems. Furthermore, the facility intends to expand operations, which will require a construction permit and permit modification. The facility intends to complete these upgrade and expansion activities within 12 months of permit issuance. Because the facility is eligible for and has been awarded grant monies for these facility and system upgrades, though, the facility is permitted to open and begin operations in accordance with the terms of this permit for a limited duration, until the upgrades are complete. Long-term use of the current storage structures is not authorized without engineering review and completion of any required upgrades to meet the design standards in 10 CSR 20-8.

Previous violations were cited for failure to provide records and comply with reporting and recordkeeping requirements. These violations, along with other operational issues, involved previous owners, not the new owner of this facility. As such, recordkeeping requirements are continued in this permit, but this type of non-compliance of the former owner was not considered in the establishment of the permit conditions for this owner and their future operations.

FACILITY MAP:

IMPACTED STORMWATER FLOW DIAGRAM:



Part II RECEIVING STREAM INFORMATION

RECEIVING WATER BODY'S WATER QUALITY:
The receiving stream has no concurrent water quality data available.

303(D) LIST:
Section 303(d) of the federal Clean Water Act requires that each state identify waters that are not meeting water quality standards and for which adequate water pollution controls have not been required. Water quality standards protect such beneficial uses of water as whole body contact (such as swimming), maintaining fish and other aquatic life, and providing drinking water for people, livestock and wildlife. The 303(d) list helps state and federal agencies keep track of waters that are impaired but not addressed by normal water pollution control programs. http://dnr.mo.gov/env/wpp/waterquality/303d/303d.htm

✓ Applicable; Pomme de Terre River is listed on the 2014 Missouri 303(d) list for *E. Coli*.

- This facility is considered to be a source of or has the potential to contribute to the above listed pollutant(s). Permitted feature #011, a land application field, is in an area that drains to the Pomme de Terre River, but the land application field is a no-discharge feature, the most protective limitation for a regulated activity and, as such, protects this impaired stream. The stormwater outfalls discharge after running across land and through small unlisted tributaries to 100K Extent Streams, which then flow downstream into the Pomme de Terre River within two miles of the facility. For outfall #15, animal waste potentially impacts the stormwater with *E. Coli*. As such, limits were established for *E. Coli* to protect water quality, and limits were established based on an ELG for fecal coliform. Therefore, permit limitations within this permit are intended to protect this stream.

TOTAL MAXIMUM DAILY LOAD (TMDL):
A TMDL is a calculation of the maximum amount of a given pollutant that a body of water can absorb before its water quality is affected; hence, the purpose of a TMDL is to determine the pollutant loading a specific waterbody can assimilate without exceeding water quality standards. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan or TMDL may be developed. The TMDL shall include the WLA calculation. http://dnr.mo.gov/env/wpp/tmdl/
✓ Not applicable; this facility does not discharge to a waterbody/watershed with a TMDL.

UPSTREAM OR DOWNSTREAM IMPAIRMENTS:
The permit writer has reviewed upstream and downstream stream segments of this facility for impairments.
✓ The permit writer has noted a downstream impairments for E. Coli near this facility see 303(D) List explanation above.

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.
✓ All Other Waters

RECEIVING STREAMS TABLE:

PERMITTED FEATURE	WATERBODY NAME	CLASS	WBID	DESIGNATED USES*	DISTANCE TO SEGMENT (MILES)	12-DIGIT HUC
ALL	Tributary to Tributary to Pomme de Terre River	n/a	n/a	GEN	0.0	10290107-0104
#001	100K Extent Remaining Stream	C	3960	AQL, HHP, IRR, LWW, SCR, WBCB	0.29	
#003	100K Extent Remaining Stream	C	3960	AQL, HHP, IRR, LWW, SCR, WBCB	0.31	
#011	Pomme de Terre River	P	1440	AQL, HHP, IRR, LWW, SCR, WBCA	0.38	
#012	100K Extent Remaining Stream	C	3960	AQL, HHP, IRR, LWW, SCR, WBCB	0.29	
#013	100K Extent Remaining Stream	C	3960	AQL, HHP, IRR, LWW, SCR, WBCB	0.17	
#014	100K Extent Remaining Stream	C	3960	AQL, HHP, IRR, LWW, SCR, WBCB	0.11	
#015	100K Extent Remaining Stream	C	3960	AQL, HHP, IRR, LWW, SCR, WBCB	0.23	
#016	100K Extent Remaining Stream	C	3960	AQL, HHP, IRR, LWW, SCR, WBCB	0.24	
#017	100K Extent Remaining Stream	C	3960	AQL, HHP, IRR, LWW, SCR, WBCB	0.27	

n/a not applicable
WBID Waterbody ID: Missouri Use Designation Dataset 8-20-13 MUDD V1.0 data can be found as an ArcGIS shapefile on MSDIS at ftp://msdis.missouri.edu/pub/Inland_Water_Resources/MO_2014_WQS_Stream_Classifications_and_Use_shp.zip
* As per 10 CSR 20-7.031 Missouri Water Quality Standards, 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 1st classified receiving stream's beneficial water uses to be maintained are in the receiving stream table 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.:
AQL = Protection of aquatic life (Current narrative use(s) are defined to ensure the protection and propagation of fish shellfish and wildlife, which is 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 AQL effluent limitations in 10 CSR 20-7.031 Table A 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 that supports swimming uses and has public access;
WBC-B = Whole body contact recreation that supports swimming;
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;
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);
DWS = Drinking Water Supply;
IND = Industrial water supply
10 CSR 20-7.031(1)(C)8-11.: Wetlands (10 CSR 20-7.031 Table A 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

MIXING CONSIDERATIONS:
For all outfalls, mixing zone and zone of initial dilution are not allowed per 10 CSR 20-7.031(5)(A)4.B.(I)(a) and (b), as the base stream flow does not provide dilution to the effluent.

RECEIVING STREAM MONITORING REQUIREMENTS:
No receiving water monitoring requirements are recommended at this time.

Part III RATIONALE & DERIVATION OF LIMITATIONS & PERMIT CONDITIONS

ALTERNATIVE EVALUATIONS FOR NEW FACILITIES:
As per [10 CSR 20-7.015(4)(A)], discharges to losing streams shall be permitted only after other alternatives including land application, discharges to a gaining stream and connection to a regional wastewater treatment facility have been evaluated and determined to be unacceptable for environmental and/or economic reasons.

✓ Not Applicable; The facility is a no-discharge system that does not discharge to a Losing Stream as defined by [10 CSR 20-2.010(36)] & [10 CSR 20-7.031(1)(O)], or 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).
  - The previous permit included monitoring for TSS and BOD in groundwater, but these are not pollutants of concern for groundwater protection. As such, these parameters have been removed.
  - 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 the stormwater outfall potentially impacted by animal waste, the potential for offensive odor in sufficient amounts preventing full maintenance of beneficial uses is being monitored, limits are established for fecal coliform and benchmarks are established for *E. coli*, which limits animal waste in runoff from the facility. The animal waste is the expected source of any offensive odor. For all other outfalls, there is no RP 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 and benchmarks are included for those pollutants could be discharged in toxic amounts. These monitoring requirements, effluent limitations for *E. Coli*, fecal coliform, and nitrates are protective of human health, animals, and aquatic life.

(E) Waters shall maintain a level of water quality at their confluences to downstream waters that provides for the attainment and maintenance of the water quality standards of those downstream waters, including waters of another state.
- This criteria was not assessed for antibacksliding as this is a new requirement, approved by the EPA on July 30, 2019.

(F) There shall be no significant human health hazard from incidental contact with the water.
- Much like the condition above, the permit writer considered specific toxic pollutants when writing this permit, including those pollutants could cause human health hazards. The discharge is limited by numeric effluent limitations for those conditions could result in human health hazards.

(G) 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.
- 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 livestock and wildlife watering.

(H) 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 changes impairing the natural biological community because nothing disclosed by the permittee indicates this is occurring.
- It has been established any chemical changes are covered by the specific numeric effluent limitations established in the permit.
- 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.

(I) 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.

- The previous permit special condition stated: "Any pesticide discharge from any point source shall comply with the requirements of Federal Insecticide, Fungicide and Rodenticide Act, as amended (7 U.S.C. 136 et. seq.) and the use of such pesticides shall be in a manner consistent with its label."
  The permit writer has determined this special condition was outside the scope of NPDES permitting and was removed.
- The previous permit special condition indicated spills from hazardous waste substances must be reported to the department. However, this condition is covered under standard conditions therefore was removed from special conditions.

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 http://dnr.mo.gov/env/wpp/permits/antideg-implementation.htm

✓ 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 applies the ELG in 40 CFR 432 to the impacted stormwater, thereby classifying it as "wastewater," but the flows, operations and therefore potential pollutant loading has not changed.

BEST MANAGEMENT PRACTICES:

Minimum site-wide best management practices are established in this permit to ensure 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).

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.

BIOSOLIDS & SEWAGE SLUDGE:

Biosolids are solid materials resulting from domestic wastewater treatment that meet federal and state criteria for beneficial uses (i.e. fertilizer). Sewage sludge is solids, semi-solids, or liquid residue generated during the treatment of domestic sewage in a treatment works; including but not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works. Additional information regarding biosolids and sludge is located at the following web address: http://extension.missouri.edu/main/DisplayCategory.aspx?C=74, items WQ422 through WQ449.

✓ Not applicable; this condition is not applicable to the permittee for this facility. Solids removed from this facility and land applied are not by definition "biosolids" or "sewage sludge" as the solids are produced primarily by industrial process wastewater.

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 must authorize 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).

- ✓ Applicable, sludge/biosolids/septage are removed by contract hauler, incinerated, stored in the lagoon, etc. The permitted management strategy must be followed, see FACILITY DESCRIPTION in the permit. If the described management strategy cannot be followed, the permittee must obtain a permit modification. See Standard Conditions Part III.
- ✓ Standard conditions Part III is incorporated into this permit.

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.

- ✓ Activities conducted at this facility are subject to Effluent Limit Guidelines of Subpart I of 40 CFR 432 Meat Processing point source category. As this facility conducts land application of wastewater and residuals the effluent limitations set forth in 40 CFR 432 subpart I are not included for those activities. For these areas, no discharge requirements of this permit are more stringent than the technology based limits set forth in the ELG. Stormwater impacted by animal holding areas, though, are subject to this ELG, which has been applied at Outfall #15, the stormwater outfall for the area of the facility where animal holding and off-loading occurs.

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: http://dnr.mo.gov/forms/780-2692-f.pdf. 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 ensure data entry is being completed appropriately.

- ✓ The permittee/facility is not currently using the eDMR data reporting system. The permittee shall submit an eDMR Permit Holder and Certifier Registration form within **60 days** of the effective date of this permit.

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, RSMo 644.076.1, 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. See Part IV for specific determinations.

GROUNDWATER MONITORING:
Groundwater is a water of the state according to 10 CSR 20-7.015(1)11, and is subject to regulations at 10 CSR 20-7.015(7) and 10 CSR 20-7.031(6) and must be protected accordingly.

- ✓ This facility is required to monitor groundwater for the water protection program.

LAND APPLICATION:
Land application, or surficial dispersion of wastewater and/or sludge, is performed by facilities to maintain a basin as no-discharge. Requirements for these types of operations are found in 10 CSR 20-6.015; authority to regulate these activities is from RSMo 644.026.

- ✓ Applicable, the facility shall comply with all applicable land application requirements listed in this permit. These requirements incorporated into this permit pursuant to 10 CSR 20-6.015(4) ensure appropriate minimum operational controls of the no-discharge land application systems. When operated correctly these permit conditions will prevent unauthorized and illicit discharges to waters of the state; and will protect soils, vegetation, surface water, groundwater, and public health. These requirements also ensure application activities fall within a productive use demonstration (agricultural use), prevent plant phytotoxicity, and prevent and protect soils loading of specified pollutants. The minimum requirements established in the permit are to meet, not only DNRs requirements, but to also ensure the exemptions for agricultural stormwater runoff in 10 CSR 20-6.200(1)(B)5 or 10 CSR 20-6.300(2)(D)2 continue to be met.
  - The facility disclosed they apply water using a spray from a water truck or spray with a hose.
  - Following is a list of helpful publications; while generally geared to biosolids and domestic sludge, these documents can show operators and permittees specific best management practices which may be important to their own operations.
    - Land Applications Considerations for Animal Manure (contains nutrient requirements for plant growth) https://extension2.missouri.edu/eq202
    - State and EPA Regulations for Domestic Wastewater Sludge and Biosolids https://extension2.missouri.edu/eq421
    - Land Application of Septage https://extension2.missouri.edu/eq422
    - Monitoring Requirements for Biosolids Land Application https://extension2.missouri.edu/wq423
    - Biosolids Standards for Pathogens and Vectors https://extension2.missouri.edu/wq424
    - Biosolids Standards for Metals and Other Trace Substances https://extension2.missouri.edu/wq425
    - Best Management Practices for Biosolids Land Application https://extension2.missouri.edu/wq426
    - Benefits and Risks of Biosolids https://extension2.missouri.edu/wq427
    - Activity and Movement of Plant Nutrients and Other Trace Substances https://extension2.missouri.edu/wq428
    - Interpretation of Laboratory Analysis of Biosolids Samples https://extension2.missouri.edu/wq429
    - Crop/Nutrient Considerations of Biosolids https://extension2.missouri.edu/eq430
    - Collection and Storage of Biosolids https://extension2.missouri.edu/eq431
    - Equipment for Off-Site Application of Biosolids https://extension2.missouri.edu/wq432
    - Equipment for On-Site Land Application of Biosolids https://extension2.missouri.edu/wq433
    - Operating Considerations for Biosolids Equipment https://extension2.missouri.edu/wq434
    - Biosolids Glossary of Terms https://extension2.missouri.edu/eq449

- ✓ The facility must follow the applicable application loading rates indicated in the permit's facility description and/or special conditions. Following are an explanation of the conditions in this permit.
  - **Hydraulic Loading Rates** – wastewater needs to be land applied at rates to allow for proper soil absorption and plant uptake. In accordance with 10 CSR 20-8.200(6)(B), the hydraulic loading rate shall not exceed the soil permeability rate, resulting in a discharge of wastewater from the land application field.
  - **Nitrogen Loading Rates** – wastewater application rates should not exceed a nitrogen application rate of 150 pounds total nitrogen per acre per year, and the applied wastewater should not exceed 10 mg/L of nitrate nitrogen as N at any time.
  - 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
    - University of Missouri Nutrient Management Home Page: http://nmplanner.missouri.edu/
    - United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Nutrient Management technical resources https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/technical/ecoscience/mnm/?cid=stelprdb1044741
- ✓ Soils testing. The permit's special conditions stipulate soil testing for this facility. Soil testing is performed to monitor soil accumulation rates of the specified parameters.
- ✓ Definitions used in the land application section of the permit can be found at RSMo 644.016, 10 CSR 20-2, and 40 CFR 503.11.
- ✓ This permit does not authorize land disposal or the application of hazardous waste.

LAND DISTURBANCE:
Land disturbance, sometimes called construction activities, are actions which cause disturbance of the root layer or soil; these include clearing, grading, and excavating of the land. 40 CFR 122.26(b)(14) and 10 CSR 20-6.200(3) requires permit coverage for these activities. Coverage is not required for facilities when only providing maintenance of original line and grade, hydraulic capacity, or to continue the original purpose of the facility.

✓ Not applicable; this permit does not provide coverage for land disturbance activities. The facility may obtain a separate land disturbance permit (MORA) online at https://dnr.mo.gov/env/wpp/stormwater/sw-land-disturb-permits.htm; MORA permits do not cover disturbance of contaminated soils, however, site specific permits such as this one can be modified to include appropriate controls for land disturbance of contaminated soils by adding site-specific BMP requirements and additional outfalls.

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). https://dnr.mo.gov/pubs/pub2236.htm
✓ 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 per 10 CSR 26-2.010(2) or may be regulated as a petroleum tank.
✓ Not applicable; the permittee has not disclosed the use of any oil water separators they wish to include under the NPDES permit at this facility and therefore oil water separator tanks are not authorized by this permit.

PRETREATMENT:
This permit does not regulate pretreatment requirements for facilities discharging to an accepting permitted wastewater treatment facility. If applicable, the receiving entity (the publicly owned treatment works - POTW) is to ensure compliance with any effluent limitation guidelines for pretreatment listed in 40 CFR Subchapter N per 10 CSR 20-6.100. Pretreatment regulations per RSMo 644.016 are limitations on the introduction of pollutants or water contaminants into publicly owned treatment works or facilities.
✓ Not applicable, this facility does not discharge wastewater to a POTW.

REASONABLE POTENTIAL (RP):
Federal regulation [40 CFR Part 122.44(d)(1)(i)] requires effluent limitations for all pollutants that are (or may be) discharged at a level 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 that pollutant [40 CFR Part 122.44(d)(1)(iii)].
✓ The permit writer reviewed application materials, DMR data, past inspections, and other site specific factors to evaluate general and narrative water quality reasonable potential for this facility. Per the permit writer's best professional judgment, based on available data and full and accurate disclosure on application materials, this facility does not demonstrate reasonable potential for excursions from the general or narrative water quality criteria. See Part IV: Effluent Limit Determinations for specific parameter RP.

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 phosphorus, volatile organic compounds, and others.

As per 10 CSR 20-7.015, BOD_5 and TSS collected for lagoons/sand filters may be grab samples. Grab samples must be collected for pH, Ammonia as N, *E. coli*, TRC, Oil & Grease, Dissolved Oxygen and Total Phosphorus. This is due to the holding time restriction for *E. coli*, the volatility of Ammonia and TRC, and pH and DO cannot be preserved and must be sampled in the field. As Ammonia, Oil & Grease, and Total Phosphorus samples must be immediately preserved with acid, these samples are to be collected as a grab. For further information on sampling and testing methods see 10 CSR 20-7.015(9)(D)2.

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 and 10 CSR 20-7.031(11) 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.

- ✓ Applicable; the time given for *E. Coli* effluent limitations of this permit listed under Interim Effluent Limitations and Final Effluent Limitations were established in accordance with [10 CSR 20-7.031(11)]. The facility has been given a schedule of compliance to meet final effluent limits, as this is a new permit limit. See permit Sections A and B for compliance dates. No SOC is allowed for fecal coliform because the limit is based on the federal effluent limitations established in 40 CFR 432 and, as such, are not eligible for an 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. http://dnr.mo.gov/env/esp/spillbill.htm

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

- ✓ Applicable; Permittee land applies industrial sludge in accordance with this permit, which constitutes a Department approved sludge management plan.

SPILL 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.

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 requirements dealing with domestic wastewater, sludge, and land application.

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.

- ✓ Applicable, this facility has stormwater-only outfalls where benchmarks or limitations were deemed appropriate contaminant measures.

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 https://www.epa.gov/sites/production/files/2015-11/documents/swppp_guide_industrial_2015.pdf, 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).

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 (http://dnr.mo.gov/env/wpp/docs/AIP050212.pdf).

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 cost-effective 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: https://dnr.mo.gov/forms/#WaterPollution

✓ 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 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 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.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS (TBEL):
One of the major strategies of the Clean Water Act (CWA) in making "reasonable further progress toward the national goal of eliminating the discharge of all pollutants" is to require effluent limitations based on the capabilities of the technologies available to control those discharges. Technology-based effluent limitations (TBELs) aim to prevent pollution by requiring a minimum level of effluent quality attainable using demonstrated technologies for reducing discharges of pollutants or pollution into the waters of the United States. TBELs are developed independently of the potential impact of a discharge on the receiving water, which is addressed through water quality standards and water quality-based effluent limitations (WQBELs).

✓ Not applicable; this facility does not discharge process wastewater except the impacted stormwater subject to the technology-based limits established in 40 CFR 432. The ELG limits were implemented in this permit.

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 144.12(c), (d), or (e). In accordance with 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, P.O. Box 250, Rolla, Missouri 65402. The Class V Well Inventory Form can be requested from the Geological Survey Program or can be found at the following web address: http://dnr.mo.gov/forms/780-1774-f.pdf Single family residential septic systems and non-residential septic systems used solely for sanitary waste and having the capacity to serve fewer than 20 persons a day are excluded from the UIC requirements (40 CFR 144.81(9)).

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

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

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

WASTELOAD ALLOCATIONS (WLA) FOR LIMITS:
As per [10 CSR 20-2.010; definitions], 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). Total Maximum Daily Loads, if required for this facility, were also reviewed.

✓ Not applicable; wasteload allocations were either not calculated or were not based on TSD methods.

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 water quality standard that 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– STORAGE BASIN

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.

STORAGE BASIN LIMITATIONS TABLE (PERMITTED FEATURES #001 - TABLES A-1):

PARAMETERS	UNIT	DAILY MAX	MONTHLY AVG.	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	REPORTING FREQUENCY	SAMPLE TYPE
STORAGE BASIN							
FREEBOARD	FEET	*		SAME	DAILY	MONTHLY	MEASURED
PRECIPITATION	INCHES	*		SAME	DAILY	MONTHLY	MEASURED
EMERGENCY DISCHARGE							
FLOW	MGD	*		SAME	ONCE/EVENT	MONTHLY	MEASURED
AMMONIA AS N	mg/L	*		SAME	ONCE/EVENT	MONTHLY	GRAB
BOD_5	mg/L	*		SAME	ONCE/EVENT	MONTHLY	GRAB
E. COLI	#/100mL	*		SAME	ONCE/EVENT	MONTHLY	GRAB
OIL & GREASE	mg/L	*		SAME	ONCE/EVENT	MONTHLY	GRAB
pH †	SU	*		SAME	ONCE/EVENT	MONTHLY	GRAB
TOTAL SUSPENDED SOLIDS (TSS)	mg/L	*		SAME	ONCE/EVENT	MONTHLY	GRAB
WASTEWATER LAND APP							
AMMONIA AS N	mg/L	*		NEW	ONCE/QUARTER	QUARTERLY	GRAB
NITRATE AS N	mg/L	*		SAME	ONCE/QUARTER	QUARTERLY	GRAB
TOTAL KJELDAHL NITROGEN	mg/L	*		SAME	ONCE/QUARTER	QUARTERLY	GRAB
TOTAL PHOSPORUS	mg/L	*		SAME	ONCE/QUARTER	QUARTERLY	GRAB
POTASSIUM	mg/L	*		NEW	ONCE/QUARTER	QUARTERLY	GRAB
INDUSTRIAL SLUDGE APP							
AMMONIA AS N	mg/kg-dry	*		NEW	ONCE/APPLICATION	MONTHLY	COMPOSITE
NITRATE AS N	mg/kg-dry	*		NEW	ONCE/APPLICATION	MONTHLY	COMPOSITE
TOTAL KJELDAHL	mg/kg-dry	*		NEW	ONCE/APPLICATION	MONTHLY	COMPOSITE
TOTAL PHOSPORUS	mg/kg-dry	*		NEW	ONCE/APPLICATION	MONTHLY	COMPOSITE
POTASSIUM	mg/kg-dry	*		NEW	ONCE/APPLICATION	MONTHLY	COMPOSITE
SOLIDS	%	*		NEW	ONCE/APPLICATION	MONTHLY	COMPOSITE

PERMITTED FEATURE #001 – DERIVATION AND DISCUSSION OF LIMITS:

STORAGE BASIN AND LAND APPLICATION:

Freeboard

Monitoring requirement only. In order to determine the facility is being properly operated within capacity.

Precipitation

Monitoring requirement only. 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.

Emergency Discharge Flow
In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to ensure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification. The facility will report the total flow in millions of gallons per day (MGD), discharge monitoring continued from previous permit.

Ammonia, Total as Nitrogen
Nitrogen may be present in an emergency basin discharge; therefore monitoring of ammonia is required per 10 CSR 20-7.015(5)(B). Furthermore, nutrients must be measured prior to land application activities to ensure appropriate agronomic rates are used.

Biochemical Oxygen Demand - 5 Day (BOD_5)
Monitoring only for emergency discharges through outfall #001 from the previous state operating permit have been reassessed and verified it remains protective of the receiving stream's water quality. BOD monitors the effect of organic material decomposition on the water. Considering the organic content of this waste stream, BOD monitoring is needed to ensure continued protection of water quality.

Escherichia coli (E. coli)
This wastewater treatment system receives wastewater from beef processing activities at this facility and also receives stormwater impacted by animal holding, transportation and off-loading areas. As such, monitoring any emergency discharge for *E. Coli* is warranted. This monitoring is carried over from the previous permit.

Kjeldahl Nitrogen, Total (TKN)
Nutrients must be measured prior to land application activities to ensure appropriate agronomic rates are used.

Nitrate Nitrogen
Nutrients must be measured prior to land application activities to ensure appropriate agronomic rates are used.

Oil & Grease
Monitoring only for any emergency discharge from this outfall. Oil and grease is considered a conventional pollutant. Oil and grease is a comprehensive test which measures for gasoline, diesel, crude oil, creosote, kerosene, heating oils, heavy fuel oils, lubricating oils, waxes, and some asphalt and pitch. The test can also detect some volatile organics such as benzene, toluene, ethylbenzene, or toluene, but these constituents are often lost during testing due to their boiling points. It is recommended to perform separate testing for these constituents if they are a known pollutant of concern at the site, i.e. aquatic life toxicity or human health is a concern. Results do not allow for separation of specific pollutants within the test, they are reported, totaled, as "oil and grease". To protect the general criteria, it is the responsibility of the permittee to visually observe the discharge and receiving waters for sheen or bottom deposits.

pH
6.5 to 9.0 SU – instantaneous grab sample. Water quality limits [10 CSR 20-7.031(5)(E)] are applicable to this outfall.
pH is a fundamental water quality indicator. Additionally, metals leachability and ammonia availability in wastewater is dependent on pH. Limitations in this permit will protect against aquatic organism toxicity, downstream water quality issues, human health hazard contact, and negative physical changes in accordance with the general criteria at 10 CSR 20-7.031(4) and the Clean Water Act's (CWA) goal of 100% fishable and swimmable rivers and streams.

Phosphorus, Total P (TP)
Nutrients must be measured prior to land application activities to ensure appropriate agronomic rates are used.

Potassium
Nutrients must be measured prior to land application activities to ensure appropriate agronomic rates are used.

Solids
Measuring the % solids in any sample is needed to appropriately evaluate and convert concentrations, which is necessary because land application fields are used for wastewater land application as well. Agronomic application rates must consider all nutrient sources applied to the field.

Total Suspended Solids (TSS)
Monitoring only during emergency discharge. There is no numeric water quality standard for TSS; however, sediment discharges can negatively impact aquatic life habitat. TSS is also a valuable indicator parameter. TSS monitoring allows the permittee to identify increases in TSS indicating uncontrolled materials leaving the site. Increased suspended solids in runoff can lead to decreased available oxygen for aquatic life and an increase of surface water temperatures in a receiving stream. Suspended solids can also be carriers of toxins, which can adsorb to the suspended particles; therefore, total suspended solids are a valuable indicator parameter for other pollution.

PERMITTED FEATURES #007-#010– GROUNDWATER WELLS

GROUNDWATER MONITORING TABLE (PERMITTED FEATURES #007-#010 - TABLES A-2):

MONITORING	UNIT	DAILY MAX	MONTHLY AVG.	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	REPORTING FREQUENCY	SAMPLE TYPE
DEPTH TO GROUNDWATER	FEET	*		SAME	ONCE/QUARTER	QUARTERLY	MEASURED
PH	SU	*		SAME	ONCE/QUARTER	QUARTERLY	GRAB
E. COLI	#/100mL	*		SAME	ONCE/QUARTER	QUARTERLY	GRAB
AMMONIA AS N	MG/L	*		SAME	ONCE/QUARTER	QUARTERLY	GRAB
NITRATE AS N	MG/L	*		SAME	ONCE/QUARTER	QUARTERLY	GRAB

PERMITTED FEATURES #007-#010 – DERIVATION AND DISCUSSION OF LIMITS:

GROUNDWATER MONITORING:

Depth to Groundwater
Monitoring requirement only to determine proximity of land application activities to groundwater.

Escherichia coli (E. coli)
Monitoring requirement only to determine impact of land application activities on groundwater to protect the beneficial uses of groundwater.

pH
Monitoring only in groundwater. pH is a fundamental water quality indicator. Additionally, ammonia availability in water is dependent on pH.. Limitations in this permit will protect beneficial uses of groundwater.

Ammonia, Total as Nitrogen
Monitoring requirement only. Meat processing facilities generate waste streams impacted with organic matter, which can cause elevated levels of ammonia in the waste stream. As groundwater in this area is regularly used for drinking water, groundwater monitoring is required to ensure land application activities do not impact beneficial uses of groundwater.

Nitrate Nitrogen
Monitoring requirement only. Meat processing facilities generate waste streams impacted with organic matter, which can cause elevated levels of nitrate in the waste stream. As groundwater in this area is regularly used for drinking water, groundwater monitoring is required to ensure land application activities do not impact beneficial uses of groundwater.

PERMITTED FEATURES #011-#014 –LAND APPLICATION

LAND APPLICATION FIELDS #011-#014 – TABLE A-3:

PARAMETERS	UNIT	DAILY MAX	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	MINIMUM REPORTING FREQUENCY	SAMPLE TYPE
WASTEWATER/ SLUDGE APPLICATION						
APPLICATION AREA	ACRES	*	SAME	ONCE PER DAY/APP	ONCE/MONTH	MEASURED
APPLICATION RATE	INCHES/ACRES	*	SAME	ONCE PER DAY/APP	ONCE/MONTH	MEASURED
IRRIGATION PERIOD	HOURS	*	SAME	ONCE PER DAY/APP	ONCE/MONTH	MEASURED
VOLUME IRRIGATED	GALLONS	*	SAME	ONCE PER DAY/APP	ONCE/MONTH	MEASURED

PERMITTED FEATURES #011#014 – DERIVATION AND DISCUSSION OF LIMITS:

WASTEWATER / SLUDGE LAND APPLICATION ACTIVITIES (PER FIELD):

Application Area
Monitoring requirement only. In order to determine compliance with no-discharge limitations of land application fields, monitoring of application activity is required. Monitoring the area will allow the permittee to ensure compliance with application practices.

Application Rate
Monitoring requirement only. In order to determine compliance with no-discharge limitations of land application fields, monitoring of application activity is required. Monitoring the rate will allow the permittee to ensure appropriate permeability and plant uptake is occurring and will prevent soil saturation that may result in runoff and illicit discharges to waterbodies. This will also prevent sludge buildup that may clog soils, which likewise will cause runoff and illicit discharges of wastewater to waterbodies.

Irrigation Period
Monitoring requirement only. In order to determine compliance with no-discharge limitations of land application fields, monitoring of application activity is required. Monitoring the irrigation period will also ensure that soils to not get saturated and result in runoff and illicit discharges to waterbodies.

Volume Irrigated
Monitoring requirement only. In order to determine compliance with no-discharge limitations of land application fields, monitoring of application activity is required. Monitoring the volume irrigated will allow the permittee to ensure over application does not occur and that hydraulic loading is maintained within design levels. This will also help prevent runoff and illicit discharges due to soil saturation. This will also prevent sludge buildup that may clog soils, which likewise will cause runoff and illicit discharges of wastewater to waterbodies.

SOIL MONITORING LAND APPLICATION FIELDS #011-#014 – TABLE A-4:

PARAMETERS	UNIT	DAILY MAX	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	MINIMUM REPORTING FREQUENCY	SAMPLE TYPE
PH (SALT)	SU	*	NEW	ONCE/PERMIT	ONCE/PERMIT	GRAB
AMMONIA AS N	MG/KG-DRY	*	NEW	ONCE/PERMIT	ONCE/PERMIT	GRAB
NITRATE NITROGEN AS N	MG/KG-DRY	*	NEW	ONCE/PERMIT	ONCE/PERMIT	GRAB
PHOSPHORUS, BRAY P1 METHOD	PPM	*	NEW	ONCE/PERMIT	ONCE/PERMIT	GRAB
SODIUM ADSORPTION RATIO	RATIO	*	NEW	ONCE/PERMIT	ONCE/PERMIT	GRAB

PERMITTED FEATURES #011#014 – DERIVATION AND DISCUSSION OF LIMITS:

SOIL MONITORING ON LAND APPLICATION FIELDS:

pH: Monitoring requirement only. Monitoring for pH is included to determine nutrient loading rates on the land application fields, similar to requirements for other no-discharge land application fields under 10 CSR 20-6.015(4)(A).

Ammonia as N: Ammonia is necessary to calculate Plant Available Nitrogen. The calculation for Plant Available nitrogen will be used to determine if nitrogen is applied at an appropriate level. Plant available nitrogen is calculated by the following: 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.

Nitrate Nitrogen: Nitrate is necessary to calculate Plant Available Nitrogen. The calculation for Plant Available nitrogen will be used to determine if nitrogen is applied at an appropriate level. Plant available nitrogen is calculated by the following: 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.

Nitrogen – Total Kjeldahl: Total Kjeldahl nitrogen is necessary to calculate Plant Available Nitrogen. Total Kjeldahl nitrogen includes Organic Nitrogen and Ammonia Nitrogen.

The calculation for Plant Available nitrogen will be used to determine if nitrogen is applied at an appropriate level. Plant available nitrogen is calculated by the following: 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.

Plant Available Nitrogen: Plant Available nitrogen monitoring is necessary to determine if wastewater is being applied at an agronomic rate.

Total Phosphorus

Monitoring requirement only. Wastewater and sludge can contain variable concentration of nutrients. Soils and plants have limited capacity to uptake the nutrients found in the wastewater and sludge being land applied.

Potassium

Monitoring requirement only. Wastewater and sludge can contain variable concentration of nutrients. Soils and plants have limited capacity to uptake the nutrients found in the wastewater and sludge being land applied.

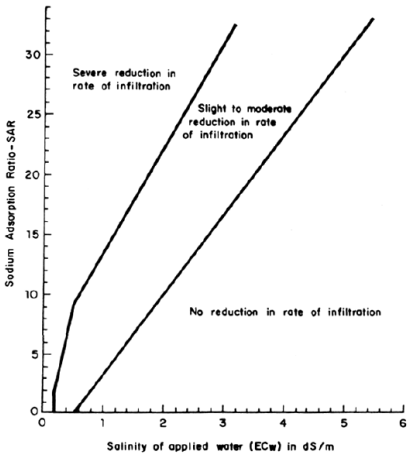
SALINITY

The negative effects (dispersion of soil particles, impaired permeability) of elevated sodium levels are counter acted by high electrolyte solution (electrical conductivity). SAR is included due to this relationship.

Sodium Adsorption Ratio:

SAR is a measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. Soils that have an SAR values of 13 or more may be characterized by an increased dispersion of organic matter and clay particles, reduced saturated hydraulic conductivity (Ksat) and aeration and the general degradation of soil structure. SAR is the ratio of Na concentrations divided by the square root of one half of the Ca + Mg concentrations Salination of soils can become an issue in situations where frequent irrigation takes place. As water is irrigated salts are built up in the soil faster than can be leached out.

Effect of SAR and EC on soil structure:



OUTFALLS #015 - #017 – STORMWATER MONITORING

Limitations derived and established in the below Tables 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.

OUTFALLS #015 AND #016 IMPACTED STORMWATER LIMITATIONS AND MONITORING TABLE A-5 AND A-6:

PARAMETERS	UNIT	DAILY MAXIMUM LIMIT/ MONTHLY AVERAGE	BENCH-MARK	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	REPORTING FREQUENCY	SAMPLE TYPE
PHYSICAL							
FLOW	MGD	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	24 HR. ESTIMATE
CONVENTIONAL							
BOD	g/kg LWK	0.24/0.12	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
E. COLI	#/100/mL	630/126 (TABLE A-6)	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
FECAL COLIFORM	#/100/mL	400/-	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
OIL & GREASE	g/kg LWK	0.12/0.06	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
PH	SU	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
SETTLEABLE SOLIDS	mL/L/hr	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
TSS	g/kg LWK	0.40/0.20	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
NUTRIENTS							
AMMONIA AS N	mg/L	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
NITRATE PLUS NITRATE N	mg/L	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
TOTAL KJELDAHL NITROGEN (TKN)	mg/L	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
PHOSPHORUS, TOTAL (TP)	mg/L	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB

OUTFALL #017 STORMWATER LIMITATIONS AND MONITORING TABLE A-7:

PARAMETERS	UNIT	DAILY MAXIMUM LIMIT	BENCH-MARK	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	REPORTING FREQUENCY	SAMPLE TYPE
PHYSICAL							
FLOW	MGD	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	24 HR. ESTIMATE
CONVENTIONAL							
BOD	mg/L	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
E. COLI	#/100/mL	**	630	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
FECAL COLIFORM	#/100/mL	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
OIL & GREASE	mg/L	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
PH	SU	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
SETTLEABLE SOLIDS	mL/L/hr	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
TSS	mg/L	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
NUTRIENTS							
AMMONIA AS N	mg/L	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
NITRATE PLUS NITRATE N	mg/L	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
TOTAL KJELDAHL NITROGEN (TKN)	mg/L	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB
PHOSPHORUS, TOTAL (TP)	mg/L	*	-	NEW	ONCE/QUARTER	ONCE/QUARTER	GRAB

DERIVATION AND DISCUSSION OF STORMWATER MONITORING AND LIMITS:

PHYSICAL:

Flow
In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to ensure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification. The facility will report the total flow in millions of gallons per day (MGD); quarterly monitoring is appropriate.

CONVENTIONAL:

Biochemical Oxygen Demand - 5 Day (BOD_5)
Daily maximum limit of 0.24 pounds per 1,000 lbs of live weight killed animals and a monthly average limit of 0.12 pounds per 1,000 lbs of live weight killed animals (equal to g/kg LWK). Outfall #015 only. This outfall includes runoff from animal hauling, truck parking and off-loading areas impacted by animal waste and, as such, is subject to the ELG limitations established 40 CFR 432.

For outfalls #016 and #017, monitoring only is appropriate to determine potential impact of stormwater pollutants on receiving stream. Furthermore, monitoring is appropriate to ensure animal hauling activities are not impacting stormwater in these areas as well.

Escherichia coli (E. coli)
The EPA approved the Department's new stream classifications in 2014. A schedule of compliance has been included in the permit to meet final effluent limitations for *E. coli* which are protective of the stream use designation. For impacted stormwater at outfall #015, daily maximum limit of 630 colony forming units per 100 mL [10 CSR 20-7.015(9)(B)1.E.] and a monthly geometric mean limit of 126 bacteria per 100 mL [10 CSR 20-7.031 Table A1] during the recreational season from April 1 through October 31 only [10 CSR 20-7.031(5)(C)], to protect Whole Body Contact (A) [10 CSR 20-7.031(C)2.A.(I)] designated use of the receiving stream. For outfalls #016 and #017, non-impacted stormwater, a benchmark is warranted to ensure that animal waste is not impacting these areas.

Fecal coliform
Limit of 400 colony forming units per 100mL. Outfall #015 only. This outfall includes runoff from animal hauling, truck parking and off-loading areas impacted by animal waste and, as such, is subject to the ELG limitations established 40 CFR 432.

Oil & Grease
Oil and grease is considered a conventional pollutant. Oil and grease is a comprehensive test which measures for gasoline, diesel, crude oil, creosote, kerosene, heating oils, heavy fuel oils, lubricating oils, waxes, and some asphalt and pitch. The test can also detect some volatile organics such as benzene, toluene, ethylbenzene, or toluene, but these constituents are often lost during testing due to their boiling points.

Outfall #015 only: Daily maximum limit of 0.12 pounds per 1,000 lbs of live weight killed animals (equal to g/kg LWK) and a monthly average limit of 0.06 pounds per 1,000 lbs of live weight killed animals. This outfall includes runoff from animal hauling, truck parking and off-loading areas impacted by animal waste and, as such, is subject to the ELG limitations established 40 CFR 432.

Outfalls #016 and #017: Monitoring only. Oil and grease is considered a conventional pollutant. Oil and grease is a comprehensive test which measures for gasoline, diesel, crude oil, creosote, kerosene, heating oils, heavy fuel oils, lubricating oils, waxes, and some asphalt and pitch. The test can also detect some volatile organics such as benzene, toluene, ethylbenzene, or toluene, but these constituents are often lost during testing due to their boiling points. It is recommended to perform separate testing for these constituents if they are a known pollutant of concern at the site, i.e. aquatic life toxicity or human health is a concern. Results do not allow for separation of specific pollutants within the test, they are reported, totaled, as "oil and grease".

pH
The pH at the site has been reviewed and determined limitations are appropriate for the stormwater discharges at this site. The stormwater has the potential to be altered by stone or aggregate which may elevate the pH of the stormwater. It is the responsibility of the permittee to ensure the pH remains stable to protect aquatic life in the receiving streams.

Settleable Solids (SS)
Monitoring only. There is no numeric water quality standard for SS; however, sediment discharges can negatively impact aquatic life habitat. Settleable solids are also a valuable indicator parameter. Solids monitoring allows the permittee to identify increases in sediment and solids may indicate uncontrolled materials leaving the site.

Total Suspended Solids (TSS)
Outfall #015: Daily maximum limit of 0.40 pounds per 1,000 lbs of live weight killed animals (equal to g/kg LWK) and a monthly average limit of 0.20 pounds per 1,000 lbs of live weight killed animals. This outfall includes runoff from animal hauling, truck parking and off-loading areas impacted by animal waste and, as such, is subject to the ELG limitations established 40 CFR 432.

Outfalls #016 and #017: Monitoring only. There is no numeric water quality standard for TSS; however, sediment discharges can negatively impact aquatic life habitat. TSS is also a valuable indicator parameter. TSS monitoring allows the permittee to identify increases in TSS indicating uncontrolled materials leaving the site. Increased suspended solids in runoff can lead to decreased available oxygen for aquatic life and an increase of surface water temperatures in a receiving stream. Suspended solids can also be carriers of toxins, which can adsorb to the suspended particles; therefore, total suspended solids are a valuable indicator parameter for other pollution.

NUTRIENTS

Ammonia as N, Nitrate plus Nitrate Nitrogen, Total Kjeldahl Nitrogen, Phosphorus:
Animals are hauled onto the site and off-loaded, trucks parked, and animals are processed at this facility. Nutrient monitoring is implemented in this permit to ensure animal waste and other animal handling activities are not impacting stormwater and causing a discharge of nutrients into waters of the state.

OTHER

Chloride
Facility de-icing activities may add chloride to stormwater runoff. As such, monitoring is warranted.

PART V. 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. http://dnr.mo.gov/env/wpp/cpp/docs/watershed-based-management.pdf. 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.
✓ This permit will become synchronized by expiring the end of the 4th quarter, 2024.

PUBLIC NOTICE:
The Department shall give public notice a draft permit has been prepared and its issuance is pending. http://dnr.mo.gov/env/wpp/permits/pn/index.html. 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 October 9, 2020 through November 9, 2020. One comment was received from the permittee indicating that they will not be using chloride or brine solutions for meat processing; as such, chloride monitoring was removed from wastewater systems. The permittee also commented and requested site-specific land application rates based on soil analysis and evaluation; the changes were incorporated. The ELG impacted stormwater limit, based on the ELG, is listed in the permit as g/kg LWK, but data entry into the electronic reporting system is not compatible with this measurement. As such, a conversion table was included, converting g/kg LWK to pounds/day based on the planned production and average weight of a processed cow. The actual limit remains unchanged, but data will be reported in lbs/day due to the reporting system limitations. One commenter provided feedback on impacted stormwater; as such, the BMP section of the permit was updated to include additional language on manure management. The facility description and history was also updated in response to comments, specifically comments about a previous owner's compliance history. Numerous comments were received about compliance history, ownership, and protection of receiving waters. No significant changes were made other than those noted here.

DATE OF FACT SHEET: OCTOBER 6, 2020

COMPLETED BY:

HEATHER PETERS, ENVIRONMENTAL SUPERVISOR
MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
OPERATING PERMITS SECTION – INDUSTRIAL PERMITS UNIT
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STANDARD CONDITIONS FOR NPDES PERMITS
ISSUED BY
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION
REVISED
AUGUST 1, 2014

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

Part I – General Conditions
Section A – Sampling, Monitoring, and Recording

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

2. **Monitoring Requirements**.
   a. Records of monitoring information shall include:
      i. The date, exact place, and time of sampling or measurements;
      ii. The individual(s) who performed the sampling or measurements;
      iii. The date(s) analyses were performed;
      iv. The individual(s) who performed the analyses;
      v. The analytical techniques or methods used; and
      vi. The results of such analyses.
   b. If the permittee monitors any pollutant more frequently than required by the permit at the location specified in the permit using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring shall be included in the calculation and reported to the Department with the discharge monitoring report data (DMR) submitted to the Department pursuant to Section B, paragraph 7.

3. **Sample and Monitoring Calculations.** Calculations for all sample and monitoring results which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in the permit.

4. **Test Procedures**. The analytical and sampling methods used shall conform to the reference methods listed in 10 CSR 20-7.015 unless alternates are approved by the Department. The facility shall use sufficiently sensitive analytical methods for detecting, identifying, and measuring the concentrations of pollutants. The facility shall ensure that the selected methods are able to quantify the presence of pollutants in a given discharge at concentrations that are low enough to determine compliance with Water Quality Standards in 10 CSR 20-7.031 or effluent limitations unless provisions in the permit allow for other alternatives. A method is "sufficiently sensitive" when; 1) the method minimum level is at or below the level of the applicable water quality criterion for the pollutant or, 2) the method minimum level is above the applicable water quality criterion, but the amount of pollutant in a facility's discharge is high enough that the method detects and quantifies the level of pollutant in the discharge, or 3) the method has the lowest minimum level of the analytical methods approved under 10 CSR 20-7.015. These methods are also required for parameters that are listed as monitoring only, as the data collected may be used to determine if limitations need to be established. A permittee is responsible for working with their contractors to ensure that the analysis performed is sufficiently sensitive.

5. **Record Retention.** Except for records of monitoring information required by the permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five (5) years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

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

Section B – Reporting Requirements

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

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

b. The following shall be included as information which must be reported within 24 hours under this paragraph.
   i. Any unanticipated bypass which exceeds any effluent limitation in the permit.
   ii. Any upset which exceeds any effluent limitation in the permit.
   iii. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit required to be reported within 24 hours.

c. The Department may waive the written report on a case-by-case basis for reports under paragraph 2. b. of this section if the oral report has been received within 24 hours.

3. **Anticipated Noncompliance**. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The notice shall be submitted to the Department 60 days prior to such changes or activity.

4. **Compliance Schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date. The report shall provide an explanation for the instance of noncompliance and a proposed schedule or anticipated date, for achieving compliance with the compliance schedule requirement.

5. **Other Noncompliance.** The permittee shall report all instances of noncompliance not reported under paragraphs 2, 3, and 6 of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph 2. a. of this section.

6. **Other Information**. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

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

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 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.

d. It is unlawful for any person to cause or permit any discharge of water contaminants from any water contaminant or point source located in Missouri in violation of sections 644.006 to 644.141 of the Missouri Clean Water Law, or any standard, rule or regulation promulgated by the commission. In the event the commission or the director determines that any provision of sections 644.006 to 644.141 of the Missouri Clean Water Law or standard, rules, limitations or regulations promulgated pursuant thereto, or permits issued by, or any final abatement order, other order, or determination made by the commission or the director, or any filing requirement pursuant to sections 644.006 to 644.141 of the Missouri Clean Water Law or any other provision which this state is required to enforce pursuant to any federal water pollution control act, is being, was, or is in imminent danger of being violated, the commission or director may cause to have instituted a civil action in any court of competent jurisdiction for the injunctive relief to prevent any such violation or further violation or for the assessment of a penalty not to exceed $10,000 per day for each day, or part thereof, the violation occurred and continues to occur, or both, as the court deems proper. Any person who willfully or negligently commits any violation in this paragraph shall, upon conviction, be punished by a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than one year, or both. Second and successive convictions for violation of the same provision of this paragraph by any person shall be punished by a fine of not more than $50,000 per day of violation, or by imprisonment for not more than two (2) years, or both.

2. **Duty to Reapply.**
   a. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.
   b. A permittee with a currently effective site-specific permit shall submit an application for renewal at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Department. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)
   c. A permittees with currently effective general permit shall submit an application for renewal at least 30 days before the existing permit expires, unless the permittee has been notified by the Department that an earlier application must be made. The Department may grant permission for a later submission date. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)

3. **Need to Halt or Reduce Activity Not a Defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

4. **Duty to Mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

5. **Proper Operation and Maintenance**. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

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

7. **Permit Transfer.**
   a. Subject to 10 CSR 20-6.010, an operating permit may be transferred upon submission to the Department of an application to transfer signed by the existing owner and the new owner, unless prohibited by the terms of the permit. Until such time the permit is officially transferred, the original permittee remains responsible for complying with the terms and conditions of the existing permit.
   b. The Department may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Missouri Clean Water Law or the Federal Clean Water Act.
   c. The Department, within 30 days of receipt of the application, shall notify the new permittee of its intent to revoke or reissue or transfer the permit.

8. **Toxic Pollutants.** The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Federal Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

9. **Property Rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.

10. **Duty to Provide Information.** The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

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

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

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

14. **Severability.** The provisions of the permit are severable, and if any provision of the permit, or the application of any provision of the permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of the permit, shall not be affected thereby.

AP 32916

MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
FORM A – APPLICATION FOR NONDOMESTIC PERMIT UNDER MISSOURI CLEAN WATER LAW

RECEIVED
JUN 21 2019
Water Protection Program

FOR AGENCY USE ONLY	
CHECK NUMBER	
DATE RECEIVED 6-21-19	FEE SUBMITTED 0
JET PAY CONFIRMATION NUMBER	

PLEASE READ ALL THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM.
SUBMITTAL OF AN INCOMPLETE APPLICATION MAY RESULT IN THE APPLICATION BEING RETURNED.

IF YOUR FACILITY IS ELIGIBLE FOR A NO EXPOSURE EXEMPTION:
Fill out the No Exposure Certification Form (Mo 780-2828): https://dnr.mo.gov/forms/780-2828-f.pdf

1. REASON FOR APPLICATION:

☑ a. This facility is now in operation under Missouri State Operating Permit (permit) MO – 0113204, is submitting an application for renewal, and there is no proposed increase in design wastewater flow. Annual fees will be paid when invoiced and there is no additional permit fee required for renewal.

☐ b. This facility is now in operation under permit MO – _____, is submitting an application for renewal, and there is a proposed increase in design wastewater flow. Antidegradation Review may be required. Annual fees will be paid when invoiced and there is no additional permit fee required for renewal.

☐ c. This is a facility submitting an application for a new permit (for a new facility). Antidegradation Review may be required. New permit fee is required.

☐ d. This facility is now in operation under Missouri State Operating Permit (permit) MO – _____ and is requesting a modification to the permit. Antidegradation Review may be required. Modification fee is required.

2. FACILITY

NAME		TELEPHONE NUMBER WITH AREA CODE	
Moon Ridge Foods, LLC			
ADDRESS (PHYSICAL)	CITY	STATE	ZIP CODE
5305 Highway H	Pleasant Hope	MO	65725

3. OWNER

NAME		TELEPHONE NUMBER WITH AREA CODE	
Moon Ridge Foods, LLC			
EMAIL ADDRESS			
ADDRESS (MAILING)	CITY	STATE	ZIP CODE
5305 Highway H	Pleasant Hope	MO	65725

4. CONTINUING AUTHORITY

NAME		TELEPHONE NUMBER WITH AREA CODE	
Brent King, CTP, Receiver		816-945-7825	
EMAIL ADDRESS			
bking@glassratner.com			
ADDRESS (MAILING)	CITY	STATE	ZIP CODE
17711 W. 83rd Terrace	Lenexa	KS	66219

5. OPERATOR CERTIFICATION

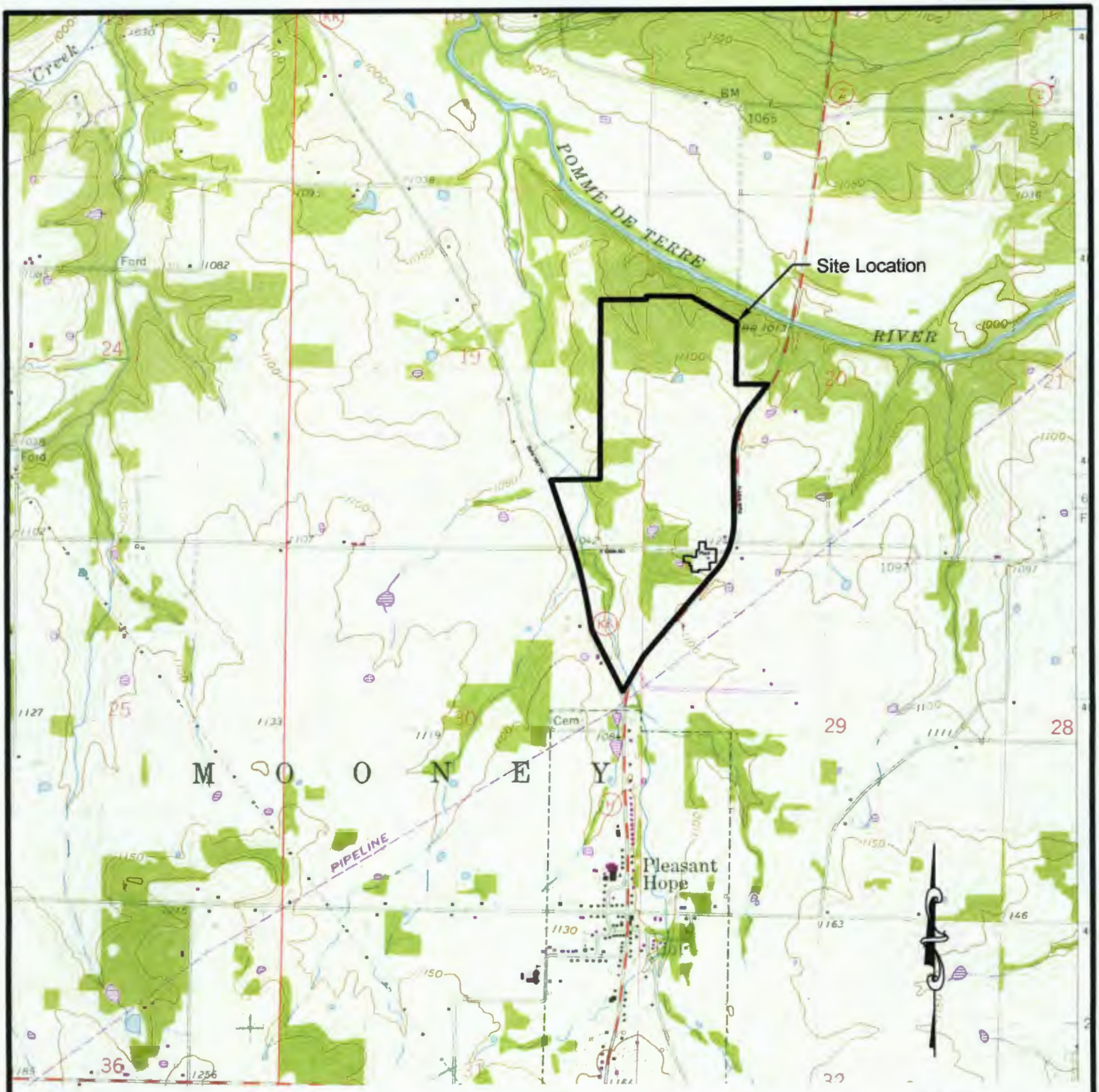
NAME	CERTIFICATE NUMBER	TELEPHONE NUMBER WITH AREA CODE	
Not applicable / required			
ADDRESS (MAILING)	CITY	STATE	ZIP CODE

6. FACILITY CONTACT

NAME	TITLE	TELEPHONE NUMBER WITH AREA CODE
Brent King, CTP, Receiver for Moon Ridge Foods, LLC	Managing Director	816-945-7825
E-MAIL ADDRESS		
bking@glassratner.com		

7. DOWNSTREAM LANDOWNER(S) Attach additional sheets as necessary.

NAME			
Please See Addendum C			
ADDRESS	CITY	STATE	ZIP CODE



Sections 19, 20, 29 & 30, Township 32N, Range 21W
Polk County, Mo

Portion of the Pleasant Hope Quadrangle
USGS

Scale

1,000' 0 2,000'

MOON RIDGE FOODS, LLC

PERMIT NO. Mo. 0113204

General Location Map

drawn by	date	Triad Environmental Services
MG	06/2019	P.O. Box 1507 Pittsburg, KS 66762 (620) 231-8660 V (620) 231-0661 F

X:\Triad Projects\34-108\Moon Ridge Foods.dwg(Gen Loc)

Sections 19, 20, 29 & 30, Township 32N, Range 21W
Polk County, Mo

Portion of the Pleasant Hope Quadrangle
USGS

Scale

500' 0 1,000'

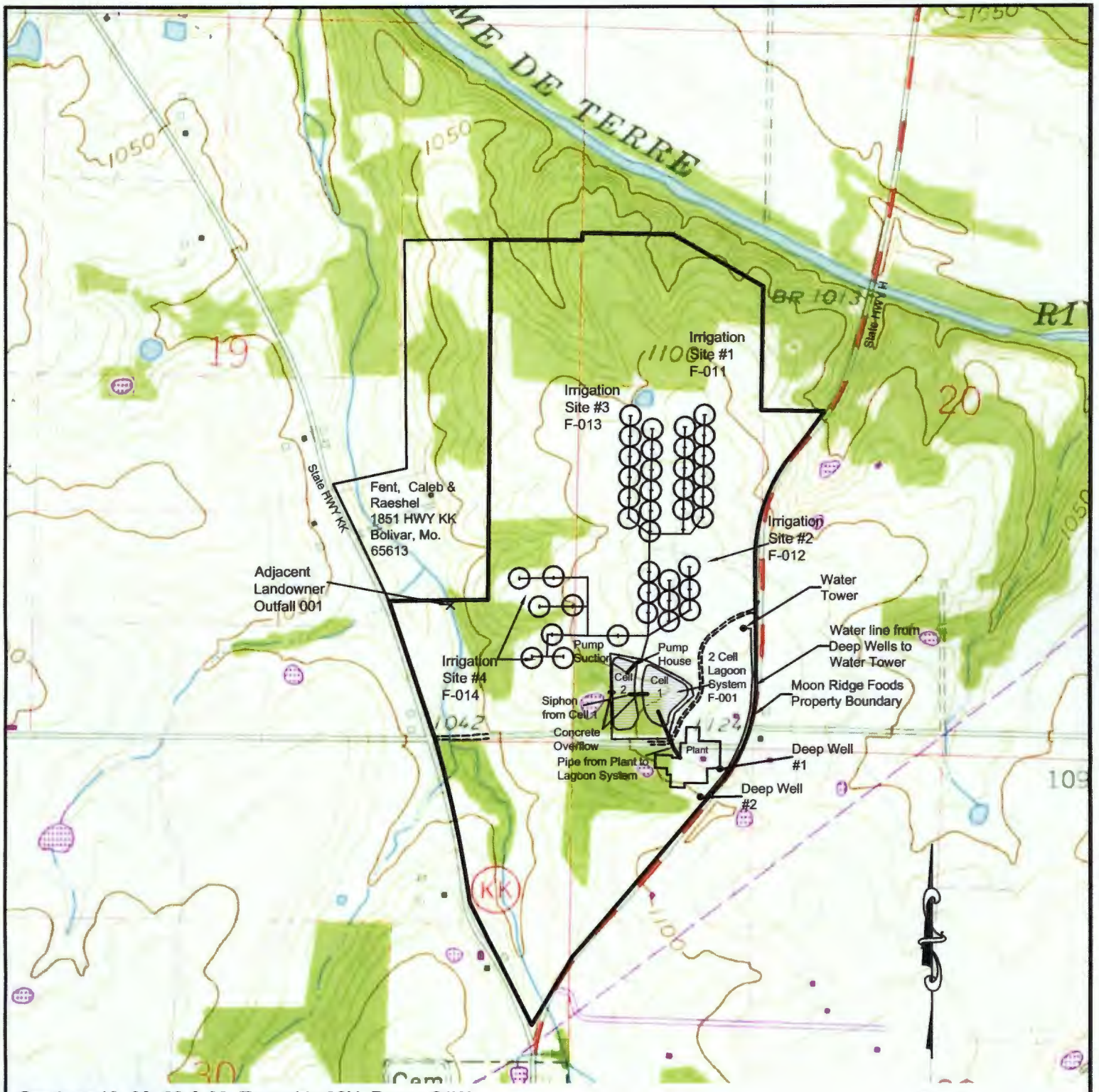
MOON RIDGE FOODS, LLC.

PERMIT NO. Mo. 0113204

Google Aerial
August 2017

drawn by	date	Triad Environmental Services
MG	06/2019	P.O. Box 1607 Pittsburg, KS 66762 (620) 231-5660 V (620) 231-5661 F

X:\Triad Projects\34-108\Moon Ridge Foods.dwg(Google Aerial 2017)



Sections 19, 20, 29 & 30, Township 32N, Range 21W
Polk County, Mo

Portion of the Pleasant Hope Quadrangle
USGS

Scale

500' 0 1,000'

Existing Irrigation Distribution System

MOON RIDGE FOODS, LLC.

PERMIT NO. Mo. 0113204

Adjacent Landowner Outfall Addendum C

drawn by	date
MG	06/2019

Triad Environmental Services
P.O. Box 1507
Pittsburg, KS 66762
(620) 231-5660 V
(620) 231-5661 F

X:\Triad Projects\34-108\Moon Ridge Foods.dwg(Addendum C)

MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM

FORM I – PERMIT APPLICATION FOR OPERATION OF WASTEWATER IRRIGATION SYSTEMS

RECEIVED
JUN 21 2019
Water Protection Program

FOR AGENCY USE ONLY
PERMIT NUMBER MO -
DATE RECEIVED

INSTRUCTIONS: The following forms must be submitted with Form I: FORM B or B2 for domestic wastewater.
FORM A for industrial wastewater.

1. FACILITY INFORMATION

1.1 Facility Name
Moon Ridge Foods, LLC

1.2 Permit Number
MO- 0113204

1.3 Type of wastewater to be irrigated: ☐ Domestic ☐ Municipal ☐ State/National Park ☐ Seasonal business
☐ Municipal with Pretreatment Program or Significant Industrial Users ☑ Other (explain) packing plant

SIC Codes (list all that apply, in order of importance) 2011

1.4 Months when the business or enterprise will operate or generate wastewater:
☑ 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 of time.
☐ Irrigation during recreation season (April – October) and discharge during November – March.
☑ Other (explain) Irrigation to permitted features

1.6 List the Facility outfalls which will be applicable to the irrigation system.
Outfall Numbers: 001

2. STORAGE BASINS

2.1 Number of storage basins: 2
Type of basin: ☐ Steel ☐ Concrete ☐ Fiberglass ☑ Earthen
☐ Earthen with membrane liner

3. LAND APPLICATION SYSTEM

3.1 Number of irrigation sites 4 Total Acres 67.5
Location: ___ ¼, ___ ¼, ___ ¼, Sec ___ T ___ R ___ _____ County _____ Acres
Location: ___ ¼, ___ ¼, ___ ¼, Sec ___ T ___ R ___ _____ County _____ Acres
Attach pages as needed. See Addendum B

3.2 Attach a site map showing topography, storage basins, irrigation sites, property boundary, streams, wells, roads, dwellings, and other pertinent features.

3.3 Type of vegetation: ☑ Grass hay ☐ Pasture ☐ Timber ☐ Row crops ☐ Other (describe) _____

3.4 Wastewater flow (dry weather) gallons/day:
Average annual: 42.97 M Seasonal _____ Off-season _____
Months of seasonal flow: 12

3. LAND APPLICATION SYSTEM (continued)

3.5 Land Application rate per acre (design flow including 1 in 10 year stormwater flows):

Design: 24 inches/year .2 inches/hour 1 inches/day 3 inches/week

Actual: 24 inches/year .2 inches/hour 1 inches/day 3 inches/week

Total Irrigation per year (gallons): 42.97 M Design 42.97 M Actual

Actual months used for Irrigation (check all that apply):

☐ Jan ☐ Feb ☑ Mar ☑ Apr ☑ May ☑ Jun ☑ Jul ☑ Aug ☑ Sep ☑ Oct ☑ Nov ☐ Dec

3.6 Land Application Rate is based on:

☐ Nutrient Management Plan (N&P)

☑ Hydraulic Loading

☐ Other (describe) _____

3.7 Equipment type: ☑ Sprinklers ☐ Gated pipe ☐ Center pivot ☑ Traveling gun ☐ Other (describe) _____

Equipment Flow Capacity: _____ Gallons per hour _____ Total hours of operation per year

3.8 **Public Use Areas.** Public access shall not be allowed to public use area irrigation sites when application is occurring. Method of Public Access Restriction:

☑ Site is Fenced ☐ Wastewater disinfection prior to irrigation ☑ Site is not for public use

☐ Other (describe): _____

3.9 Separation distance (in feet) from the outside edge of the wetted irrigation area to nearby down gradient features:

350' Permanent flowing stream ____ Losing Stream ____ Intermittent (wet weather) stream 450' Lake or pond

50' Property boundary 500' Dwellings 500' Water supply well ____ Other (describe) _____

3.10 The facility must develop and retain an Operation and Maintenance (O&M) Plan for the irrigation system.

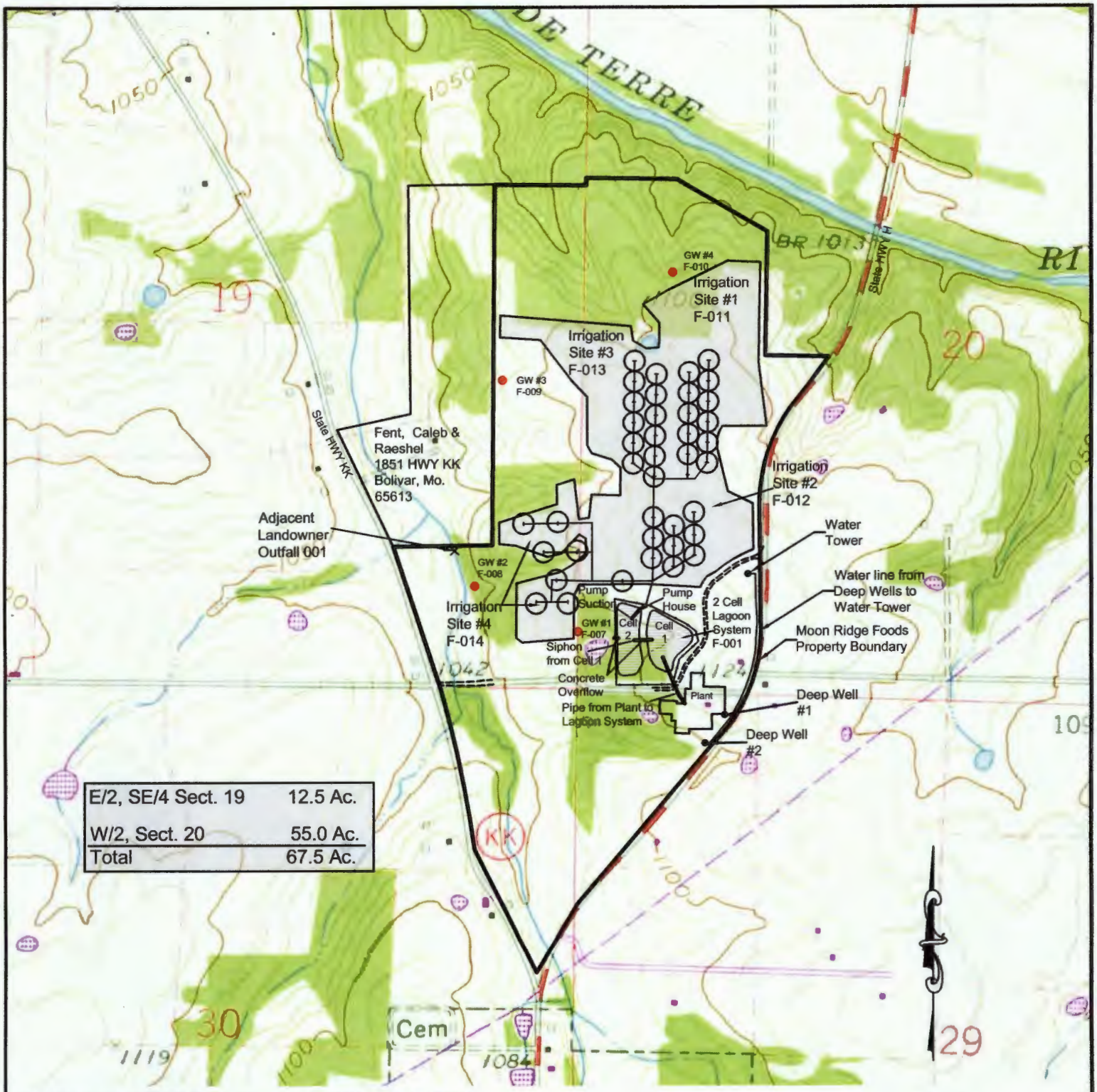
Date of O&M Plan: 1/31/17

4. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine or imprisonment.

OWNER OR AUTHORIZED REPRESENTATIVE	OFFICIAL TITLE
Brent King, CTP, Managing Director	Receiver, Moon Ridge Foods, LLC
EMAIL ADDRESS	**TELEPHONE NUMBER WITH AREA CODE**
BKING@GLASSRATNER.COM	(816) 945-7825
SIGNATURE	**DATE SIGNED**
[signature]	6-20-19

780-1686 (08-14)



E/2, SE/4 Sect. 19	12.5 Ac.
W/2, Sect. 20	55.0 Ac.
Total	67.5 Ac.

Sections 19, 20, 29 & 30, Township 32N, Range 21W
Polk County, Mo

Portion of the Pleasant Hope Quadrangle
USGS

Scale

500' 0 1,000'

Current Grass Area
Available for Irrigation

Existing Irrigation
Distribution System

MOON RIDGE FOODS, LLC.

PERMIT NO. Mo. 0113204

Existing Irrigation System Layout

Addendum B

drawn by	date	Triad Environmental Services
MG	06/2019	P.O. Box 1807 Pittsburg, KS 66762 (620) 231-5660 V (620) 231-5661 F

X:\Triad Projects\34-108\Moon Ridge Foods.dwg(Irrigation)

RECEIVED
JUN 21 2019
Water Protection Program

MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION CONTROL BRANCH

FORM C – APPLICATION FOR DISCHARGE PERMIT – MANUFACTURING, COMMERCIAL, MINING, SILVICULTURE OPERATIONS, AND STORMWATER

GENERAL INFORMATION (PLEASE SEE INSTRUCTIONS)

1.0 NAME OF FACILITY

Moon Ridge Foods, LLC

1.1 THIS FACILITY IS OPERATING UNDER MISSOURI STATE OPERATING PERMIT (MSOP) NUMBER:

MO-0113204

1.2 IS THIS A NEW FACILITY? PROVIDE CONSTRUCTION PERMIT (CP) NUMBER IF APPLICABLE.

No

1.3 Describe the nature of the business, in detail. Identify the goods and services provided by the business. Include descriptions of all raw, intermediate, final products, byproducts, or waste products used in the production or manufacturing process, stored outdoors, loaded or transferred and any other pertinent information for potential sources of wastewater or stormwater discharges.

Kill and cut pork processing facility. Production side receives, kills, cleans, and cuts product into sides for cooling, then fabrication side processes product into final cuts, cyrovac packaging, boxing, freezing, then shipping. Please see flow chart attached as Addendum "A"

FLOWS, TYPE, AND FREQUENCY

2.0 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 and maximum flows between intakes, operations, treatment units, evaporation, 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.

2.1 For each outfall (1) below, provide: (2) a description of all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, stormwater runoff, and any other process or non-process wastewater, (3) the average flow and maximum flow (put max in parentheses) contributed by each operation and the sum of those operations, (4) the treatment received by the wastewater, and (5) the treatment type code. Continue on additional sheets if necessary.

1. OUTFALL NO.	2. OPERATION(S) CONTRIBUTING FLOW; INCLUDE ALL PROCESSES AND SUB PROCESSES AT EACH OUTFALL	3. AVERAGE FLOW AND (MAXIMUM FLOW), INCLUDE UNITS.	4. TREATMENT DESCRIPTION	5. TREATMENT CODES FROM TABLE A
001	6' main, Retention tank, water softner	No discharge	N/A	
	cold h20, 140 quick water, 180 Boiler sys.	No discharge	N/A	
	Production side kill floor	Data unavaiable	N/A	
	Production side wash stations	Data unavaiable	N/A	
	cyrovac, chilling water system, prep for freezing	Data unavaiable	N/A	
	cleaning, sanitizing, degreasing, plant washing	Data unavaiable	N/A	2 - F
	All water use enters sanitary drain system	Data unavaiable	N/A	
	Discharge enters #001 lagoon cell #1	Data unavaiable	Aerobic & Anaerobic digestion	3 - C, 5 - B
	Effluent syphons to #001 Cell #2	Data unavaiable	N/A	
	Effluent irrigated to permitted features (map)	Data unavaiable	N/A	

Attach additional pages if necessary.

2.2 INTERMITTENT DISCHARGES

Except for stormwater runoff, leaks, or spills, are any of the discharges described in items 2.0 or 2.1 intermittent or seasonal?

☐ Yes *(complete the following table)* ☑ No *(go to section 2.3)*

1. OUTFALL NUMBER	2. OPERATION(S) CONTRIBUTING FLOW	3. FREQUENCY		4. FLOW				C. DURATION *(in days)*
				A. FLOW RATE *(in mgd)*		B. TOTAL VOLUME (specify with units)		
		A. DAYS PER WEEK *(specify average)*	B. MONTHS PER YEAR *(specify average)*	1. MAXIMUM DAILY	2. LONG TERM AVERAGE	4. LONG TERM DAILY	3. MAXIMUM AVERAGE	
#001	311611 Hogs, slaughter, production	5	12	.106077				365 (261)

2.3 PRODUCTION

A. Does an effluent limitation guideline (ELG) promulgated by EPA under section 304 of the Clean Water Act apply to your facility? Indicate the part and subparts applicable.

☐ Yes 40 CFR_____ Subpart(s) _____ ☑ No *(go to section 2.5)*

B. Are the limitations in the effluent guideline(s) expressed in terms of production (or other measure of operation)? Describe in C below.

☐ Yes *(complete C.)* ☑ No *(go to section 2.5)*

C. If you answered "yes" to B, list the quantity representing an actual measurement of your maximum level of production, expressed in the terms and units used in the applicable effluent guideline and indicate the affected outfalls.

A. OUTFALL(S)	B. QUANTITY PER DAY	C. UNITS OF MEASURE	D. OPERATION, PRODUCT, MATERIAL, ETC. *(specify)*

2.4 IMPROVEMENTS

A. Are you required by any federal, state, or local authority to meet any implementation schedule for the construction, upgrading, or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

☐ Yes *(complete the following table)* ☑ No *(go to 2.6)*

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS	3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
			A. REQUIRED	B. PROJECTED

B. Optional: provide below or attach additional sheets describing water pollution control programs or other environmental projects which may affect discharges. Indicate whether each program is underway or planned, and indicate actual or planned schedules for construction. This may include proposed bmp projects for stormwater.

2.5 SLUDGE MANAGEMENT

Describe the removal of any industrial or domestic biosolids or sludges generated at your facility. Include names and contact information for any haulers used. Note the frequency, volume, and methods (incineration, landfilling, composting, etc) used. See Form A for additional forms which may need to be completed.

N/A

DATA COLLECTION AND REPORTING REQUIREMENTS FOR APPLICANTS

3.0 EFFLUENT (AND INTAKE) CHARACTERISTICS (SEE INSTRUCTIONS)

A. & B. See instructions before continuing – complete one Table 1 for **each outfall** (and intake) – annotate the outfall (intake) number or designation in the space provided. The facility is not required to complete intake data unless required by the department or rule.

C. Use the space below to list any pollutants listed in the instructions section 3.0 C. Table B which you know or have reason to believe is discharged or may be discharged from any outfall not listed in parts 3.0 A or B on Table 1. For every pollutant listed, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	3. OUTFALL(S)	4. ANALYTICAL RESULTS (INCLUDE UNITS)
Total Kjeldahl Nitrogen as N	Irrigated effluent	#001	mg/L
Nitrate Nitrogen as N	Irrigated effluent	#001	mg/L
Total Phosphorus as P	irrigated effluent	#001	mg/L
above items monitoring only			
Test results attached to back	(test sample was grab, not irrigated)		

3.1 Whole Effluent Toxicity Testing

A. To your knowledge, have any Whole Effluent Toxicity (WET) tests been performed on the facility discharges (or on receiving waters in relation to your discharge) within the last three years?

☐ Yes (go to 3.1 B) ☑ No (go to 3.2)

3.1 B

Disclose wet testing conditions, including test duration (chronic or acute), the organisms tested, and the testing results. Provide any results of toxicity identification evaluations (TIE) or toxicity reduction evaluations (TRE) if applicable. Please indicate the conclusions of the test(s) including any pollutants identified as causing toxicity and steps the facility is taking to remedy the toxicity.

N/A

3.2 CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported herein, above, or on Table 1 performed by a contract laboratory or consulting firm?

☑ Yes (list the name, address, telephone number, and pollutants analyzed by each laboratory or firm.) ☐ No *(go to 4.0)*

A. LAB NAME	B. ADDRESS	C. TELEPHONE *(area code and number)*	D. POLLUTANTS ANALYZED *(list or group)*
CaSi	3378 S. Scenic Ave. #A Springfield, MO. 65807	417-882-1017	Please see attached test results

4.0 STORMWATER

4.1
Do you have industrial stormwater discharges from the site? If so, attach a site map outlining drainage areas served by each outfall. Indicate the following attributes within each drainage area: pavement or other impervious surfaces; buildings; outdoor storage areas; material loading and unloading areas; outdoor industrial activities; structural stormwater control measures; hazardous waste treatment, storage, and disposal units; and wells or springs in the area.

OUTFALL NUMBER	TOTAL AREA DRAINED (PROVIDE UNITS)	TYPES OF SURFACES (VEGETATED, STONE , PAVED, ETC)	BEST MANAGEMENT PRACTICES EMPLOYED; INCLUDE STRUCTURAL BMPS AND TREATMENT DESIGN FLOW FOR BMPS DESCRIBE HOW FLOW IS MEASURED
N/A	N/A	N/A	N/A

4.2 STORMWATER FLOWS
Provide the date of sampling with the flows, and how the flows were estimated.
N/A

SIGNATORY REQUIREMENTS

5.0 CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (TYPE OR PRINT)	TELEPHONE NUMBER WITH AREA CODE
Brent King, CTP, Receiver for Moon Ridge Foods, LLC	816-945-7825
SIGNATURE (SEE INSTRUCTIONS) Brent King	DATE SIGNED 6-20-19

SEE INSTRUCTIONS; PLEASE PRINT OR TYPE.
You may report some or all of this information on separate sheet *(use similar format)* instead of completing these pages.

FORM C TABLE 1 FOR 3.0 - ITEMS A AND B

EFFLUENT (AND INTAKE) CHARACTERISTICS THIS OUTFALL IS: OUTFALL NO. 001

3.0 PART A – You must provide the results of at least one analysis for every pollutant in Part A. Complete one table for each outfall or proposed outfall. See instructions.

1. POLLUTANT	2. VALUES							3. UNITS *(specify if blank)*	
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUES		C. LONG TERM AVERAGE VALUES		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			
A. Biochemical Oxygen Demand, 5-day (BOD_5)									
B. Chemical Oxygen Demand (COD)									
C. Total Organic Carbon (TOC)									
D. Total Suspended Solids (TSS)									
E. Ammonia as N									
F. Flow	VALUE		VALUE		VALUE			MILLIONS OF GALLONS PER DAY (MGD)	
G. Temperature *(winter)*	VALUE		VALUE		VALUE			°F	
H. Temperature *(summer)*	VALUE		VALUE		VALUE			°F	
I. pH	MINIMUM		MAXIMUM		AVERAGE			STANDARD UNITS (SU)	

3.0 PART B – Mark "X" in column 2A for each pollutant you know or have reason to believe is present. Mark "X" in column 2B for each pollutant you believe to be absent. If you mark Column 2A for any pollutant, you must provide the results for at least one analysis for the pollutant. Complete one table for each outfall (intake). Provide results for additional parameters not listed here in Part 3.0 C.

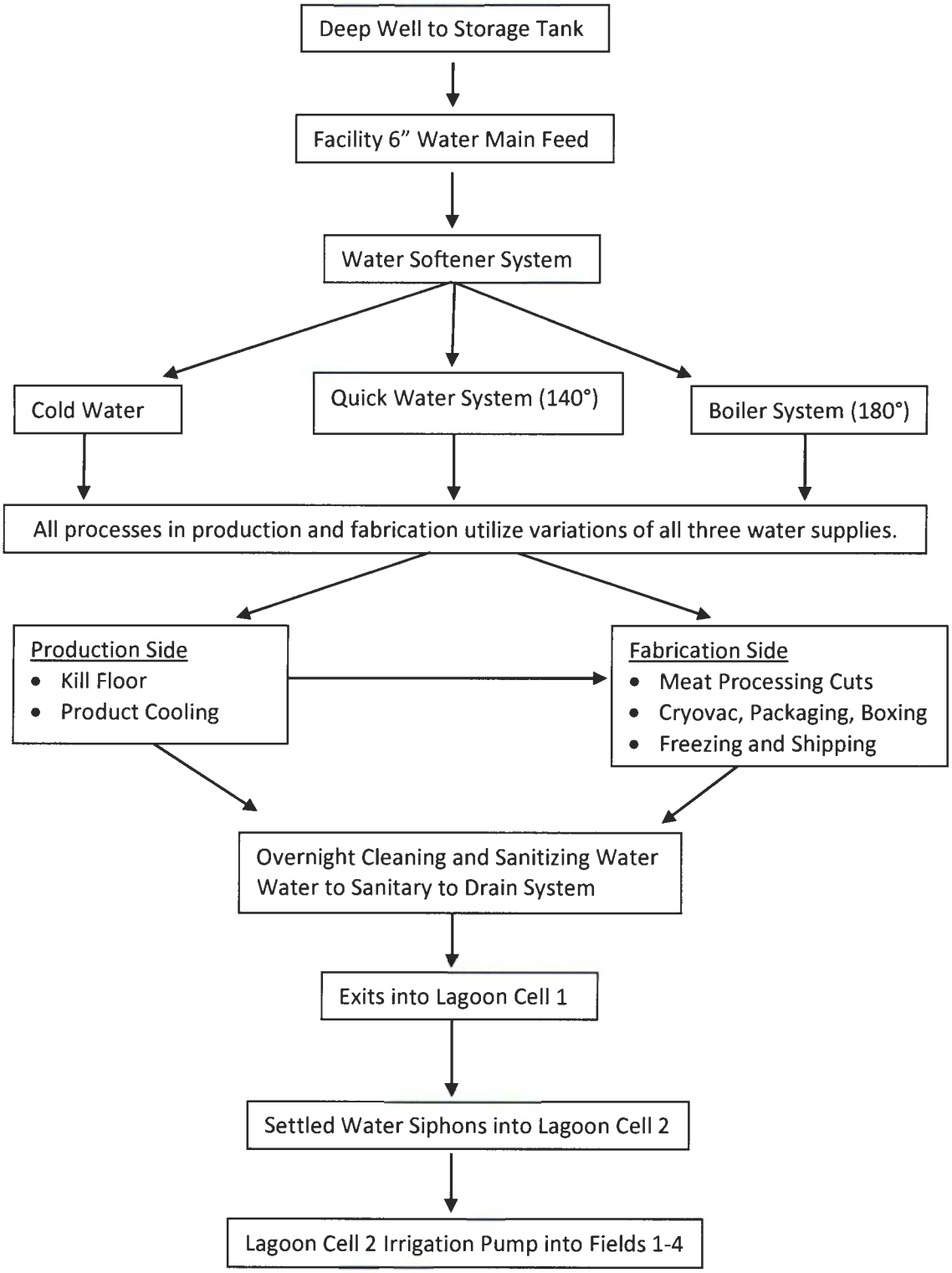
1. POLLUTANT AND CAS NUMBER *(if available)*	2. MARK "X"		3. VALUES							4. UNITS	
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUES		C. LONG TERM AVERAGE VALUES		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS
			CONCENTRATION	MASS	CONCENTRATION	MASS	CONCENTRATION	MASS			
Subpart 1 – Conventional and Non-Conventional Pollutants											
A. Alkalinity ($CaCO_3$)			MINIMUM		MINIMUM		MINIMUM				
B. Bromide (24959-67-9)		X									
C. Chloride (16887-00-6)		X									
D. Chlorine, Total Residual		X									
E. Color		X									
F. Conductivity		X									
F. Cyanide, Amenable to Chlorination		X									

1. POLLUTANT AND CAS NUMBER *(if available)*	2. MARK "X"		3. VALUES							4. UNITS	
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE		C. LONG TERM AVERAGE VALUE		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS
			CONCENTRATION	MASS	CONCENTRATION	MASS	CONCENTRATION	MASS			
Subpart 1 – Conventional and Non-Conventional Pollutants (Continued)											
G. *E. coli*	X										
H. Fluoride (16984-48-8)		X									
I. Nitrate plus Nitrite *(as N)*	X										
J. Kjeldahl, Total (as N)	X										
K. Nitrogen, Total Organic *(as N)*	X										
L. Oil and Grease	X										
M. Phenols, Total		X									
N. Phosphorus *(as P)*, Total (7723-14-0)	X										
O. Sulfate *(as SO^4)* (14808-79-8)		X									
P. Sulfide *(as S)*											
Q. Sulfite (as SO^3) (14265-45-3)											
R. Surfactants	X										
S. Trihalomethanes, Total		X									
Subpart 2 – Metals											
1M. Aluminum, Total Recoverable (7429-90-5)		X									
2M. Antimony, Total Recoverable (7440-36-9)		X									
3M. Arsenic, Total Recoverable (7440-38-2)		X									
4M. Barium, Total Recoverable (7440-39-3)		X									
5M. Beryllium, Total Recoverable (7440-41-7)		X									
6M. Boron, Total Recoverable (7440-42-8)		X									
7M. Cadmium, Total Recoverable (7440-43-9)		X									
8M. Chromium III Total Recoverable (16065-83-1)		X									
9M. Chromium VI, Dissolved (18540-29-9)		X									
10M. Cobalt, Total Recoverable (7440-48-4)		X									

1. POLLUTANT AND CAS NUMBER *(if available)*	2. MARK "X"		3. VALUES							4. UNITS	
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE		C. LONG TERM AVERAGE VALUE		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS
			CONCENTRATION	MASS	CONCENTRATION	MASS	CONCENTRATION	MASS			
Subpart 2 – Metals (Continued)											
11M. Copper, Total Recoverable (7440-50-8)		X									
12M. Iron, Total Recoverable (7439-89-6)		X									
13M. Lead, Total Recoverable (7439-92-1)		X									
14M. Magnesium, Total Recoverable (7439-95-4)		X									
15M. Manganese, Total Recoverable (7439-96-5)		X									
16M. Mercury, Total Recoverable (7439-97-6)		X									
17M. Methylmercury (22967926)		X									
18M. Molybdenum, Total Recoverable (7439-98-7)		X									
19M. Nickel, Total Recoverable (7440-02-0)		X									
20M. Selenium, Total Recoverable (7782-49-2)		X									
21M. Silver, Total Recoverable (7440-22-4)		X									
22M. Thallium, Total Recoverable (7440-28-0)		X									
23M. Tin, Total Recoverable (7440-31-5)		X									
24M. Titanium, Total Recoverable (7440-32-6)		X									
25M. Zinc, Total Recoverable (7440-66-6)		X									
Subpart 3 – Radioactivity											
1R. Alpha Total		X									
2R. Beta Total		X									
3R. Radium Total		X									
4R. Radium 226 plus 228 Total		X									

ADDENDUM A

WATER SYSTEM FLOW CHART



CONSULTING CALYTICAL
SERVICES SILICON INTERNATIONAL

3378 S. SCENIC AVE., SUITE A
SPRINGFIELD, MO 65807
TEL (417) 882-1017
FAX (855) 715-0820
info@casilab.com

CERTIFICATE OF ANALYSIS

MOON RIDGE FOODS, LLC
Re: CaSi File/Case/Log: 1283/190441-0444/4237
Samples Received: 02-14-19, 14:53

March 4, 2019

CONTROL NUMBER		190441				
SAMPLE DESCRIPTION		IRRIGATED WASTEWATER 001 02-14-19 11:00	FLAG	UNITS	ANALYSIS DATE	ANALYSIS TIME
PARAMETER	METHOD					
PHOSPHORUS, total as P	SM 4500-P B/E	0.43		mg/l	02-19-19	11:34
TOTAL KJELDAHL NITROGEN	SM 4500 N org C SM 4500-NH_3 B	2.9		mg/l	02-28-19	15:59
NITRATE/ NITRITE as NITROGEN	EPA 300.0	6.5		mg/l	02-26-19	14:49
TOTAL NITROGEN	Calculation	9.4		mg/l	02-28-19	15:59
NITRATE as NITROGEN	EPA 300.0	6.5		mg/l	02-26-19	14:49

Laboratory analyses were performed on samples utilizing procedures published in Title 40 of the Code of Federal Regulations, Parts 136 or 141, or in EPA Publication SW-846, 3rd edition, September 1986, and the latest promulgated update. Data qualifiers may be appended to this report. All results are reported on a wet weight basis, unless otherwise noted.

Samples are maintained in the laboratory for fourteen (14) days following issuance of the final report, unless an alternate arrangement is agreed to in writing. All samples determined to be hazardous, or which may not be disposed to the publicly owned treatment works (POTW) or to the sanitary landfill, will be returned to you for proper disposal.

Tara Ruff
VP/General Manager

RECEIVED
JUN 21 2019
Water Protection Program

MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM

ELECTRONIC DISCHARGE MONITORING REPORT (eDMR) SYSTEM REGISTRATION

Complete this form to register a permit for electronic reporting. This form should also be used to identify or change authorized representatives assigned an electronic signature for the department's eDMR system.

A. PERMIT INFORMATION

PERMIT NUMBER	FACILITY NAME		
MO-0113204	Moon Ridge Foods, LLC		
ADDRESS	**CITY**	**STATE**	**ZIP CODE**
5305 Highway H	Pleasant Hope	MO	65725

PERMIT ACCOUNT ACTION

☑ New Application ☐ Revised Permit or Account Information ☐ Request for Reactivation

B. USER ACCOUNT INFORMATION

USER ACCOUNT ACTION	ACCOUNT TYPE		
☑ Add ☑ Update ☐ Delete	☐ Viewer	☑ Preparer	☑ Certifier
LAST NAME	**FIRST NAME**		**MIDDLE INITIAL**
Hiatt	Chet		D
JOB TITLE	**EMPLOYER'S NAME**		
Environmental Scientist	Triad Environmental Services		
EMAIL	**TELEPHONE NUMBER WITH AREA CODE**		
chet@triad-es.com	620-231-5660		
ADDRESS	**CITY**	**STATE**	**ZIP CODE**
P.O. Box 1507	Pittsburg	KS	66762

USER ACCOUNT ACTION	ACCOUNT TYPE		
☑ Add ☐ Update ☐ Delete	☑ Viewer	☐ Preparer	☐ Certifier
LAST NAME	**FIRST NAME**		**MIDDLE INITIAL**
King	Brent		
JOB TITLE	**EMPLOYER'S NAME**		
Receiver, CPT, Managing Director	Glass Ratner		
EMAIL	**TELEPHONE NUMBER WITH AREA CODE**		
bking@glassratner.com	816-945-7825		
ADDRESS	**CITY**	**STATE**	**ZIP CODE**
17711 W. 83rd Terrace	Lenexa	KS	66219

USER ACCOUNT ACTION	ACCOUNT TYPE		
☐ Add ☐ Update ☐ Delete	☐ Viewer	☐ Preparer	☐ Certifier
LAST NAME	**FIRST NAME**		**MIDDLE INITIAL**
JOB TITLE	**EMPLOYER'S NAME**		
EMAIL	**TELEPHONE NUMBER WITH AREA CODE**		
ADDRESS	**CITY**	**STATE**	**ZIP CODE**

C. PERMIT REGISTRATION

I request the above identified permit be registered for electronic reporting and request any department initiated minor permit revisions (where no fee is required) that may be necessary to allow use of the department's eDMR system. As the permit holder, I agree the authorized representatives will follow permit requirements and the procedures for the electronic submission of DMR forms and reports, as described in the permit holder participation package.

Please establish or revise the above user accounts in accordance with the information provided for each identified account. The person(s) identified as certifier(s) are hereby designated as the authorized representatives for all reporting purposes. I understand each person to receive a certifier account on the eDMR system must complete Part D and must sign in the presence of a Notary Public.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

CONTINUING AUTHORITY OR OWNER NAME (TYPE OR PRINT)	CONTINUING AUTHORITY OR OWNER SIGNATURE	DATE
Brent King, CPT	Brent King, RECEIVER	6.20.19

OFFICIAL TITLE (TYPE OR PRINT)

"Receiver" as per order of appointment of Receiver, case # 18PO-CC00048 Polk Co. 8-21-2018

D. CERTIFIER REGISTRATION

The continuing authority or owner and certifier intend to have the submission of eDMRs be the functional equivalent of the paper submissions required by a permit issued in accordance with the Missouri Clean Water Law, Chapter 644, RSMo and/or the Clean Water Act, 33 U.S.C. § 1251, *et seq.* The certifier will use a validly issued PIN as a signature when submitting eDMRs. The continuing authority or owner and certifier agree not to contest the validity of eDMRs submitted under an authorized PIN based on the fact such submissions were completed electronically. The continuing authority or owner and certifier further agree the provisions of the Uniform Electronic Transactions Act, Sections 432.200 through 432.295, RSMo, shall apply, except as otherwise stated herein.

The continuing authority or owner and certifier agree:

1. Any eDMR submitted under the PIN specific to the certifier shall be considered a "writing" or "in writing;" and any such records shall be deemed for all purposes:
   a. To have been "signed" by the certifier.
   b. To constitute an "original" when printed from electronic files or records.
2. Electronic DMRs constitute admissible evidence in any judicial or administrative proceeding.

An electronically submitted DMR will not satisfy a reporting requirement until it has been received and accepted by the department. If an electronically submitted DMR is rejected, the permit holder shall take the necessary steps to properly resubmit such DMR within 24 hours of the notice of rejection.

By signing below, the continuing authority or owner and certifier agree with the terms and conditions of Part D.

Certifier (must sign in the presence of Notary) — Date: 18 JUNE 2019

NOTARY PUBLIC-State of Kansas
CHRISTINE M. HENDERSON
My Appt. Expires 7-15-22

Notary Public 1* — Date: 6-18-19

Sign Here

Continuing Authority or Owner (must sign in presence of Notary) — Date: 6-20-19

State of Kansas
County of Johnson
Sign or attested before me on 6/20/19 by Brent King.

Notary Public 2* — Date: 6/20/19

CHRIS FINCH
Notary Public
State of Kansas
My Appointment Expires 4/5/23

* Notary Public 1 is for use if the continuing authority or owner and the certifier both sign in the presence of the same notary; however, if the notary so desires they may sign and stamp both locations.

- If the certifier and the continuing authority or owner do not sign at the same time, then Notary Public 1 is specific to the certifier and Notary Public 2 is specific to the continuing authority or owner.
- In cases when the certifier and the continuing authority or owner are not in the same location, the certifier must complete the application to the best of their ability (including signature and Notary Public 1) and send the document to the continuing authority or owner to be completed (including signature and Notary Public 2).